

Endoscopy

Supplement

S03/2026

Heft S03 • May 2026 • 58. Jahrgang • Seite –

This journal is indexed
in MEDLINE, Current
Contents (CM + LS),
Science Citation Index,
and in EMBASE/Excerpta
Medica and SCOPUS

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**ESGE
DAYS
2026**

ESGE Days 2026

Abstract issue

**Reimagining
Endoscopy:
Smarter, Together,
For the Future**

Milan, Italy • May 14–16, 2026

Allianz MiCo • Milano Convention Centre



 **Thieme**

ESGE Days 2026



Date/Venue:
14.–16. May 2026, Milan, Italy

ESGE President:
Cesare Hassan

Welcome message

Dear colleagues in endoscopy,

On behalf of the ESGE Scientific Committee, it is my pleasure to present the abstracts accepted to **ESGE Days 2026** in this supplemental edition of *Endoscopy*.

We are delighted to see the continued growth of the ESGE Days meeting, reflected not only in the impressive number of abstract submissions received, but also in their outstanding scientific quality. This year we received 2395 abstracts, representing a 21 % increase on last year. The breadth of topics and strong international representation signal the rapid evolution of GI endoscopy and the commitment of our community to advancing research, innovation, and patient care. Original research remains the foundation of our congress, and together we are shaping the future of our field.

We extend our sincere thanks to all authors who submitted their work and I sincerely hope they enjoy the experience of presenting their science at our meeting. Each year we work hard to conceptualize innovative ways to showcase the research on offer. In Milan, abstract authors will showcase their work in oral presentation and pitch your poster sessions. In addition, for 2026 we are introducing ePoster Connect, an in-person forum where delegates with shared special interests can explore and debate the latest science. The six top-ranked abstracts from this year will be presented in the Presidential Session and a dedicated Best Abstracts session. To these researchers we give our heartfelt congratulations and hope that presenting their work under this accolade is a highlight of their endoscopy career. Furthermore, in recognition of the most recent evolution in our field, we are introducing two dedicated Late-Breaking Abstract Sessions, providing a platform for the most up to date and innovative research.

I would also like to acknowledge the dedication of the Scientific Committee, reviewers, and the ESGE Office team, whose efforts have created a high-quality and engaging programme.

At ESGE Days 2026, our mission is to Reimagine Endoscopy: Smarter, together and for the future. We invite you to explore the research presented in this supplement and to join us in Milan to further our mission together.

Your ESGE Scientific Committee Chair
Tomáš Hucl



Tomáš Hucl
ESGE Scientific Committee Chair

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Abbreviations:

BA: Best abstract

LBA: Late breaking abstract

eP: ePoster

OP: Oral presentation

PYP: Pitch Your Poster

V: Video

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Publishers

Georg Thieme Verlag KG
Oswald-Hesse-Straße 50
D-70469 Stuttgart
P.O. Box 301120
70451 Stuttgart
Germany

Thieme Medical Publishers, Inc.
333 Seventh Avenue
USA, New York, NY 10001

For subscription information
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Impact Factor: 12.8

Best abstracts

ESGE Presidential Session

14/05/2026, 15:30–17:15

Plenary Room (Coral 4 + 5)

BA001 Low rates of lymph node metastases and recurrence following radical endoscopic resection of T1b adenocarcinoma in Barrett's esophagus: evidence from the PREFER study supports a strict endoscopic surveillance strategy with annual CT/PET

Authors Bos V¹, Chan MW¹, Nagengast WB², Bourke MJ³, Beyna T⁴, Bisschops R⁵, Koch AD⁶, Weusten BL^{7, 8}, Alkhalaf A⁹, Pech O¹⁰, Seewald S¹¹, Haidry R^{12, 13}, De Wulf D¹⁴, Schlag C¹⁵, Schoon EJ¹⁶, Houben MHMG¹⁷, Messmann H¹⁸, Westerhof J², Spaander M⁶, De Hertogh G¹⁹, Nieuwenhuis E²⁰, Jansen M²¹, Neuhaus H⁴, Meijer SL²², Bergman J¹, Pouw R^{1, 7}

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DOI 10.1055/s-0046-1820650

Aims Strict follow-up after endoscopic resection (ER) is gaining recognition as a valid management strategy for esophageal adenocarcinoma (EAC) invading the submucosa (T1b) [1]. However, the optimal follow-up protocol is still unclear. We present the results of the first prospective international multicenter cohort study (PREFER, NCT03222635) on the safety and efficacy of strict follow-up following R0 ER of T1b EAC, now that all patients have completed at least two years of follow-up.

Methods Patients treated with ER for T1b EAC with tumor free vertical resection margins (R0v) were included at 19 expert centers in Europe and Australia until the sample size of ≥ 141 was reached. Submucosal invasion $\geq 500\mu\text{m}$, poor

differentiation, and lymphovascular invasion were considered risk factors for lymph node metastases (LNM). Lesions were classified low-risk (LR) in case of only superficial submucosal invasion ($< 500\mu\text{m}$), and high-risk (HR) when at least one of the risk factors for LNM was present. All included patients underwent baseline re-staging with gastroscopy, endoscopic ultrasound (EUS) and whole-body CT/PET-CT 6-8 weeks after ER. When no metastases were detected (cT1bN0M0), patients entered strict follow-up with gastroscopy and EUS every 3 months during the first 2 years, every 6 months during years 3 and 4, and once at the end of year 5. CT/PET-CT was repeated 1 year after baseline. Primary outcomes were disease-specific and overall survival; secondary outcomes were rates of LNM, intraluminal recurrence not amenable to endoscopic treatment, and distant metastasis.

Results In total, 157 T1b patients (54 LR, 103 HR) were included between July 2017-July 2023.

In LR-T1b patients (87 % male, median age 70 years), median follow-up was 39 months (IQR 26-57) with 11 endoscopies (IQR 7-13). During follow-up, 3/54 (6 %; annual risk 1.7 %) developed LNM, of whom one patient died of EAC. Intraluminal recurrence not amenable for endoscopic treatment developed in 2/54 (4 %; annual risk 1.1 %), both patients were treated curatively. No distant metastasis were diagnosed.

In patients with HR-T1b (81 % male, median age 71 years), median follow-up was 37 months (IQR 24-51) with a median of 10 endoscopies (IQR 6-12). In total, 10/103 (10 %; annual risk 3.2 %) developed LNM: 7/10 received curative treatment, 3/10 were unfit for curative treatment due to comorbidities. In 8/103 (8 %; annual risk 2.5 %) intraluminal recurrences not amenable for endoscopic treatment developed: all were detected at a curable stage, however, 5/8 refused further treatment or received palliative treatment due to comorbidities, 3/8 died of EAC. Furthermore, 4/103 (4 %; annual risk 1.3 %) developed distant metastases, all without signs of intraluminal recurrence or LNM: 2/4 developed liver metastases, one of whom refused further treatment and died, and the other received immunotherapy but died of heart failure; 1/4 underwent resection of lung metastasis but developed new pulmonary and liver metastases after 2 years and now receives palliative treatment; 1/4 developed non-regional LNM (i.e. cervical and sacral) with further policy pending. Most distant metastases (3/4) were detected in the third year of follow-up (2/4 detected with CT due to symptoms, 1/4 during regular follow-up EUS), and 1/4 was detected during the per-protocol CT/PET 1 year after baseline. In this cohort, over a median follow-up of 37 months (IQR 25-52), 34/157 (22 %) have successfully completed an event-free 5-year follow-up. Non-EAC mortality (14/157; 9 %) was three times higher than EAC-related mortality (5/157; 3 %).

Conclusions The interim results of this first prospective study on strict follow-up after R0v ER of T1b EAC show that after a median follow-up of 3 years, 34/157 (22 %) have successfully completed event-free 5-year follow-up, non-EAC death (9 %) is 3x higher than EAC death (3 %), and 26/157 (17 %) developed metastasis and/or intraluminal recurrence not amenable to endoscopic treatment, of which the majority (22/26; 85 %) was diagnosed at a curable stage. Our data also show that 3/4 distant metastases were found in the third year of follow-up, not detected by the protocol-mandated CT/PET-CT 1 year after baseline. Given the unknown incidence of distant metastases after year 1 and improved treatment options for distant metastases in recent years, we advise adding annual CT/PET-CT during strict follow-up of these patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Weusten B, Bisschops R, Dinis-Ribeiro M, di Pietro M, Pech O, Spaander MCW et al. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2023; 55 (12): 1124–46

BA002 Combination of NSAIDs and prophylactic pancreatic duct stent is superior in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis in patients with one or more unintentional pancreatic duct cannulations (FLUYT-2)

Authors de Jong MJ^{1,2}, Sperna Weiland CJ³, Van Delft F¹, Van Eijck BC⁴, De Wijkerslooth TR⁵, Hadithi M⁶, Verdonk RC⁷, Verlaan T⁸, Bhalla A⁹, Vrij AA¹⁰, Bisseling TM¹, Thierens ND¹, Nagelhout A¹¹, Seerden T¹², Scheffer R³, Hazewinkel Y¹³, Venneman NG¹⁴, Boonstra K¹, Huibregtse I⁵, Koehestanie P¹⁵, Voorburg AM¹⁶, Poen AC¹⁷, Bruno MJ¹⁸, Van Geenen EM¹, Siersema PD^{1, 18}

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DOI 10.1055/s-0046-1820651

Aims Post-endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis (PEP) has an incidence of approximately 10 %. Both the European and American Society of Gastrointestinal Endoscopy recommend a 100 mg diclofenac or indomethacin suppository just prior to an ERCP procedure as primary prophylaxis against PEP. Furthermore, both societies recommend inserting a plastic stent into the pancreatic duct (PD) following multiple unintentional PD cannulations. However, it remains unclear whether PD stent placement after a single unintentional PD cannulation, combined with non-steroidal anti-inflammatory drugs (NSAIDs), offers additional benefit in preventing PEP.

The aim of the FLUYT-2 trial was to determine whether the combination of NSAIDs and PD stent placement is more effective than NSAIDs alone in preventing PEP in patients with one or more unintentional PD cannulations.

Methods This study was designed as an additional arm of the initial FLUYT trial, a randomized controlled trial that compared the combination of aggressive hyperhydration and rectal NSAIDs with NSAIDs alone in preventing PEP. The initial trial found no significant difference between both groups.

In the FLUYT-2 trial, we prospectively included a new cohort of 275 patients who underwent PD stent placement following even a single unintentional PD wire cannulation. Screening for eligibility occurred with the same exclusion criteria as the initial FLUYT trial. This cohort was compared with a subgroup of 262 patients from the FLUYT trial who did not receive PD stent placement after

unintentional PD cannulation. FLUYT-2 was carried out between October 2021 and September 2025 in four academic and 18 community hospitals in The Netherlands.

The inserted prophylactic PD stents were either single pigtail or straight stents without an internal flange, with a recommended size of 5 French and 5 centimeters in length. The primary endpoint was the incidence of PEP, defined according to the Cotton criteria. Secondary endpoints included severity of PEP, ERCP-related complications other than PEP, and the rate of spontaneous PD stent migration.

Results A total of 275 patients were included, with 217 successfully placed straight or single-pigtail PD stents that remained in place during the procedure. The primary indication for ERCP was choledocholithiasis (63.6 %). The incidence of PEP was 19.8 % in the group without PD stent placement vs. 12.4 % in the group with PD stent placement ($p = 0.03$). In the subgroup of patients with a dislocated stent during the procedure ($n = 19$), the incidence of PEP was 15.8 %. The severity of PEP did not differ significantly between both groups, and there was no significant difference in duration of hospital admission (1 night [IQR 1-4] in the no-PD stent group vs. 1 night [IQR 1-3] in the PD stent group). The incidence of other ERCP-related complications was comparable between both groups. Pigtail stents had a lower PEP incidence compared with straight stents (10.8 vs. 13.5 %) and were more likely to dislocate spontaneously within the two weeks after ERCP (76.7 % vs. 64.6 %). A total of 53 PD stents had to be removed by gastroscopy after abdominal X-ray was made. None of these patients developed pancreatitis after stent removal.

Conclusions Insertion of a plastic stent in the pancreatic duct following unintentional PD cannulation in combination with rectal NSAIDs is superior to NSAIDs alone in preventing PEP. We recommend the placement of a single pigtail 5cm 5Fr PD stent after common bile duct intervention in patients with even a single unintentional PD cannulation.

Conflicts of Interest Mike J.P. de Jong, Christina J. Sperna Weiland, Foke van Delft, Brechje C. van Eijck, Thomas R. de Wijkerslooth, Muhammed Hadithi, Tessa Verlaan, Abha Bhalla, Anton A. Vrij, Tanya M. Bisseling, Naomi D.E. Thierens, Anne Nagelhout, Tom C.J. Seerden, Robert C.H. Scheffer, Yark Hazewinkel, Niels G. Venneman, Inge L. Huibregtse, Parweez Koehestanie, Annet M.C.J. Voorburg, Alexander C. Poen, Marco J. Bruno, Pleun Appelhof, Matthijs P. Schwartz, Govert Veldhuijzen, and Jan-Werner Poley have no conflicts of interest or financial ties to disclose. Kirsten Boonstra received speaker's fees from Falk Pharma and Boston Scientific. Robert C. Verdonk received speaker's fees from Viatrix. Rogier P. Voermans reports research grants from Boston Scientific and Prion Medical, performed as a consultant for Boston Scientific, and received speaker's fees from Mylan and Zambon. Jeanin E. van Hooft reports lecture fees from Cook Medical, dr. Falk Pharma, Boston Scientific, Fuji Film, and consultancy fees from Olympus. Erwin M. van Geenen reports research grants from Olympus, Boston Scientific, and MTW Endoskopie. Peter D. Siersema reports research grants from Pentax and Fujifilm. All outside the submitted work.

Best Abstracts Oral Presentation Session

15/05/2026, 14:30–15:30

Ocean 3 +4

BA003 A double-blinded randomized controlled trial on prophylactic clipping to prevent post-polypectomy bleeding after colonoscopy in direct oral anticoagulant users (PROCLIP study)

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DOI 10.1055/s-0046-1820652

Aims Direct oral anticoagulants (DOAC) increase the risk of post-polypectomy bleeding (PPB). We aim to evaluate the effectiveness of prophylactic clipping among these high-risk patients.

Methods We performed an industry-independent, double-blinded, parallel-group, superiority randomized trial in Hong Kong. Subjects who received DOAC and underwent colonoscopies were recruited. They withheld DOAC for 48 hours pre-procedure and resumed on the next day unless contraindicated. Endoscopic resection was standardized (cold polypectomy for < 10mm and non-pedunculated polyps, hot resection for large or pedunculated polyps). When polypectomy was performed, subjects were randomized 1:1 to receive prophylactic clipping (intervention) or without (control) by an independent research staff. In intervention arm, endoclips were used to close all polypectomy sites. In control arm, no endoclip was applied to any polypectomy site, except in case of uncontrolled immediate PPB. Randomization was blinded to non-endoscopist physicians in-charge, patients and data analysts. The primary endpoint was 30-day complicated delayed PPB, associated with i) unstable hemodynamics despite resuscitation; ii) decrease in hemoglobin ≥ 2 g/dL; iii) blood transfusion; iv) hemostatic interventions by endoscopy, angiographic embolization or surgery; v) prolonged hospitalization or vi) death. Secondary endpoints were overall PPB and cardiovascular events. All endpoints were adjudicated by an independent physician [1–3].

Results Between December 2021 and April 2025, 440 subjects were screened with 148 subjects excluded due to absence of polyp, withdrawal of consent or unfit for procedures. 145 and 147 subjects were randomized to intervention and control arms respectively. Baseline characteristics were comparable including demographics, medications, endoscopic factors, polyp characteristics (size, location) and resection techniques. (► Table 1) The 30-day complicated delayed PPB rates were 3.4% (5/145) in intervention and 3.4% (5/147) in control arms respectively, with no significant difference between the two arms (hazard ratio (HR) 1.01, 95%CI 0.29–3.48, $p = 0.991$). The overall PPB rates were 9.7% (14/145) in intervention and 8.8% (13/147) in control arms respectively, without significant difference between arms (HR 1.07, 95%CI 0.50–2.28, $p = 0.856$). Only one cardiovascular event (ischemic stroke) occurred in the control arm.

► Table 1

	Intervention arm (n = 145)	Control arm (n = 147)
Age (mean, SD)	70.9 (7.4)	71.9 (6.0)
HAS-BLED score	2.32 (0.97)	2.39 (1.05)
Apixaban (%)	81 (55.9)	74 (50.3)
Dabigatran (%)	28 (19.3)	30 (20.4)
Other anti-Xa (%)	36 (24.8)	43 (29.3)
Standard dose (%)	96 (66.2)	101 (68.7)
Aspirin/clopidogrel (%)	75 / 27 (51.7 / 18.6)	74 / 21 (50.3 / 14.3)
Polyp number (mean, SD)	3.7 (2.9)	4.1 (3.9)
< 10mm (n, %)	143 (98.6)	146 (99.3)
10–19mm (n, %)	24 (16.6)	26 (17.7)
≥ 20 mm (n, %)	9 (6.2)	10 (6.8)

► Table 1

	Intervention arm (n = 145)	Control arm (n = 147)
Right colon (n, %)	109 (75.2)	119 (81.0)
Left colon (n, %)	106 (73.1)	109 (74.1)
Cold biopsy (n, %)	23 (15.9)	27 (18.4)
Cold snare (n, %)	138 (95.2)	141 (95.9)
Hot snare (n, %)	18 (12.4)	21 (14.3)
EMR (n, %)	6 (4.1)	9 (6.1)
ESD (n, %)	1 (0.7)	1 (0.7)

Conclusions In this randomized trial, prophylactic clipping was not superior to standard care in preventing delayed PPB and associated complications among DOAC users. The cost-effectiveness of this widely-adopted practice should be reconsidered. (ClinicalTrials.gov: NCT05169242)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Spadaccini M, Albéniz E, Pohl H, Maselli R, Thoguluva Chandrasekar V, Correale L, Anderloni A, Carrara S, Fugazza A, Badalamenti M, Iwatate M, Antonelli G, Enguita-Germán M, Álvarez MA, Sharma P, Rex DK, Hassan C, Repici A. Prophylactic Clipping After Colorectal Endoscopic Resection Prevents Bleeding of Large, Proximal Polyps: Meta-analysis of Randomized Trials. *Gastroenterology* 2020; 159 (1): 148–158.e11
- [2] Lau LH, Guo CL, Yip TC, Mak JW, Wong SH, Lam KL, Wong GL, Ng SC, Chan FK. Risks of post-colonoscopy polypectomy bleeding and thromboembolism with warfarin and direct oral anticoagulants: a population-based analysis. *Gut* 2022; 71 (1): 100–110
- [3] Lau LHS, Guo CLT, Lee JKK, Chan CST, Mak JWY, Wong SH, Yip TCF, Wong GLH, Wong VWS, Chan FKL, Tang RSY. Effectiveness of prophylactic clipping in preventing postpolypectomy bleeding in oral anticoagulant users: a propensity-score analysis. *Gastrointest Endosc* 2022; 96 (3): 530–542.e1

BA004 EUS-guided versus percutaneous ultrasound-guided biopsy for parenchymal liver disease: A randomized controlled, non-inferiority trial

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DOI 10.1055/s-0046-1820653

Aims Endoscopic ultrasound-guided liver biopsy (EUS-LB) is being increasingly used to acquire liver biopsies. However, the current accepted standard of EUS-LB using 19G Franseen needle has never been compared with the current gold standard of percutaneous ultrasound-guided liver biopsy (PC-LB) using a full-core 16G or 18G cutting needle.

Methods We conducted a parallel-group, randomized controlled trial at the Institute of Liver and Biliary Sciences (ILBS), New Delhi. Patients were randomized via the ILBS Interactive Web Response System (IWRS; block size 10). EUS-LB was done by a single experienced endosonographer (VB) using a 19G Franseen (Acquire™, Boston Scientific) needle, under total intravenous anesthesia (TIVA) by an anaesthesiologist. PC-LB was done by multiple interventional radiologists using an 18G BioPince full core (Argon medical devices) needle under local anesthesia.

For EUS-LB, a modified wet-heparin suction technique was used; the number of passes and needle actuations (for EUS-LB) were not restricted. Either the left or right lobe (or both) was accessed as per the operator's judgement. To avoid confounding by differences in the number of passes, we submitted the biopsy material from each pass separately for analysis of the adequacy parameters after slide digitization (MorphoLens 6). The pathologist reporting the liver bi-

opsy specimens was not blinded to the allocation sequence. The primary endpoint was specimen adequacy (defined as total specimen length [TSL] ≥ 15 mm and ≥ 8 complete portal tracts [CPTs]). Secondary endpoints were the number of fragments, number of fragments >9 mm, number of CPTs, biopsy area, collagen proportionate area, fibrosis staging, diagnostic yield, width of specimen, pain scores, satisfaction, and adverse events. For calculating the sample size, we assumed the success rate of procurement of adequate liver biopsies (defined above) to be 90 % in the PC group and 85 % with EUS-LB, based on existing literature. With an α of 10 %, a power of 80 %, and a non-inferiority margin of 10 %, we required 44 patients per arm (total sample size of 88); to account for technical limitations, we planned to enroll 90 patients. The trial was registered online (CTRI Number: CTRI/2023/10/058529; Clinical Trials.gov ID: NCT06047327)

Results EUS-LB yielded 6.9 cm of total specimen length per patient compared with 2.0 cm for PC/TUS, and achieved a markedly larger total biopsy area (39.75 mm² vs 10.42 mm², $p < 0.01$). Even on a per-pass basis, EUS-LB produced substantially greater tissue area (19.5 mm² vs 10.65 mm², $p < 0.001$). EUS-LB also generated many more tissue fragments (13 vs 1 per patient, $p < 0.01$), with correspondingly higher complete portal tract (CPT) counts (42 vs 9 per patient, $p < 0.01$), and this advantage persisted on a per-pass comparison (21 vs 9 CPTs, $p < 0.001$), indicating markedly superior architectural representation. Although EUS cores were slightly narrower in width (667.2 μ m vs 747.8 μ m, $p < 0.01$), they provided more fragments >9 mm (2 vs 1 per patient) and greater cumulative length, with collagen proportionate area remaining comparable between groups (11.0 % vs 8.1 %, $p = 0.78$). Across all major adequacy standards—including the study primary definition (≥ 15 mm and ≥ 8 CPT), AASLD, EASL, APASL, and BGS criteria—EUS-LB consistently outperformed PC/TUS-LB. Adequacy rates with EUS-LB ranged from 95.6 % to 97.8 % per patient, compared with 28.9 % to 64.4 % for PC/TUS (all $p < 0.001$ except EASL $p = 0.01$). On a per-pass basis, adequacy with EUS-LB ranged from 81.8 % to 93.2 %, compared with 25.5 % to 63.8 % for PC/TUS (all $p < 0.001$ except EASL $p = 0.03$), confirming the consistently superior histologic yield of EUS-guided biopsy. The risk difference in adequacy (primary endpoint) between a single pass of EUS-LB and PC-LB was 0.26 (95 % CI 0.11 to 0.41).

Conclusions EUS-LB using a 19G Franseen-tip needle was non-inferior and superior compared to PC-LB using 18G full-core, cutting needle. EUS-LB yields higher TSL, CPT number, and biopsy area, albeit with more fragmentation and less biopsy width. A single pass of EUS-LB yields an adequate specimen about 26 % more often than PC-LB (absolute increase in adequacy rate). Adverse effects with EUS-LB were significantly higher, but minor.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

BA005 Post-colonoscopy colorectal cancer in SCREESCO (Screening of Swedish colons): comparison low- versus high-rate detectors of adenomas and proximal serrated polyps

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DOI 10.1055/s-0046-1820654

Aims We aim to assess risk factors for post-colonoscopy colorectal cancers (PCCRC) in a national Swedish randomized controlled colorectal cancer screening trial, SCREESCO. The focus is on quality indicators of the endoscopists and impact on the occurrence of PCCRC.

Methods In SCREESCO, 278,051 individuals aged 60 were randomly assigned to once-only primary colonoscopy vs control, or two rounds of two-stool fecal immunochemical testing (FIT) two years apart with cut-off 10 μ g hemoglobin/g feces vs control. Intervention was completed in 2020.

A PCCRC in this study was defined as a CRC following a negative colonoscopy either in the primary colonoscopy arm (PCOL) or in the FIT arm after a work-up examination after a positive test. CRCs detected after >6 months up to 10 years after the index colonoscopy were considered as a PCCRC. Endoscopist's ADR and proximal sessile lesion detection rates (PSPDR) were divided into either low- or high detection rates with a cutoff of 25 % in the PCOL arm and 40 % in the FIT arm for ADR, and 10 % in both arms for PSPDR. Endoscopists with at least 20 colonoscopies in the FIT arm and 20 colonoscopies in the primary colonoscopy arm performed in SCREESCO were included. In the FIT arm separate analyses were performed for the first and the second round [1].

The cumulative incidence proportion of CRC from 6 months up to 10 years after the index colonoscopy was computed with 95 % confidence interval (CI) considering death from any cause as a competing risk.

Results In the PCOL arm 10,620 colonoscopies were included and in the FIT arm there were 3,259 colonoscopies in round 1 and 3,886 in round 2. There were 22 PCCRCs in the PCOL arm, 16 in FIT round 1 and 2 in round 2. Of these 3, 4 and 1 were detected within 3 years respectively. Of the total of 42 PCCRCs 18 (42 %) were diagnosed in men. Stage I-II was seen in 23 (55 %), Stage III-IV in 15 (36 %) and for 4 (9 %) of the cases.

A total of 141 endoscopists were included; 51 were defined as high-detectors of adenomas and 36 of PSP. There were 31 defined as low-detectors of adenomas and 46 of PSP. Data was missing in 58 of the endoscopists.

Within 6-36 months after the index colonoscopy the risk of PCCRC was 0.03 % (95 % CI: 0.02-0.03 %) in low ADR detectors in the PCOL arm, 0.24 % (95 % CI: 0.20-0.29 %) in FIT round 1, and 0 % in FIT round 2. In high ADR detectors the corresponding risks was 0.03 % (95 % CI: 0.03-0.04 %) in PCOL, 0.05 % (95 % CI: 0.04-0.07 %) in FIT round 1 and 0.06 % (95 % CI: 0.05-0.08 %) in FIT round 2. In low PSP detectors the risks were 0.02 % in PCOL, 0.22 % in FIT round 1, and 0.07 % in FIT round 2. In high PSP detectors the risks were 0.05 % in PCOL, 0 % in FIT round 1 and 2. The risks became increased somewhat between 4 to 7 years after the index colonoscopy, more pronounced among the low detectors.

Conclusions ADR and PSPDR of endoscopists seem to be associated with the occurrence of PCCRC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Forsberg A, Westerberg M, Metcalfe C et al. Once-only colonoscopy or two rounds of faecal immunochemical testing 2 years apart for colorectal cancer screening (SCREESCO): preliminary report of a randomised controlled trial. *Lancet Gastroenterol Hepatol* 2022; 7 (6): 513–21

BA006 Polyps characterization: a real time optical diagnosis between the endoscopist and the AI (CADx). A multicentre randomized controlled trial in a western setting

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DOI 10.1055/s-0046-1820655

Aims Optical diagnosis involves real time characterization of polyps during colonoscopy to characterise the nature of polyp to decide the best management strategy for the polyp. Trained Endoscopists can use enhanced imaging (EI) or use newly developed AI based CADx to make an optical diagnosis to implement resect & discard strategy. The aim of our study is to compare the outcome of EI based optical diagnosis performed by experts with newly developed AI based CADx in a RCT.

Methods This was a prospective, randomized controlled trial (RCT) conducted across multiple tertiary centres in UK. Patients were randomized (1:1) to either

the control arm (AI off) or the intervention arm (AI on). The CAD-x device used for this study was WISE VISION (NEC Japan). This was a superiority trial, powered on NPV, to demonstrate an improvement from 75 % (endoscopist) to 90 % (CADx), with an 80 % power and an alpha of 0.05. In the control arm, endoscopist made an optical diagnosis by using EI and that was recorded and compared with the final histology. In the AI arm, CADx diagnosis on WLI and EI was prospectively recorded and compared with the histology. Data on sensitivity, specificity, accuracy and NPV was collected for each arm for all polyps and for polyps <5mm in size.

Results A total of 653 patients were randomised across 3 centres in the UK. 328 to the control arm where experts made EI based OD and 324 to the intervention arm with CADx based OD. The mean age was 60.34 ± 12.28 and 60.44 ± 13.11 ($p = 0.92$), in the control and intervention group and a significantly lower rate of male (49.39% vs 57.72%, $p = 0.04$) was observed for control. For the control group, the endoscopist performance was evaluated on 628 polyps (414 diminutive). For all polyps, sensitivity, specificity and negative predictive value were 0.93, 0.63 and 0.87 on white light and 0.92, 0.62 and 0.85 on EI. For diminutive polyps sensitivity, specificity and negative predictive value were 0.90, 0.63 and 0.84 on white light and 0.90, 0.62, 0.82 on EI.

For the intervention group, CADx performance was evaluated on 699 polyps (494 diminutive). For all size polyps sensitivity, specificity and negative predictive value were 0.72, 0.62, 0.61 on white light and 0.77, 0.56 and 0.63 on EI. For diminutive polyps sensitivity, specificity and negative predictive value were 0.70, 0.64 and 0.59 on white light and 0.77, 0.56 and 0.63 on EI.

The performance of the composite diagnosis of endoscopist plus CAD-x were measured on 658 polyps (522 diminutive). For all size polyps sensitivity, specificity and negative predictive value were 0.89, 0.59 and 0.79 on white light and 0.88, 0.58 and 0.78 on EI. For diminutive polyps sensitivity, specificity and negative predictive value were 0.88, 0.57 and 0.77 on white light and 0.89, 0.56 and 0.78 on EI.

Finally, the threshold of NPV > 0.90 for diminutive polyps was not met by the experts using EI and neither was it met by CAD-X. However, PIVI-2 threshold of > 90% concordance of follow up was met (agreement 97.4%) by CADx based OD

Conclusions Our study demonstrates that current version of CAD-X is suboptimal and cannot be used on its own or in combination with Endoscopist based diagnosis. We found that CADx cannot improve the performance of expert endoscopists and if anything, it can negatively influence it.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ESGE Presidential Session

14/05/2026, 15:30–17:15

Plenary Room (Coral 4+5)

BA007 LBA: Colonoscopy Intervals and Colorectal Cancer in Patients with Polyps

Authors Jover R¹, Bretthauer M², Cubiella J³, Barry SJ⁴, Barnett L⁴, Macios A⁵, Erichsen R⁶, Kaminski MF⁷, Adami HO⁸, Holme Ø⁹, Ijspeert J¹⁰, Ferlitsch M¹¹, Dinis-Ribeiro M¹², Pellise M¹³, Martinez-Roca A¹⁴, Baile-Maxia S¹⁵, De Castro Parga L¹⁶, Bujanda L¹⁷, Diez Redondo P¹⁸, Nordberg Nilsen JA¹⁹, Nguyen HD²⁰, Bernklev L²¹, Tilma J²², Love US²³, Jaensch C²⁴, Pilonis ND²⁵, Szura M²⁶, Bialek A²⁷, Van Berkel A²⁸, Spaander M²⁹, Ter Borg F³⁰, Van Leerdam M³¹, Hernan M³², Regula J²⁵, Løberg M³³, Kalager M³³, Evelien D³⁴

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DOI 10.1055/s-0046-1822896

Aims Recommended colonoscopy surveillance intervals for patients after polyp removal are arbitrary because randomized trials comparing surveillance intervals are lacking.

Methods We randomized 10,799 patients with high-risk adenomas in 8 European countries 1:1 to currently recommended 3-year colonoscopy or to colonoscopy after 5 years. To avoid lead time bias, the 3-year arm also received colonoscopy after 5 years. A parallel single-arm trial enrolled patients with removed serrated polyps to 5-year surveillance colonoscopy. The primary endpoint was non-inferiority of colorectal cancer risk at 5 years.

Results We randomized 5,398 patients to less frequent (first after 5 years) and 5,401 to more frequent (first after 3 years) surveillance. The 5-year risk of CRC was 0.47% with less frequent surveillance as compared to 0.48% with more-frequent surveillance (absolute risk difference adjusted for competing risk of death -0.003%; upper bound of 99.12% confidence interval: 0.381%). The 5-year CRC risk was 0.46% (95%CI 0.112 to 0.911%) among 1,861 patients with serrated polyps. The distribution of CRC stage at diagnosis was similar between study arms. Five patients died of CRC; three in the less frequent surveillance arm (0.06%) and two in the more frequent surveillance arm (0.04%). No patients with only serrated polyps died of CRC. The cumulative yield of advanced adenomas was 10.82% in patients with advanced adenomas with more frequent and 10.66% with less frequent surveillance ($p = 0.83$), and 7.45% in patients with serrated polyps.

Conclusions First surveillance colonoscopy after five years is non-inferior to currently recommended 3-year colonoscopy for patients with high-risk adenomas. NCT02319928.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Oral presentation

Customizing POEM for Optimal Patient Outcomes

14/05/2026, 08:30–09:30

Sky 1

OP001 Contractility patterns on functional lumen imaging probe (FLIP) prior to peroral endoscopic myotomy predict outcomes in achalasia

Authors Peranathan V¹, Chhoda A¹, Ospina Velasquez LE¹, Wong Kee Song LM¹, Law R¹, Codipilly D¹, Snyder D¹, Leggett C¹, Alexander J¹, Ravi K¹

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DOI 10.1055/s-0046-1820656

Aims While functional lumen imaging probe (FLIP) is well-established for identifying esophagogastric junction outflow disorders, its role in patients with confirmed achalasia before per-oral endoscopic myotomy (POEM) are unclear. This study aimed to evaluate whether FLIP provides additional diagnostic value before POEM.

Methods This retrospective study of prospectively collected data included patients with primary achalasia confirmed on high-resolution esophageal manometry who underwent FLIP at a tertiary center from March 2020 to June 2024. Reduced EGJ opening (REO) on FLIP was defined as a distensibility index < 2 mm²/mmHg at 60 mL balloon volume and diameter < 12 mm at 70 mL. Contractile response (CR) was categorized using published criteria. Outcome measures comprised of clinical success (Eckardt score ≤ 3) and significant barium retention on timed barium esophagram (TBE), defined as a column height > 5 cm at 5 minutes and/or retention of a 13-mm barium tablet.

Results Among 166 patients (44.6% female; median age 60.0, IQR 44.5–73.0), 18 (10.8%) had type I, 123 (74.1%) type II, and 25 (15.1%) had type III achalasia. All patients demonstrated REO on FLIP; 126 (75.9%) had absent CR and 40 (24.1%) had some contractility (► **Table 1**). Significant barium retention on TBE was observed in 48 patients (28.9%). Absent CR was associated with increased barium retention (RR 1.3, 95% CI 1.1–1.5, *p* = 0.005) and greater mean column height at 5 minutes (2.0 cm vs. 0.8 cm, *p* = 0.048) post POEM procedure.

► **Table 1**

	Total cohort	No contractility	Contractility present	p-value
N	166	126 (75.9%)	40 (24.1%)	
Age years (median + IQR)	60.0 (44.5 – 73.0)	61.5 (44.8 – 73.0)	55.0 (44.0 – 73.0)	0.636
Female (n, %)	74 (44.6%)	60 (47.2%)	14 (35.9%)	0.270
BMI (median + IQR)	27.6 (23.6 – 33.0)	26.8 (23.1 – 32.5)	29.9 (26.2 – 34.3)	0.039 *
Type 1 (n, %)	18 (10.8%)	14 (11.0%)	4 (10.3%)	0.999
Type 2 (n, %)	123 (74.1%)	98 (77.2%)	25 (64.1%)	0.142
Type 3 (n, %)	25 (15.1%)	15 (11.8%)	10 (25.6%)	0.043 *
Pre-POEM Eckardt score (median + IQR)	7.0 (5.0 – 8.0)	7.0 (5.0 – 8.0)	6.0 (4.0 – 9.0)	0.636

► **Table 1**

	Total cohort	No contractility	Contractility present	p-value
Esophageal Myotomy length (cm)	6.0 (6.0 – 8.0)	6.0 (6.0 – 8.0)	8.0 (6.0 – 10.5)	0.114
FLIP Distensibility (mm ² /mmHg) at 60mL Pre-POEM (median + IQR)	1.2 (0.8 – 2.3)	1.2 (0.8 – 2.2)	1.2 (0.6 – 2.5)	0.571
FLIP Diameter (mm) at 70mL Pre-POEM (median + IQR)	8.2 (6.2 – 11.5)	8.2 (6.4 – 12.0)	8.7 (5.8 – 10.8)	0.448

Conclusions Absent CR on FLIP prior to POEM predicts significant barium retention on TBE following POEM, supporting an additive role for FLIP to predict outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP002 Long term efficacy of pneumatic dilation in type I and II achalasia

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DOI 10.1055/s-0046-1820657

Aims Achalasia is a chronic degenerative disease affecting the esophageal motility. The treatment of achalasia is mainly symptomatic, aimed at symptom relief by reducing the LES pressure. The main treatments for achalasia are pneumatic dilation (PD), Heller laparoscopic myotomy (LHM), and endoscopic peroral myotomy (POEM), each with specific risks and benefits. The effectiveness of treatments tends to decline over time, and studies comparing the three therapeutic options have provided conflicting results in the long-term. Over the last two decades, the introduction of High-resolution manometry (HRM) enabled the identification of 3 types of achalasia, allowing a more precise and individualized treatment approach. The latest ESGE 2020 and the ACG 2020 guidelines recommended graded pneumatic dilation as first line treatment for type I and type II achalasia. This study aims to evaluate the efficacy and safety of graded pneumatic dilation in the treatment of type I and type II achalasia in our center, over a 10-year follow-up.

Methods This is a single-center, retrospective, observational study designed and realized in our tertiary referral Gastroenterology Unit. From January 2009 to December 2019, we enrolled a total of 73 patients, 23 with type I achalasia and 50 with type II achalasia. The enrolled patients underwent a graded dilation protocol. The treatment was based on up to three incremental dilations as needed (30–35–40 mm caliber). Fifty-seven patients completed a 5-year follow-up, and 23 patients completed a 10-year follow-up. The primary outcome was clinical remission, defined as an Eckardt score ≤ 3 during an annual clinical follow-up. The secondary outcome was the rate of postprocedural complications and subgroup analysis to evaluate the factors associated with treatment failure. A Kaplan-Meier curve was constructed for the time to treatment failure. The subgroup analysis on the time to treatment failure was performed using univariate Cox regressions.

Results The cumulative success rate of pneumatic dilation was 94.4% at 2 years (95%CI: 85.9%-97.9%), 91.5% at 5 years (95%CI:82.0%-96.1% CI), and 81.9% at 10 years (95%CI 68.1%-90.1% CI). In the subgroup analysis, the need for multiple dilations was associated with treatment failure. Treatment failure was not associated with age, gender, type of achalasia, or clinical severity as assessed by the Eckardt score before dilation. The major complication rate was 1.3%: a single contained perforation that was managed conservatively.

Conclusions This retrospective, observational, single-center study demonstrates that graded pneumatic dilation is a safe and effective long-term treatment for patients with type I and type II achalasia. Our findings indicate the reliability of pneumatic dilation with a graded on-demand approach as a highly effective treatment option for achalasia. These results warrant the graded PD technique as a viable first-line treatment in type I and type II achalasia patients, as an alternative to Heller myotomy or POEM.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP003 Full-thickness or circular myotomy alone in Peroral Endoscopic Myotomy (POEM) in patients with newly diagnosed achalasia. Results of a double-blind, randomized clinical trial

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DOI 10.1055/s-0046-1820658

Aims Achalasia is defined as a functional obstruction of the esophagus due to impaired relaxation of the lower esophageal sphincter (LES) with absent or spastic contractions of the tubular esophagus. Modern treatment is dominated by Peroral Endoscopic Myotomy (POEM) which traditionally involves a transmural myotomy extending down to the upper part of the gastric sling fibers. A significant side effect of this procedure is, however, gastroesophageal reflux.

Question: Does myotomy of only the LES circular muscle component provide comparable clinical symptom control as does full-thickness myotomy, but better control of the gastroesophageal reflux?

Methods 55 patients (29 males and 26 females with a median age of 44 years) with newly diagnosed achalasia were randomized at the start of the endoscopic myotomy to either full-thickness (n = 28) or circular LES myotomy alone (n = 27). The groups were comparable with respect to relevant clinical and disease-specific variables. In all patients, swallowing-related symptoms, reflux symptoms (GSRS) and quality of life (SF 36) were recorded before treatment and at defined time points postoperatively

Results Preoperatively, a median Eckardt score of 7 was recorded in both groups (range; 3 – 11) and a median value of 2 and 1.5 (1 – 5), respectively was recorded

ed regarding the reflux dimension within the GSRS instrument. The treatments could be carried out with limited morbidity (Clavien Dindo > 3a) without any difference between the treatment groups. All procedures were carried out on an outpatient basis. 12 months postoperatively, a median Eckardt score of 2 was reported in both groups (range; 0 – 3 vs 0 – 5) and the reflux dimension in the GSRS also gave similar values in both groups (median 1.5; range 1 – 4). The mental and physical dimensions in the SF 36 were reported equipose in both treatment groups

Conclusions One-year follow-up after full-thickness or circular LES endoscopic myotomy, performed in patients with newly diagnosed achalasia, shows identical outcomes regarding both reflux symptoms and Eckardt score. These results suggest that circular myotomy alone is preferable in POEM, but more detailed analysis and longer follow-up are required to allow more firm conclusions

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP004 Impact of gastric length of myotomy during POEM on the incidence of gastroesophageal reflux: A randomized controlled trial

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Aims Peroral endoscopic myotomy (POEM) is an effective treatment for achalasia cardia, but gastroesophageal reflux disease (GERD) remains a significant concern. The length of gastric myotomy may influence reflux outcomes, but high-quality data are lacking. This randomized controlled trial compared the incidence of GERD after short versus long gastric myotomy (SGM vs LGM) during POEM [1–5].

Methods In this randomized trial, we compared SGM (gastric myotomy < 3 cm) with LGM (gastric myotomy > 3 cm) during POEM in cases with type I or II achalasia. The primary endpoint was significant reflux esophagitis defined as Los Angeles grade B or higher esophagitis at 6 months follow-up. Secondary endpoints included esophageal acid exposure ($\geq 6\%$ total acid exposure time [AET]) on 24-hour pH monitoring, reflux symptoms, proton pump inhibitor (PPI) use, Eckardt score, esophageal emptying, and high-resolution manometry parameters.

Results A total of 100 patients were randomly assigned to undergo either POEM with SGM (50 patients) or LGM (50 patients). Baseline characteristics were similar between groups. At 6 months, significant reflux esophagitis occurred in 24% (12/50) of SGM patients versus 42% (22/50) of LGM patients ($p = 0.035$; odds ratio, 2.45; 95% CI, 1.04–5.79). Upright acid exposure was significantly lower in the SGM group (median 0.75% vs 3.2%; $p = 0.036$). No differences were observed in reflux symptoms, PPI use, total AET, or clinical efficacy between groups (► Table 1).

► Table 1

LA $\geq$ Grade B esophagitis, (%)	Long Gastric Myotomy	Short Gastric Myotomy	P	Odds ratio (95% CI)	Relative risk (95% CI)	Unadjusted absolute difference, % (95% CI)
Intention to treat (ITT)	22/50 (44)	12/50 (24)	0.035	2.45 (1.04-5.79)	1.83 (1.02-3.30)	20 (1.8-38.2)
Per-protocol (PP)	22/47 (46.8)	12/48 (25)	0.027	2.49 (1.05-5.91)	1.84 (1.03-3.29)	21.8 (3-40.6)

Conclusions SGM significantly reduces the risk of clinically relevant reflux esophagitis after POEM without compromising efficacy. SGM should be considered a simple technical modification to reduce post-POEM GERD. (ClinicalTrials.gov number, NCT05500196)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nabi Z, Chandran V, Basha J et al. Conventional versus oblique fiber-sparing endoscopic myotomy for achalasia cardia: a randomized controlled trial (with videos). *Gastrointestinal Endoscopy* 2023; 99: 1–9
- [2] Grimes KL, Bechara R, Shimamura Y et al. Gastric myotomy length affects severity but not rate of post-procedure reflux: 3-year follow-up of a prospective randomized controlled trial of double-scope per-oral endoscopic myotomy (POEM) for esophageal achalasia. *Surg Endosc* 2020; 34: 2963–2968
- [3] El Nakeeb A, Ezzat H, Shehta A et al. Impact of the Myotomy Extent on Gastric Side on Surgical Outcome after Heller's Cardiomyotomy for Achalasia. *Surgical Laparoscopy, Endoscopy and Percutaneous Techniques* 2019; 29: 362–366
- [4] Nabi Z, Nageshwar Reddy D. Impact of modified techniques on outcomes of peroral endoscopic myotomy: A narrative review. *Front Med (Lausanne)* 2022; 9: 948299
- [5] Nabi Z, Inavolu P, Duvuru NR. Prediction, prevention and management of gastroesophageal reflux after per-oral endoscopic myotomy: An update. *World J Gastroenterol* 2024; 30: 1096–1107

OP005 Monitoring the effectiveness and post-POEM complications in patients with achalasia and esophagogastric junction outflow obstruction using impedance planimetry. (FLIPOEM study. Preliminary results)

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Aims Peroral endoscopic myotomy (POEM) is effective for the treatment of esophageal motility disorders (EMD) but is associated with a high rate of gastroesophageal reflux disease (GERD). Impedance planimetry (IP) may help reduce this risk. The aim of our study was to evaluate the association between distensibility and diameter of the esophagogastric junction measured by IP and post-POEM GERD [1–15].

Methods Prospective, international, multicenter cohort study including consecutive naïve patients diagnosed according to Chicago IV with achalasia or esophagogastric junction outflow obstruction (EGJO). All patients had baseline Eckardt scores and high-resolution manometry (HRM). IP was performed before and after POEM, and clinical, endoscopic, manometric, and pH monitoring without proton pump inhibitor (PPI) follow-up was carried out at 3–5 months. Clinical success was defined as a post-POEM Eckardt ≤ 3, and GERD according to Lyon 2.0 criteria. Different acidification patterns were considered. Fermentation was defined as a slow fall in pH below 4, with a drop rate < 1 pH unit per minute and lasting more than 5 minutes. Stasis was defined as a fall in pH below 4 during meals that persisted more than 5 minutes after finishing.

Results Eighteen patients were included (mean age 50.7 years [SD 16.9]; 7 [38.9%] males). The indication for POEM was type I achalasia in 3 patients (16.7%) and type II in 15 (83.3%). Technical and clinical success reached 100%, with Eckardt score decreasing from 7 (IQR: 6–9) to 1 (IQR: 0–1) ($p < 0.001$). Distensibility at 50 ml increased from 1.1 mmHg (SD 0.5) to 3.2 mmHg (SD 1) ($p < 0.001$), and diameter from 10.2 mm (SD 2.4) to 15.8 mm (SD 2.3) ($p < 0.001$). The GERD rate at 3 months was 61.1%. In 11.1% of patients it was considered borderline. pH-metric reflux was found in 44.4% and endoscopic reflux in 33.3%. Three patients (16.6%) presented grade B esophagitis, two

grade C (11.1%), and one grade D (5.6%). No statistically significant differences were found between GERD and non-GERD groups, except for GERD-Q ($p = 0.012$) and post-POEM upright IRP ($p = 0.003$). No significant association was found between IP and post-POEM GERD nor between IP and fermentation and stasis.

Conclusions Our study did not demonstrate a statistically significant association between impedance planimetry values and the risk of post-POEM GERD. These are preliminary results from an ongoing prospective study currently in the recruitment phase.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Eckardt VF. Clinical presentation and complications of achalasia. Vol. 11: *Gastrointestinal Endoscopy Clinics of North America*. 2001
- [2] Attar M, Su B, Wong HJ, Kuchta K, Denham W, Haggerty SP et al. Intraoperative impedance planimetry (EndoFLIPTM) results and development of esophagitis in patients undergoing peroral endoscopic myotomy (POEM). *Surg Endosc* 2021; 35 (8): 4555–62
- [3] Teitelbaum EN, Soper NJ, Pandolfino JE, Kahrilas PJ, Boris L, Nicodème F et al. An extended proximal esophageal myotomy is necessary to normalize EGJ distensibility during Heller myotomy for achalasia, but not POEM. *Surg Endosc* 2014; 28 (10): 2840–7
- [4] Teitelbaum EN, Soper NJ, Pandolfino JE, Kahrilas PJ, Hirano I, Boris L et al. Esophagogastric junction distensibility measurements during Heller myotomy and POEM for achalasia predict postoperative symptomatic outcomes. *Surg Endosc* [Internet]. 2015; [cited 2023 Jun 13] 29 (3): 522. Available from: /pmc/articles/PMC4343529/
- [5] Amundson JR, Wu H, VanDruff V, Campbell M, Kuchta K, Hedberg HM et al. Esophagogastric junction compliance on impedance planimetry (EndoFLIPTM) following peroral endoscopic myotomy (POEM) predicts improvement in postoperative Eckardt score. *Surg Endosc* 2023; 37 (2): 1493–500
- [6] Nabi Z, Ramchandani M, Reddy DN. Per-oral endoscopic myotomy and gastroesophageal reflux: Where do we stand after a decade of "POETRY"? *Indian Journal of Gastroenterology* [Internet]. 2019; Aug 1 [cited 2023 Jun 24] 38 (4): 287–94. Available from: <https://link.springer.com/article/doi:10.1007/s12664-019-00980-5>
- [7] Jamshed S, Bhagavathula AS, Zeeshan Qadar SM, Alauddin U, Shamim S, Hasan S. Cost-effective Analysis of Proton Pump Inhibitors in Long-term Management of Gastroesophageal Reflux Disease: A Narrative Review. *Hosp Pharm* [Internet]. 2020; [cited 2023 Jul 7] 55 (5): 292. Available from: /pmc/articles/PMC7502866/
- [8] Koyyada A. Long-term use of proton pump inhibitors as a risk factor for various adverse manifestations. *Therapies* 2021; 76 (1): 13–21
- [9] Repici A, Fuccio L, Maselli R, Mazza F, Correale L, Mandolesi D et al. GERD after per-oral endoscopic myotomy as compared with Heller's myotomy with fundoplication: a systematic review with meta-analysis. Vol. 87: *Gastrointestinal Endoscopy*. 2018
- [10] Nabi Z, Reddy DN. POEM, long-term outcomes, and gastroesophageal reflux: All is well. Vol. 94: *Gastrointestinal Endoscopy*. Elsevier Inc; 2021: p 943–4
- [11] Sanaka MR, Thota PN, Parikh MP, Hayat U, Gupta NM, Gabbard S et al. Peroral endoscopic myotomy leads to higher rates of abnormal esophageal acid exposure than laparoscopic Heller myotomy in achalasia. *Surg Endosc* 2019; Jul 15 33 (7): 2284–92
- [12] Teh JL, Tham HY, Soh AY, Sen CC, Kim G, Shabbir A et al. Gastro-esophageal reflux disease (GERD) after peroral endoscopic myotomy (POEM). *Surg Endosc* 2022; 36 (5): 3308–16
- [13] Rubín De Célix C, Bravo S, Zabalza L, Casabona S, Rodríguez I, Muñoz R et al. 28-ENDOFLIP DURANTE EL POEM: ¿PODEMOS REDUCIR LA MIOTOMÍA ESOFÁGICA? [Internet]. Vol. 44: *Gastroenterol Hepatol*. 2021; Available from <https://www.elsevier.es/gastroenterologia>
- [14] Feng J, Ali RW, Hao JY, Kong GX, Yang LH, Huang XJ. Peroral endoscopic myotomy for esophageal motility disorders. *Esophagus* [Internet] 2020; [cited 2023 Jul 7] 17 (1): 11. Available from: /pmc/articles/PMC6976553/
- [15] Holmstrom AL, Campagna RAJ, Cirera A, Carlson DA, Pandolfino JE, Teitelbaum EN et al. Intraoperative use of FLIP is associated with clinical success following POEM for achalasia. *Surg Endosc* [Internet]. 2021; cited 2023 Jul 7 35 (6): 3090–6. Available from: <https://link.springer.com/article/10.1007/s00464-020-07739-6>

OP006 Per-oral plication of the (neo)esophagus (POPE) for sump-related impaired emptying: initial Spanish multicenter case-series experience

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DOI 10.1055/s-0046-1820661

Aims Sump formation—a redundant, dilated segment with food stasis—may develop in the neo-esophagus after esophagectomy or in end-stage achalasia with sigmoid megaesophagus, leading to refractory emptying impairment. The POPE (Per-oral Plication of the Esophagus) technique offers an endoscopic suturing approach for remodeling the lumen to improve esophageal emptying. Our aim was to describe the feasibility, technical performance, and short-term clinical outcomes of per-oral plication of the esophagus (POPE) for refractory esophageal sump formation in patients with end-stage achalasia or delayed emptying of a gastric conduit after esophagectomy.

Methods We conducted a multicenter retrospective analysis of all consecutive POPE procedures performed between September 2024 and November 2025 at three university hospitals in Spain. All patients were discussed within a multidisciplinary team and met one of two indications: (1) end-stage achalasia or blown-out myotomy (BOM) after previous myotomy for achalasia, (2) Delayed emptying of gastric conduit after esophagectomy. Demographic, clinical, and procedural variables were collected. All procedures were performed with the patient under general anesthesia, in the supine position, with single-dose of antibiotic prophylaxis and at least 1 night of admission postprocedure. Luminal remodeling was performed in the dilated segment (the sump area identified pre- and intraprocedurally) using a suturing device without an overtube, grasping tissue with either a tissue helix or a grasper. Adjunctive mucosal denudation techniques such as argon plasma coagulation (APC) or endoscopic mucosal resection (EMR) were applied at the discretion of the endoscopist, as were the suturing pattern, number of sutures, and number of stitches.

Clinical response was defined as any symptomatic improvement including a decrease in the Eckardt score. Technical success was defined as successful luminal remodeling according to the treating endoscopist at the end of the procedure [1–3].

Results A total of 11 patients were treated (median age 54 years, IQR 69.5–45; 7 women). Eight cases involved end-stage achalasia with megaesophagus or BOM, and three cases involved delayed emptying of a gastric conduit after esophagectomy. All achalasia patients had undergone previous myotomy (Heller and POEM in 5, only Heller in 2, only POEM in 1). POPE was technically successful in all cases. A zig-zag plication pattern was used in most procedures, with a median of 3 sutures per patient (mean 6 stitches per suture). Combining techniques included EMR in 5 cases, and APC in 4 cases (EMR + APC in 2 cases). Median procedure time was 70 minutes (IQR 87.5–57.5). Initial clinical improvement was observed in 10/11 patients (90.9%), with a reduction of median Eckardt score from 6 (11/11) to 2 (available in 9/11). One patient with end-stage achalasia and pronounced sigmoid angulation of the distal and proximal esophagus

did not show any clinical improvement, with only minimal changes on esophagogram. One patient with post-esophagectomy conduit torsion that presented initial clinical, endoscopic and radiological improvement required subsequent surgical correction (crurotomy) due to persistent dysphagia, with correct improvement after surgery. Complications were mild and included chest pain in 2 patients that achieved clinical response, delayed bleeding managed endoscopically (1 case with an ulcer and dehiscence of a suture at the ulcer level). No severe adverse events occurred. Median hospital stay was 2 days (IQR 2–1.25). Median follow-up was 48 days (IQR 87–20.5).

Conclusions POPE is a feasible and safe endoscopic option for patients with refractory sump formation due to advanced achalasia or dysfunctional gastric conduits. Most patients experienced early clinical improvement with low complication rates. Larger prospective studies with long-term follow-up are needed to assess the durability of the remodeling and define optimal patient selection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bazerbachi F, Blackmon SH, Ravi K, Wong Kee Song LM. Endoscopic esophagoplasty for megaesophagus with sump stasis in end-stage achalasia. *VideoGIE* 2017; 2 (10): 274–275
- [2] Alexander RG, Wong Kee Song LM, Nehra AK et al. Peroral plication of the esophagus as a treatment option for end-stage achalasia with sump formation. *Diseases of the Esophagus* 2025; 38 (2):doaf013
- [3] Hedberg HM, Attaar M, McCormack MS, Ujiki MB. Per-Oral Plication of (Neo)Esophagus: Technical Feasibility and Early Outcomes. *Journal of Gastrointestinal Surgery* 2023; 27 (8): 1531–1538

Reimagining Access: The Rise of Oral Transgastric Intervention

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OP007 Incidence and Management Strategies of EUS-Guided Gastroenterostomy (EUS-GE) Dysfunction: A Multicentre Retrospective Study

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DOI 10.1055/s-0046-1820662

Aims EUS-guided gastroenterostomy (EUS-GE) is the preferred treatment for gastric outlet obstruction (GOO) [1]. However, EUS-GE dysfunction can lead to symptomatic recurrence and reduced quality of life. Data regarding the management of this adverse event are scarce. [2] We aimed to define the incidence and chronology of EUS-GE dysfunction, identifying risk factors, and assessing the efficacy of potential dysfunction salvage strategies.

Methods We conducted a retrospective study including 663 patients from six centres with GOO who underwent EUS-GE between May 2018 and December 2024. Inclusion criteria: technically successful EUS-GE with primary or secondary dysfunction. Clinical, technical, and follow-up variables were collected.

Results EUS-GE dysfunction occurred in 41/663 patients (6.2%) (52.4% male; mean age 71 ± 10.3 years). Baseline variables: median pre/post-EUS-GE GOOSS: 0/2; native anatomy in 90%; malignant aetiology in 77%. Technical variables:

80.5 % of the EUS-GE were performed using the 20x10mm Axios, and 95.1 % were performed by the direct antegrade method using a nasobiliary catheter. Dysfunction features: median time to occurrence 32 days (IQR 7–240). The most common cause of dysfunction was ingrowth (30.95 %). Endoscopic reintervention was performed in 90.5 % of cases, most commonly by coaxial metal stent placement (18 % LAMS; 45 % others). EUS-GE dysfunction resolved after endoscopic reintervention in 31 patients (75.6 %), after surgery or combined treatments in 2 patients each (4.9 %), while 14.6 % remained unresolved. Success rates by treatment type were: 86.5 % endoscopic (32/37), 100 % surgical (3/3), and 0 % pharmacological (0/7). There was a significant association ($p < 0.05$) between dysfunction resolution and treatment type (endoscopic/surgical vs pharmacological). EUS-GE dysfunction was not associated with mortality ($p = 0.35$). No anatomical or technical risk factors were associated with EUS-GE dysfunction.

Conclusions This study reports a 6 % incidence of EUS-GE dysfunction, most commonly occurring 32 days post-procedure due to tissue ingrowth. The most common cause was ingrowth, which responded to coaxial stent placement in over 76 % of cases. Endoscopic salvage is highly effective (86.5 % success rate) and should be considered the first-line management strategy.

Conflicts of Interest Manuel Pérez-Miranda: Consulting/Lecture Olympus/Medtronic/Lumendi/Siemens/Boston Scientific/M.I.Tech

References

- [1] Kastelijn JB, Moons LMG, Garcia-Alonso FJ, Pérez-Miranda M, Masaryk V, Will U, Tarantino I, van Dullemen HM, Bijlsma R, Poley J-W, Schwartz MP, Vleggaar FP. Patency of endoscopic ultrasound-guided gastroenterostomy in the treatment of malignant gastric outlet obstruction. *Endosc Int Open* 2020; 8 (9): E1194–E1201
- [2] Van der Merwe SW, van Wanrooij RLJ, Bronswijk M, Everett S, Lakhtakia S, Rimbaz M et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (2): 185–205

OP008 Multicenter, Real-World, Population-based Retrospective Study Evaluating EUS-guided gastroenterostomy for Gastric Outlet Obstruction

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DOI 10.1055/s-0046-1820663

Aims With reported technical and clinical success rates of approximately 94.0 % and 89.9 %, respectively, EUS-guided gastroenterostomy (EUS-GE) has emerged as a major therapeutic option for gastric outlet obstruction (GOO) [1]. However, nearly all existing studies originate from expert centers, and population-based real-world data are virtually nonexistent. Consequently, ESGE guidelines currently recommend restricting the procedure to expert centers [2]. The aim of this study was to evaluate, in real-life conditions and across an entire defined population, the technical success, clinical success, and complication rates of EUS-GE.

Methods This was a multicenter, real-world, population-based retrospective observational study conducted across two large regions (18 administrative divisions, 8.4 million inhabitants). All patients undergoing EUS-GE for GOO (defined as inability to tolerate oral intake or liquid-only intake) were included. Technical success was defined as optimal placement of the lumen-apposing metal stent (LAMS) between the stomach and the duodeno-jejunum. Clinical

success was defined as resumption of at least a soft/blended diet (GOOS ≥ 2). Complications were classified according to the AGREE classification.

Results A total of 247 patients (mean age 70.0 years; 45.7 % women) underwent EUS-GE between January 2020 and August 2025: 72.9 % in 5 university hospitals, 23.1 % in 3 general hospitals, and 4.0 % in 2 private clinics. Procedures were performed by 27 operators (range 1–37 procedures per operator). Etiologies of GOO were pancreatic adenocarcinoma (61.3 %), other malignancies (33.0 %), and benign disease (5.7 %). Mean follow-up was 129 days. Technical and clinical success rates were 93.1 % and 85.6 %, respectively. In university hospitals these rates were 92.2 % and 86.1 %, versus 95.5 % and 84.4 % outside university hospitals. Technical success outside university hospitals was not inferior to that observed in university hospitals (difference 3.3 %, 90 % CI: –2.0 % to +8.6 %). Complications occurred in 29.4 % of patients (12.6 % AGREE 2 and 16.8 % AGREE ≥ 3). Misdeployed stents occurred in 7.8 % of cases and was managed as follows: repeat EUS-GE (44.5 %), placement of a duodenal stent after removal of the LAMS (27.8 %), simple LAMS removal (22.2 %), surgical gastroenterostomy (5.6 %), and early death without further intervention (5.6 %). Mean postoperative hospital stay was 10.6 days (median 7 days). A total of 4.9 % of patients required ICU. One-month mortality was 21.3 %, with 2.2 % directly attributable to the procedure. Secondary failure occurred in 10.8 % of cases after a mean of 123 days and was managed by repeat EUS-GE (21.7 %), duodenal stent placement (4.3 %), medical therapy alone (13.0 %), or no intervention due to end-of-life status (60.9 %). On multivariate analysis: ascites was significantly associated with lower clinical success (OR 0.34; $p = 0.015$) and increased risk of secondary failure (OR 3.9; $p = 0.024$). Peritoneal carcinomatosis was associated with higher secondary clinical failure (OR 3.09; $p = 0.046$). Direct puncture technique was associated with lower technical success (OR 0.12; $p = 0.015$), higher overall complications (OR 5.36; $p = 0.018$), and higher severe complication rates (OR 4.47; $p = 0.040$). A biliary obstruction was present in 57.8 % of patients, prior (56.9 %), synchronous (36.5 %), or subsequent (6.6 %) to EUS-GE, and managed by ERCP (43.4 %), EUS-guided choledochoduodenostomy (EUS-CDS) (22.1 %), EUS-guided cholecystoduodenostomy (EUS-GBD) (3.7 %), EUS-guided hepaticogastrostomy (EUS-HGS) (16.2 %), percutaneous radiologic drainage (14.0 %), or surgery (0.7 %). Secondary biliary failure occurred in 41.4 % of cases (52.6 % after ERCP, 55.0 % after EUS-CDS, 20.0 % after EUS-GBD, 13.6 % after EUS-HGS, and 26.3 % after percutaneous drainage). These failures were managed by ERCP (25 %), EUS-CDS (12.5 %), EUS-GBD (7.1 %), EUS-HGS (28.6 %), percutaneous drainage (16.1 %), or no treatment in end-of-life patients (10.7 %).

Conclusions Initially considered as a complex procedure, EUS-GE proves to be relatively accessible for endoscopists trained in therapeutic EUS and ERCP. Real-life, population-based outcomes and safety profiles appear comparable to those reported in the literature. EUS-GE should become the reference treatment for gastric outlet obstruction and be accessible to all eligible patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Van Wanrooij R.L.J. et al. *Endoscopy*. 2022; 54: 310–332
- [2] Li JS et al. *Minimally Invasive Therapy & Allied Technologies*. 2023; 32: 285–299

OP009 Endoscopic ultrasound-directed transgastric interventions. Real world data from multiple UK tertiary centres

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DOI 10.1055/s-0046-1820664

Aims Endoscopic ultrasound-directed transgastric ERCP (EDGE) has emerged as an important modality for biliary access in patients with altered upper gas-

trointestinal anatomy, but data from real-world multicentre practice remains limited. This study reports outcomes of EDGE performed in three tertiary centres in the UK.

Methods A retrospective analysis was conducted of consecutive EDGE procedures performed over 2024 – 2025. Data collected included demographics, indication, anesthesia type, stent characteristics, anastomosis type, single or multiple stage, use of stent fixation, completion of the intended therapeutic outcome, subsequent fistula management and adverse events. Analysis was performed around outcomes comparing single vs multiple stage.

Results Thirty-one patients (mean age 59.7 years; 23 female, 8 male) were included. The main indication was common bile duct stones (23 cases), with additional indications including EUS with biopsy (2), papillary fibrosis (2), bile leak, biliary biopsy, and gallbladder drainage. Eighteen procedures were performed under general anesthesia and 13 under conscious sedation. AXIOS stents sized 15 × 10 mm and 20 × 10 mm were used in 3 and 28 procedures respectively. Anastomoses were gastrogastrostomy (24) and enterogastrostomy (7). Thirteen procedures were completed as single-stage procedures (all under general anaesthesia), while 18 were two-stage with a mean interval of 16.3 days between the stages. 5 of the multiple stage procedures were performed under general anaesthesia. Stent fixation clips were used in 16 procedures (including 3 two-stage cases), whereas 15 procedures were performed without clip fixation, all in the two-stage setting. Overall, the intended therapeutic outcome was achieved in 29 of 31 (93.5%) procedures. 4/31 (12.9%) had an adverse event related to the first stage, all of which were stent dislodgement and 3/4 were managed endoscopically. 2/31 (6.5%) had an adverse event in the second stage (1 migration and 1 displacement) and 1 patient developed post ERCP pancreatitis (3.2%). There was no significant difference in adverse event rate comparing single vs. multiple stage (3/13 vs. 2/18, $p=0.95$) or GA vs. sedation (4/18 vs. 2/13, $p=0.64$). Fistula follow up showed 8 closed spontaneously, 13 required no closure, 2 were closed at surgery, 1 was closed endoscopically and 7 are awaiting further imaging.

Conclusions In this multicentre series, EDGE demonstrated a high rate of technical and clinical success with acceptable adverse event rates. Most adverse events can be managed endoscopically and no difference was seen comparing number of stages or use of sedation/anaesthesia. The findings support EDGE as an effective modality for biliary and related interventions in patients with altered anatomy. Larger evaluations are being conducted to improve the statistical power of the comparisons.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP010 EUS-Guided Gastroenterostomy versus Enteral Stenting in Malignant Gastric Outlet Obstruction: a prospective non-randomized propensity score-matched study

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DOI 10.1055/s-0046-1820665

Aims Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) using lumen-apposing metal stent (LAMS) has emerged as a promising technique for the palliation of malignant gastric outlet obstruction (mGOO), offering more durable symptom relief compared with enteral stenting (ES). ES, however, remains widely used because of its rapid deployment and technical simplicity, particularly in patients with limited life expectancy [1].

Methods All patients with mGOO treated with EUS-GE or ES between March 2022 and September 2025 in a tertiary referral center in Romania were pro-

spectively included. A propensity score-matching analysis was performed, in order to reduce selection bias, resulting in a 1:1 matched cohort. Clinical and procedural data were collected, and patients were followed for 3 months after the end of the study period or until death. Primary outcomes assessed were technical success (defined as correct deployment of LAMS or ES), clinical success – defined as Gastric Outlet Obstruction Scoring System (GOOSS) ≥ 2 and re-intervention rates. Secondary outcomes included survival and complication rates.

Results Propensity score matching yielded 40 patients in total, 20 in each group. Technical success was achieved in all ES procedures and in 95% of EUS-GE procedures. Clinical success was 100% in the EUS-GE group and 80% in the ES group ($p=0.20$). Stent occlusion occurred in 5 ES patients and in none of the EUS-GE patients ($p<0.04$). Reintervention was required in 5 ES patients (25%)—due to tumor ingrowth or food impaction—and in 1 EUS-GE patient (5%) due to misdeployment of distal flange which was resolved endoscopically ($p=0.18$). Median survival was 223 ± 147 days in the EUS-GE group and 181 ± 124 days in the ES group ($p=0.10$). Median hospitalization duration was 10 ± 4 days for EUS-GE and 9 ± 3.7 days for ES ($p=0.30$). Two minor complications occurred in each group, consisting of pneumoperitoneum in EUS-GE group and self-limited bleeding in ES group. No major complications (AGREE ≥ 11) were reported.

Conclusions EUS-GE demonstrated a trend toward superior and more durable clinical efficacy compared with ES, with lower re-intervention rates and significantly fewer cases of stent occlusion. Safety profiles between the two techniques were comparable.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bang JY, Puri R, Lakhtakia S et al. Endoscopic or surgical gastroenterostomy for malignant gastric outlet obstruction: a randomised trial. Gut Published Online First 2025. doi:10.1136/gutjnl-2025-336339

OP011V Conversion of LAMS Gastrojejunostomy to Magnetic Gastrojejunostomy: Feasibility Study (CAMBIO)

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DOI 10.1055/s-0046-1820666

Problem to solve Current standards for EUS-guided gastrojejunostomy (EUS-GE) generally rely on Lumen-Apposing Metal Stents (LAMS). However, LAMS are associated with potential long-term complications and the burden of subsequent re-interventions for exchange or removal, a limitation that is especially critical in the setting of benign disease. While magnetic compression anastomosis creates a permanent fistula without a permanent stent, endoscopic placement of magnets remains critically limiting, with no standardized delivery method.

Innovation We describe a novel technique and specialized delivery system designed to convert an existing LAMS-based EUS-GJ into a magnetic compression anastomosis. The innovation lies in the delivery catheter, which utilizes a torque-release mechanism and a triple traction-based approach. The procedure involves a multistep strategy: downsizing the initial fistula, utilizing a double traction guidewire and traction suture for precise distal magnet placement, and achieving controlled magnetic apposition to form a permanent compression anastomosis, effectively replacing the LAMS.

Results The procedure was executed in sequential stages:

Preparatory Endoscopy: Removal of the LAMS with the goal of downsizing the previous fistula. Insertion of a duodenal stent for temporary enteral feeding.

Index Endoscopy:

Removal of the duodenal stent and passage of a guidewire through the remnant gastrojejunostomy fistula, followed by retrieval of the distal end through the pylorus using forceps.

Passage of a traction suture attached to the distal magnet parallel to the guidewire. Using double traction, insertion of the distal magnet attached to the delivery catheter. Removal of the proximal end of the guidewire and simultaneous traction of the suture to maintain the magnet in position.

Insertion of the proximal magnet attached to the proximal end of the delivery system until magnet apposition is achieved. Disconnection of the proximal portion of the delivery catheter using a torque mechanism.

Technical success was achieved in 7 out of 8 patients. Follow-up at + 7 days showed no severe complications. Revision

Endoscopy (+ 10 days): Removal of the magnets and visualization of a wide and patent magnetic anastomosis.

Conclusions Converting a LAMS-GE to a magnetic anastomosis is a feasible technique with an acceptable initial safety profile. This approach offers a potential solution for creating permanent fistulas that avoids the long-term disadvantages of LAMS. However, further refinement and optimization of the delivery system are essential to simplify the technical complexity of the procedure before it can be widely adopted as a standard alternative [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/c24b217b-a9ce-4bf6-987c-2ea5f449c119/Uploads/19990_CAM-BIO_ESGE_days.mp4

Conflicts of Interest Manuel Pérez-Miranda is Speaker & Consultant for: BSC, Olympus, Cook, Medtronic, M.I.Tech, Lumendi, Siemens.

References

- [1] van Hooft J.E., Vleggaar F.P., Le Moine O. et al. Endoscopic magnetic gastroenteric anastomosis for palliation of malignant gastric outlet obstruction: a prospective multicenter study. *Gastrointest Endosc* 2010; 72: 530–535. doi:10.1016/j.gie.2010.05.025.
- [2] Chopita N., Vaillaverde A., Cope C. et al. Endoscopic gastroenteric anastomosis using magnets. *Endoscopy* 2005; 37: 313–317. doi:10.1055/s-2005-861358
- [3] Cope C. Creation of compression gastroenterostomy by means of the oral, percutaneous, or surgical introduction of magnets: feasibility study in swine. *J Vasc Interv Radiol* 1995; 6: 539–545. doi:10.1016/s1051-0443(95)71131-9

OP012 Stent Patency and Clinical Outcomes of EUS-GJ versus Enteral Stenting in Malignant Gastro-duodenal Obstruction

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DOI 10.1055/s-0046-1820667

Aims Malignant gastroduodenal obstruction (mGOO) is a serious complication that compromises quality of life. Traditionally, options to restore luminal patency in patients with mGOO were surgical gastrojejunostomy (SGJ) and enteral stenting (ES). Recently, EUS-guided Gastro-Jejunostomy (EUS-GJ) has gained popularity in tertiary care centers. This retrospective study compares the efficacy and safety of EUS-GJ versus ES. The primary objective was to compare stent failure-free survival (patency time) between EUS-GJ and ES in patients with unresectable mGOO. Secondary objectives included comparing technical success, clinical success (defined as an improvement of at least two points in the Gastric Outlet Obstruction Scoring System [GOOSS] score), need for re-intervention, length of hospital stay, incidence of adverse events (AEs), and overall survival (OS).

Methods A single-center retrospective analysis (Azienda Ospedaliero Universitaria Policlinico di Modena) was conducted on all consecutive patients with confirmed symptomatic mGOO who were not candidates for curative surgical resection and underwent EUS-GJ or ES between January 2019 and August 2025.

Demographic data, mGOO etiology, procedural data, and clinical follow-up were collected and analyzed. EUS-GJ procedures were performed using the wire-endoscopic simplified technique (WEST). Cumulative patency and overall survival were analyzed using the Kaplan-Meier method and compared using the log-rank test [1–7].

Results A total of 109 patients were analyzed: 62 treated with ES and 47 with EUS-GJ. Baseline characteristics were comparable, although pancreatic etiology was more frequent in the EUS-GJ group ($p = 0.004$) and gastric etiology in the ES group ($p = 0.012$). Median stent failure-free survival was significantly longer in the EUS-GJ group (135 days) compared to the ES group (59 days; $p = 0.00068$). Technical success was comparable and high in both groups (EUS-GJ 97.9% vs. ES 100%; $p = 0.43$). However, clinical success was significantly higher in the EUS-GJ group (95.5% vs. 72.3%; $p = 0.004$). The need for re-intervention was significantly lower in the EUS-GJ group (4.3%) compared to the ES group (22.6%; $p = 0.012$). The overall rate of adverse events was similar (EUS-GJ 21.3% vs. ES 24.2%; $p = 0.82$), although tumor ingrowth (the main cause of ES failure) was significantly more frequent in the ES group ($p = 0.028$). Median overall survival was significantly longer in the EUS-GJ group (135 days vs. 71.5 days; $p = 0.017$).

Conclusions EUS-GJ demonstrated significantly longer stent failure-free survival compared to enteral stenting. In addition to comparable technical success and overall safety profiles, EUS-GJ provided higher clinical success, markedly longer anastomosis patency, and a significant reduction in the need for re-interventions. These benefits are primarily attributable to overcoming tumor ingrowth, which remains the main limitation of ES. The results suggest that EUS-GJ should be considered the first-line palliative procedure for mGOO patients in high-volume centers with adequate expertise.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Iqbal U, Khara HS, Hu Y, Kumar V, Tufail K, Confer B et al. EUS-guided gastroenterostomy for the management of gastric outlet obstruction: A systematic review and meta-analysis. *Endosc Ultrasound*. 2020
- [2] Bomman S, Ghafoor A, Sanders DJ, Jayaraj M, Chandra S, Krishnamoorthi R. Endoscopic ultrasound-guided gastroenterostomy versus surgical gastrojejunostomy in treatment of malignant gastric outlet obstruction: Systematic review and meta-analysis. *Endosc Int Open*. aprile. 2022
- [3] Ge PS, Young JY, Dong W, Thompson CC. EUS-guided gastroenterostomy versus enteral stent placement for palliation of malignant gastric outlet obstruction. *Surg Endosc*. ottobre. 2019
- [4] Krishnamoorthi R, Bomman S, Benias P, Kozarek RA, Peetermans JA, McMullen E et al. Efficacy and safety of endoscopic duodenal stent versus endoscopic or surgical gastrojejunostomy to treat malignant gastric outlet obstruction: systematic review and meta-analysis. *Endosc Int Open*. giugno. 2022
- [5] Chandan S, Khan SR, Mohan BP, Shah AR, Bilal M, Ramai D et al. EUS-guided gastroenterostomy versus enteral stenting for gastric outlet obstruction: Systematic review and meta-analysis. *Endosc Int Open*. marzo. 2021
- [6] Chen YI, Itoi T, Baron TH, Nieto J, Haito-Chavez Y, Grimm IS et al. EUS-guided gastroenterostomy is comparable to enteral stenting with fewer re-interventions in malignant gastric outlet obstruction. *Surg Endosc*. luglio. 2017
- [7] Teoh AYB, Lakhtakia S, Tarantino I, Perez-Miranda M, Kunda R, Maluf-Filho F et al. Endoscopic ultrasonography-guided gastroenterostomy versus uncovered duodenal metal stenting for unresectable malignant gastric outlet obstruction (DRA-GOO): a multicentre randomised controlled trial. *Lancet Gastroenterol Hepatol*. giugno. 2025

OP013 Randomized Controlled Trial Comparing Endoscopic Balloon Dilation Versus Endoscopic Stricturectomy For Short Strictures (<3 Cm) Related To Crohn’s Disease (The BEST-CD Trial) (NCT05521867)

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DOI 10.1055/s-0046-1820668

Aims Endoscopic balloon dilation (BD) is widely practiced for Crohn’s disease (CD)–related strictures but is limited by frequent recurrence and need for surgery. Endoscopic stricturectomy (ES) has shown encouraging results in retrospective studies, especially for anastomotic strictures, but prospective randomized evidence is lacking. The BEST-CD trial was designed to directly compare EBD and ES for short CD strictures and to evaluate predictors of recurrence, reintervention, and surgery.

Methods This single-centre, open-label, randomized controlled trial was conducted between August 2022 and March 2025 at the Asian Institute of Gastroenterology, Hyderabad, India. Eligible patients were adults 18–65 years with CD with symptomatic, strictures (<3 cm, de novo/ anastomotic, accessible by standard endoscopy). Patients with >2 strictures, strictures beyond endoscopic reach, or prior ES were excluded. Participants were randomized to undergo either EBD or ES using insulated tip knife. The primary outcome was clinical recurrence at 1 year. Secondary outcomes included reintervention, stricture-related surgery, emergency visits, hospitalization, technical and clinical success, adverse events, and time-to-event outcomes. Cox multivariable regression was done to assess independent predictors [1–3].

Results Of 157 patients screened, 101 were randomized (50 EBD, 51 ES). Baseline demographics, disease extent, and prior therapies were comparable between groups. Technical success was achieved in 88 % of both groups, and clinical success was 92 % in the EBD arm and 96 % in the ES arm. Median procedure time was longer for ES than EBD (35 vs 30 minutes, $p=0.007$). At a median follow-up of 12 months (range 3–36), ES significantly reduced clinical recurrence (24.5 % vs 54.3 %, $p=0.003$), need for reintervention (23.5 % vs 52 %, $p=0.004$), stricture-related emergency visits (17.6 % vs 54 %, $p<0.001$), and hospitalizations (15.7 % vs 38 %, $p=0.01$) compared with EBD. Stricture-related surgery was numerically lower after ES (3.9 % vs 16 %, $p=0.051$) but did not reach statistical significance. Cox regression showed ES was associated with significantly longer time to recurrence (hazard ratio [HR] 0.35, $p=0.004$), reintervention (HR 0.36, $p=0.006$), and first emergency visit (HR 0.28, $p<0.001$), with a trend towards longer time to hospitalization (HR 0.42, $p=0.02$). Time to surgery was not significantly different between groups ($p=0.4$). Adverse events occurred in 22 % of EBD and 13.7 % of ES patients ($p=0.31$), mostly minor bleeding or post-procedure pain, with one perforation in each arm. On multivariable analysis, treatment with ES (Hazard ratio [HR] 0.315, 95 % CI 0.136–0.728, $p=0.007$), greater stricture length (OR 3.59, 95 % CI 1.62–7.95, $p=0.002$) and upper GI location (► **Table 1**) independently predicted reintervention and clinical recurrence while surgery was predicted by longer stricture length rather than treatment modality.

► **Table 1**

Variable	Reintervention – p, OR (95 % CI)	Clinical recurrence – p, OR (95 % CI)	Surgery – p, OR (95 % CI)
Length of strictures	0.002, 3.587 (1.619–7.949)		0.086, 5.139 (0.792–33.336)
Ileocecal vs UGI	0.017, 0.15 (0.032–0.708)	0.005, 0.093 (0.018–0.497)	
Ileal vs upper GI	0.003, 0.106 (0.024–0.461)	0.004, 0.107 (0.023–0.494)	
ES vs EBD	0.007, 0.315 (0.136–0.728)	0.001, 4.886 (1.964–12.154)	

Conclusions In this first randomized controlled trial of endoscopic therapy for CD strictures, ES demonstrated superior efficacy over EBD with a comparable safety profile. EBD and longer stricture length independently predicted adverse outcomes, whereas surgery was determined by stricture length rather than treatment allocation. These findings suggest ES may be a safer and more effective first-line therapy than EBD for short CD strictures. Larger multicentre studies with longer follow-up are warranted to confirm these results and to refine patient selection.

Conflicts of Interest Partha Pal received consultancy fees/speaker honorarium from Johnson and Johnson, Takeda Pharmaceutical Company, Cipla Ltd, Sun Pharma, Zydus Biosciences, Dr Reddy Labs, Abbott India, RPG Life sciences, La Renon Healthcare Pvt Ltd and Daewoong Pharma

References

- [1] Bouhnik Y et al. Gut. 2018; 67: 53–60
- [2] Lan N, Shen B. Inflamm Bowel Dis. 2018; 24: 897–907
- [3] Bettenworth D et al. Aliment Pharmacol Ther. 2020; 52: 1104–1116

OP014 Moving beyond frames: Spatio-Temporal AI enables Full-Video Assessment of inflammation in Ulcerative Colitis

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DOI 10.1055/s-0046-1820669

Aims Accurate assessment of endoscopic disease activity is essential for the management of Ulcerative colitis (UC). Virtual chromoendoscopy (VCE) enhances mucosal and vascular detail, yet interpretation remains challenging and subject to substantial interobserver variability. Recent AI-models can detect and convert VCE modalities, providing a multimodal and objective evaluation [1]. However, existing AI systems predominantly analyse isolated frames, lacking spatial context and overlooking patchy inflammation. Frame-based approaches are prone to artefacts and misclassification because they cannot follow mucosal changes across the entire colon. To address these limitations, we developed and externally validated a multiple-instance learning (MIL) model that integrates spatial attention to capture patchy inflammation and mucosal granularity, together with temporal tracking of inflammatory changes across full-length endoscopic videos.

► Table 1

	Accuracy% (95% CI)	Sensitivity% (95% CI)	Specificity% (95% CI)	PPV% (95% CI)	NPV% (95% CI)	F1 score% (95% CI)	AUC%
LIMUC	92.4	93.6	90.4	95.5	90.6	94.0	97.8
5-fold cross validation	(92.3-94.9)	(92.7- 95.9)	(89.7- 94.5)	(94.0- 96.7)	(87.9- 92.7)	(92.0-95.6)	
PiCaSSO	94.6	84.0	96.8	80.8	96.7	84.0	95.7
External validation	(88.8- 97.2)	(63.9-95.5)	(90.8-98.7)	(63.6- 90)	(92.3-98.6)	(70-92)	
Birmingham	86.0	88.0	84.0	82.6	87.5	86.3	91.4
External validation	(73.3- 94.2)	(68.8- 97.5)	(63.9- 95.5)	(68.9-93.2)	(70.5-95.4)	(73.5-95.4)	

Methods Endoscopic videos from high-definition white-light endoscopy (HD-WLE), iScan2, iScan3, and narrow-band imaging (NBI) modalities from UC patients in the LIMUC [2], PiCaSSO [3], and Birmingham (BHM) [4] cohorts (1,391, 302, and 54 patients, respectively) were used to develop SpatioMIL. This MIL framework integrates spatial and temporal attention to aggregate frame-level information for robust video-level inflammation detection (**Figure 1**). Videos were labelled as active inflammation or remission according to Mayo Endoscopic Score. Overall, 784 colonoscopy videos (7,840 frames) from LIMUC dataset were used for model training. External validation was performed on 148 full-length PiCaSSO (30,000 frames) and 51 BHM videos (8,000 frames). Model performance in predicting endoscopic remission was evaluated.

Results ► **Table 1** details the performance metrics of SpatioMIL across the three cohorts. In the LIMUC cohort, the model achieved a sensitivity, specificity and accuracy of 93.6%, 90.4% and 92.4%, respectively. External validation demonstrated robust generalizability, with excellent performance in predicting endoscopic remission in both PiCaSSO and BHM cohorts (sensitivity: 84.0% and 88.0%, specificity: 96.8% and 84.0%, accuracy: 94.6% and 86.9%). Interestingly, SpatioMIL outperformed all state-of-the-art MIL approaches, with 94.6 and 86% accuracy in the PiCaSSO and BHM cohort, respectively.

Conclusions Our novel SpatioMIL model integrates spatial and temporal attention for UC assessment, enabling accurate disease evaluation by capturing patchy inflammation and mucosal granularity across the entire colon. The model demonstrated excellent performance with strong external validation across diverse VCE modalities, highlighting its potential as a reliable tool for objective and reproducible endoscopic inflammation assessment.

Conflicts of Interest MI: Grant; Pentax, Olympus, Eli Lilly, Helmsley_Personal Fees: Pentax, Pfitzer, Janssen, Eli Lilly, J&J

References

- [1] Cannatelli R., Bazarova A., Furfaro F. et al. Reproducibility of the Electronic Chromoendoscopy PiCaSSO Score (Paddington International Virtual Chromoendoscopy ScOre) in Ulcerative Colitis Using Multiple Endoscopic Platforms: A Prospective Multicenter International Study (With Video). *Gastrointestinal Endoscopy* 96: 2022; 73–83
- [2] Iacucci M, Daperno M, Lazarev M, Arsenascu R, Tontini GE, Akinola O et al. Development and reliability of the new endoscopic virtual chromoendoscopy score: the PiCaSSO (Paddington International Virtual Chromoendoscopy ScOre) in ulcerative colitis. *Gastrointest Endosc* 2017; 86 (6): 1118–1127 e5
- [3] Polat G, Kani HT, Ergenc I, Ozen Alahdab Y, Temizel A, Atug O. Improving the Computer-Aided Estimation of Ulcerative Colitis Severity According to Mayo Endoscopic Score by Using Regression-Based Deep Learning. *Inflamm Bowel Dis* 2023; 29 (9): 1431–1439. doi:10.1093/ibd/izac226
- [4] Iacucci M, Zammarchi I, Santacroce G et al. A Novel Switching of Artificial Intelligence to Generate Simultaneously Multimodal Images to Assess Inflammation and Predict Outcomes in Ulcerative Colitis-(With Video). *Dig Endosc* 2025; 37 (10): 1078–1088. doi:10.1111/den.15067

OP015 Endoscopic Needle-Knife Stricturotomy for Crohn's Disease Strictures: Safety, Technical Success, and Long-Term Outcomes in a Real-Life Cohort

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DOI 10.1055/s-0046-1820670

Aims Up to 30% of patients with Crohn's disease (CD) develop intestinal strictures during their disease course, leading to impaired quality of life and posing a major therapeutic challenge. Fibrotic strictures respond poorly to medical therapy and surgery carries substantial risks of complications and recurrence. Endoscopic balloon dilation (EBD) is widely used but often requires repeated sessions. Endoscopic stricturotomy (ES) with an IT-knife has recently emerged as a minimally invasive alternative, potentially improving long-term outcomes, although real-world evidence remains limited. To evaluate safety, technical feasibility, and long-term outcomes of ES for CD-related strictures.

Methods We prospectively analyzed 22 patients with stricturing CD who underwent ES at Hospital Clínic de Barcelona between 2018 and 2024. Eligible strictures were ≤ 3 cm long, native or anastomotic, and endoscopically accessible. The primary outcome was surgery-free survival at 12 months, defined as absence of surgical intervention for symptomatic recurrence. Secondary outcomes included: technical success (scope traversability after the procedure), clinical success (symptom improvement at follow-up), complications, need for additional endoscopic procedures and predictors of therapeutic success.

Results Twenty-two patients were enrolled (mean age 45.0 ± 12.8 years; 59.1% anastomotic, 40.9% native strictures). Magnetic resonance enterography was performed in all cases, revealing proximal dilation (≥ 3 cm) in 54.5%. Immediate technical success was achieved in 91% (20/22) of procedures. Adverse events were infrequent, limited to two cases of delayed post-procedural bleeding (9%), one requiring endoscopic haemostasis. Surgery-free survival was 91% (20/22) at 12 months and 88% (15/17) at 24 months, with no significant difference between native and anastomotic strictures (89% vs 92%, *p* = 0.5). Among the surgery-free patients, clinical success was maintained in 95% (19/20) at 12 months and 80% (12/15) at 24 months. Overall, four patients underwent repeat endoscopic interventions for symptomatic recurrence (one within 12 months, three within 24 months), all with 100% technical success.

Conclusions Endoscopic IT-knife ES appears safe, feasible, and effective for short CD-related strictures, achieving durable symptom control and surgery-free survival with a low complication rate. This study provides the longest systematic follow-up reported to date, reinforcing the long-term utility of ES in real-world practice. These findings support incorporating ES into the thera-

peutic algorithm alongside EBD, with multicentre prospective studies warranted to validate outcomes, standardize protocols, and redefine patient selection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP016 Safety and Efficacy of Endoscopic Submucosal Dissection for Colorectal Dysplasia in Inflammatory Bowel Disease: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1820671

Aims Patients with inflammatory bowel disease (IBD) are at increased risk of colorectal neoplasia. Endoscopic submucosal dissection (ESD) has emerged as an organ-preserving alternative for the management of dysplastic lesions. However, pooled data on efficacy, safety, and long-term outcomes in the IBD population remain limited. We performed a systematic review and meta-analysis to evaluate the procedural and clinical outcomes of ESD for colorectal colitis-associated neoplasia (HR-CAN).

Methods Multiple databases were searched, and studies were retrieved based on pre-specified criteria until April 2025. The outcomes assessed were resection rates, procedural complications, local recurrence, metachronous tumors and the need for surgery after ESD in IBD. Standard meta-analysis methods were followed using the random-effects model. Heterogeneity was assessed with I^2 and τ^2 statistics. Continuous variables, including lesion size and follow-up, were summarized descriptively.

Results Fifteen studies including 441 patients with 571 lesions (65% ulcerative colitis, 35% Crohn's disease) were included. The median lesion size was 30 mm (IQR 20–50 mm) and median follow-up was 24 months (range 6–60 months). Pooled en bloc resection was 92% (95% CI 88–95) and R0 resection 81% (95% CI 74–87). Procedure-related bleeding occurred in 6% (95% CI 3–11) and perforation in 9% (95% CI 5–15). Local recurrence after ESD was 6% (95% CI 4–9), whereas metachronous dysplasia was observed in 16% of patients (95% CI 9–25%). Overall, 17% of patients required surgical intervention post-ESD (95% CI 12–23), due to incomplete resection, recurrence, or histological findings.

Conclusions ESD is a safe and effective procedure for the treatment of colorectal dysplastic lesions in IBD patients, achieving high en bloc and R0 resection rates with low local recurrence. Nevertheless, a significant proportion of patients develop metachronous lesions or require surgery, underscoring the necessity of structured endoscopic surveillance and multidisciplinary management. Further prospective multicenter studies with longer follow-up are still needed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP017 Outcomes of endoscopic submucosal dissection (ESD) for dysplasia in inflammatory bowel disease (IBD): A retrospective single-centre analysis

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DOI 10.1055/s-0046-1820672

Aims En bloc resection with advanced endoscopic techniques was suggested in the BSG 2025 Guidelines for the management of visible, clearly demarcated dysplastic lesions, in patients with IBD. Our study aims to demonstrate the safety, efficacy, and long-term outcomes of ESD as treatment option in selected patients, allowing for bowel preservation in IBD.

Methods We retrospectively followed 37 patients with extensive IBD-related colitis and visible dysplastic lesions treated with ESD from 2017 to August 2025. The mean patient age was 63 years and 54.1% were male. Majority of the lesions

were rectal (67.6%) and 45.9% had a flat component. Their size was ≥ 20 mm in 73%. Follow-up endoscopic evaluations were performed at 6 months, 1-year and 3-years post-procedure. Ten patients were lost to follow up.

Results En bloc resection was achieved in 91.9% of cases, and R0 resection in 75.7%. Histologically confirmed clear vertical and horizontal margins were observed in 75.7% of patients. At 6 months, there was no recurrence. At 1-year follow-up, 97.3% of patients remained recurrence-free, and 100% in 3-year follow up. No metachronous lesions were detected in 86.5% of patients. Significant discrepancy was noted between pre-resection biopsy and final histology, with 32.4% of the lesions biopsied before resection, showing different histology from the excision specimen. Specifically, 8 out of 19 lesions (42.1%) with low grade dysplasia (LGD) before excision, were upgraded to high grade dysplasia (HGD) or cancer post resection and 2 out of 3 non-dysplastic serrated lesions were found to have LGD. Adverse events (bleeding, perforation) occurred in 5 patients (13.5%) with two of those (1 patient for suturing of bleeding vessel and 1 patient due to delayed perforation of a lesion on the ileorectal anastomosis) requiring surgical management.

Conclusions ESD is a feasible, safe, and effective method for treating visible dysplasia in IBD patients, offering significant benefits in accurate histopathology from excision specimen, a low risk of early recurrence and colon-sparing benefit. While promising, further long-term and larger-scale studies are needed to confirm these findings, particularly regarding the risk of late and metachronous recurrence in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP018 Redefining Ulcerative Colitis Assessment Through Multimodal Virtual Chromoendoscopy: The MONET Study

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DOI 10.1055/s-0046-1820673

Aims Despite normal-appearing mucosa at white light endoscopy (WLE), up to 30% ulcerative colitis (UC) patients experience persistent histological activity, with increased risk of adverse outcomes [1]. Virtual electronic chromoendoscopy (VCE) can enhance visualisation of subvisual alterations, potentially bridging this gap [2]. The MONET study aims to develop a novel endoscopic scoring system based on multimodal VCE features to distinguish between quiescent and active colitis in UC.

Methods We developed a scoring system incorporating three VCE modalities of the EVIS-X1 CV 1500 (Olympus, Japan) platform: Narrow-Band Imaging (NBI), Texture and Colour Enhancement Imaging (TXI) and Red Dichromatic Imaging (RDI). Eight international IBD-experienced endoscopists participated in a two-round modified Delphi process: an initial in-person consensus meeting followed by an anonymised online survey (*Qualtrics platform*) to select mucosal and vascular patterns representative of different UC activity grades. Consensus was defined as $\geq 75\%$ participant agreement. Twenty-one high-quality videos encompassing varying grades of inflammation were prospectively recorded using WLE, NBI, TXI, and RDI according to a standardised protocol from the ongoing multicenter international MONET study (NCT06709209). Videos were independently scored according to selected features. Interobserver agreement was evaluated using Gwet's AC1/AC2 coefficient.

Results Overall, 12 mucosal and 12 vascular features were initially identified (Table 1, Figure 1). Among mucosal features, crypt architecture (AC1 0.76), microerosions (AC1 0.76) and erosions (AC1 0.80) demonstrated substantial agreement. For vascular features, crowded and intramucosal bleeding showed substantial agreement (AC1 0.78 and 0.73, respectively), while honeycombing showed moderate agreement (AC1 0.50). NBI-specific features, including honeycombing, branching vessels, and intramucosal bleeding, demonstrated substantial agreement (AC1 0.63, 0.73, and 0.65, respectively). Using TXI, crypt architecture (AC1 0.7), microerosions (AC1 0.72), and erosions (AC1 0.78) yielded substantial agreement. Deep vessels visibility, assessed through RDI, yielded substantial agreement (AC1 0.77). The agreement for the remaining features was almost perfect. The anonymised Delphi voting survey confirmed consensus for all 24 identified elements into the final MONET score.

Conclusions The novel VCE-based MONET score demonstrated high interobserver agreement across mucosal and vascular features, supporting its robustness and clinical relevance. It holds potential to bridge the gap between endoscopic assessment and histologic activity, particularly in mildly active UC. Multicenter prospective validation is underway to support broader adoption and future integration into AI-assisted endoscopic evaluation.

Conflicts of Interest OMN: Advisory board fees from Eli Lilly, Nestlé, Janssen; Speaker fees from AbbVie, Janssen, Eli Lilly, Ferring, Alfa Sigma, Recordati, Noös, and PfizerOMN: Nardone, Olga Maria: Advisory board fees from Eli Lilly, Nestlé, Janssen; Speaker fees from AbbVie, Janssen, Eli Lilly, Ferring, Alfa Sigma, Recordati, Noös, and PfizerADB: speaker's fees from AbbVie, Alphasigma, Ferring, Lilly, Janssen, and CelltrionRB: Grant: Pentax Europe, Medtronic, Norgine; Personal Fees: Pentax Europe, Fujifilm, Norgine, Medtronic, Ipsen, Alfasigma, Viatrix, Endostart, Falk Foundation; Non-financial Support: Pentax Europe, Fujifilm, Boston Scientific, Olympus, Erbe, Norgine

References

- [1] Iacucci M, Smith SCL, Bazarova A et al. An International Multicenter Real-Life Prospective Study of Electronic Chromoendoscopy Score PICaSSO in Ulcerative Colitis. *Gastroenterology* 2021; 160 (5): 1558–1569.e8. doi:10.1053/j.gastro.2020.12.024
- [2] Yoon H, Jangi S, Dulai PS et al. Incremental Benefit of Achieving Endoscopic and Histologic Remission in Patients With Ulcerative Colitis: A Systematic Review and Meta-Analysis. *Gastroenterology* 2020; 159 (4): 1262–1275.e7. doi:10.1053/j.gastro.2020.06.043

The Changing Paradigm of Biliary Drainage: ERCP vs EUS

14/05/2026, 08:30–09:30

Aqua 3 + 4

OP019 Advanced cannulation techniques vs early EUS-guided biliary drainage in case of difficult biliary cannulation in patients with distal malignant biliary obstruction: an international multi-center propensity score-matched analysis (the ACT-EUS study)

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DOI 10.1055/s-0046-1820674

Aims Biliary drainage (BD) in distal malignant biliary obstruction (DMBO) is often hampered by difficult biliary cannulation (DBC) during endoscopic retrograde cholangiopancreatography (ERCP). Advanced cannulation techniques (aERCP) may overcome DBC but still fail in up to 15% of cases, increasing the risk of adverse events (AEs). Early endoscopic ultrasound-guided BD (eEUS-BD) is a potential alternative. The aim of this study is to directly compare safety and efficacy of EUS-BD and aERCP [1–24].

Methods This is a retrospective, multicentric study (30 centres in United States, Canada, Europe), including patients with DMBO and common bile duct (CBD) diameter > 12 mm treated between 2019 and 2024. DBC cases managed with either eEUS-BD or aERCP were analysed. A 1:2 propensity score-matched cohort was generated to ensure comparability, with regression modelling and

inverse probability of treatment weighting (IPTW) performed as sensitivity analyses. AEs rate was the primary outcome; secondary outcomes included BD failure and clinical success.

Results Standard cannulation failed in 2066/10,738 (19.2%) ERCPs. aERCP and eEUS-BD were attempted in 1733 and 333 cases, respectively. After matching, 313 patients per EUS-BD group and 626 patients per aERCP group were analyzed. AEs occurred in 18.2% of aERCPs and 9.3% of eEUS-BD ($p < 0.01$), with post-procedural pancreatitis the most frequent AE after aERCP (55 cases, 12.0%). Both regression and IPTW confirmed the robustness of these findings on the entire cohort. Technical success was significantly lower with aERCP (82.0% vs. 95.9%, $p < 0.01$), clinical success was comparable (94.5% vs. 96.4%, $p = 0.89$).

Conclusions In patients with DMBO and dilated CBD, eEUS-BD is associated with fewer AEs and higher technical success than aERCP, supporting its role as a safer, more effective option in DBC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sharaiha RZ, Khan MA, Kamal F et al. Efficacy and safety of EUS-guided biliary drainage in comparison with percutaneous biliary drainage when ERCP fails: a systematic review and meta-analysis. *Gastrointest Endosc* 2017; 85: 904–14
- [2] Beunon C, Debourdeau A, Schaefer M et al. Technical failure of endoscopic ultrasound-guided choledochoduodenostomy: multicenter study on rescue techniques, consequences, and risk factors. *Endoscopy* 2025; 57 (9): 990–1000. doi:10.1055/a-2541-2973
- [3] Lee KJ, Cho E, Park DH et al. Identification of risk factors associated with post-ERCP pancreatitis in patients with easy cannulation: a prospective multicenter observational study (with videos). *Gastrointest Endosc* 2025; 101 (5): 988–996.e4. doi:10.1016/j.gie.2024.11.018
- [4] Anderloni A, Spadaccini M, Binda C, Mauro A, Stigliano S, Carrozza L, Colombo M, Mazza S, Coluccio C, Amato A, Andreozzi M, Rizzo GEM, Facciorusso A, Radaelli F, Carrara S, Mangiavillano B, Di Matteo FM, Tarantino I, Hassan C, Repici A, Fugazza A, Fabbri C. Endoscopic ultrasound-guided choledochoduodenostomy vs endoscopic retrograde cholangiopancreatography in malignant distal biliary obstruction to prevent postprocedural pancreatitis: a randomized trial. *Gastroenterology*. 2025; [Epub ahead of print]
- [5] Chen YI, Sahai A, Donatelli G et al. Endoscopic ultrasound-guided biliary drainage of first intent with a lumen-apposing metal stent vs endoscopic retrograde cholangiopancreatography in malignant distal biliary obstruction: a multicenter randomized controlled study (ELEMENT Trial). *Gastroenterology* 2023; 165: 1249–61.e1245
- [6] Teoh AYB, Napoleon B, Kunda R et al. EUS-guided choledochoduodenostomy using lumen-apposing stent versus ERCP with covered metallic stents in patients with unresectable malignant distal biliary obstruction: a multicenter randomized controlled trial (DRA-MBO Trial). *Gastroenterology* 2023; 165: 473–82.e472
- [7] Haraldsson E, Lundell L, Swahn F et al. Endoscopic classification of the papilla of Vater. Results of an inter- and intraobserver agreement study. *United European Gastroenterol J* 2017; 5 (4): 504–510. doi:10.1177/2050640616674837
- [8] Nass KJ, Zwager LW, Van Der Vlugt M, Dekker E, Bossuyt PM, Ravindran Set al. A novel classification for adverse events in gastrointestinal endoscopy: The AGREE classification. *Gastrointest Endosc* 2022; 95 (6): 1125–35. doi:10.1016/j.gie.2022.04.189
- [9] Kiriya S, Takada T, Strasberg SM, Solomkin JS, Mayumi T, Pitt HA et al. Tokyo Guidelines 2018: diagnostic criteria and severity grading of acute cholangitis. *J Hepatobiliary Pancreat Sci*. 2018; 25 (1): 17–30. doi:10.1002/jhbp.512
- [10] ASGE Standards of Practice Committee Chandrasekhara V, Khashab MA, Muthusamy VR, Acosta RD, Agrawal Det al. Adverse events associated with ERCP. *Gastrointest Endosc* 2017; 85 (1): 32–47. doi:10.1016/j.gie.2016.06.051
- [11] Cotton PB, Eisen GM, Aabakken L, Baron TH, Hutter MM, Jacobson BC et al. A lexicon for endoscopic adverse events: report of an ASGE workshop. *Gastrointest Endosc* 2010; 71 (3): 446–54. doi:10.1016/j.gie.2009.10.027
- [12] von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *Ann Intern Med*. 2007; Oct 16 147 (8): 573–7. doi:10.7326/0003-4819-147-8-200710160-00010 Erratum in: *Ann Intern Med*. 2008 Jan 15;148(2):168 PMID: 17938396
- [13] García-Alonso FJ, Peñas-Herrero I, Sanchez-Ocana R et al. The role of endoscopic ultrasound guidance for biliary and pancreatic duct access and drainage to overcome the limitations of ERCP: a retrospective evaluation. *Endoscopy* 2021; 53 (7): 691–699. doi:10.1055/a-2544-6325
- [14] Holt BA, Hawes R, Hasan M et al. Biliary drainage: role of EUS guidance. *Gastrointest Endosc* 2016; 83 (1): 160–165. doi:10.1016/j.gie.2015.06.019
- [15] Spadaccini M, Binda C, Mauro A et al. Impact of endoscopic ultrasound-guided biliary drainage on the management of difficult biliary cannulation in patients with distal malignant biliary obstruction. *Endoscopy*. Published online 2025. doi:10.1055/a-2544-6325
- [16] Jacques J, Privat J, Pinard F, Fumex F, Valats JC, Chaoui A, Cholet F, Godard B, Grandval P, Legros R, Kerever S, Napoleon B. Endoscopic ultrasound-guided choledochoduodenostomy with electrocautery-enhanced lumen-apposing stents: a retrospective analysis. *Endoscopy*. 2019; 51 (6): 540–547. doi:10.1055/a-0735-9137 Epub 2018 Oct 22 PMID: 30347424
- [17] Fugazza A, Khalaf K, Spadaccini M, Facciorusso A, Colombo M, Andreozzi M, Carrara S, Binda C, Fabbri C, Anderloni A, Hassan C, Baron T, Repici A. Outcomes predictors in endoscopic ultrasound-guided choledochoduodenostomy with lumen-apposing metal stent: Systematic review and meta-analysis. *Endosc Int Open* 2024; Mar 28 12 (3): E456–E462. doi:10.1055/a-2271-2145 PMID: 38550768 PMID: PMC10978093
- [18] Dhir V, Singh VK, Dalal A, Patil GK, Maydeo A. Randomized comparison of precut papillotomy versus an endoscopic ultrasound-guided rendezvous procedure for difficult biliary access in malignant distal biliary obstruction. *Endoscopy*. Published online 2025. doi:10.1055/a-2515-1712
- [19] Choudhury A, Samanta J, Muktesh G et al. Endoscopic Ultrasound-Guided Rendezvous Technique Versus Precut Sphincterotomy as Salvage Technique in Patients With Benign Biliary Disease and Difficult Biliary Cannulation: A Randomized Controlled Trial. *Ann Intern Med* 2024; 177 (10): 1361–1369. doi:10.7326/M24-0092
- [20] van der Merwe SW, van Wanrooij RJ, Bronswijk M, Everett S, Lakhtakia S, Rimbaz M, Hucl T, Kunda R, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Perez-Miranda M, van Hooft JE. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (2): 185–205. doi:10.1055/a-1717-1391 Epub 2021 Dec 22 PMID: 34937098
- [21] Han S, Zhang J, Durkalski-Mauldin V et al. Impact of difficult biliary cannulation on post-ERCP pancreatitis: secondary analysis of the stent versus indomethacin trial dataset. *Gastrointest Endosc* 2025; 101 (3): 617–628. doi:10.1016/j.gie.2024.10.003
- [22] Testoni PA, Mariani A, Aabakken L, Arvanitakis M, Bories E, Costamagna G, Devière J, Dinis-Ribeiro M, Dumonceau JM, Giovannini M, Gyökeres T, Haffner M, Halttunen J, Hassan C, Lopes L, Papanikolaou IS, Tham TC, Tringali A, van Hooft J, Williams EJ. Papillary cannulation and sphincterotomy techniques at ERCP: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2016; Jul 48 (7): 657–83. doi:10.1055/s-0042-108641 Epub 2016 Jun 14 PMID: 27299638
- [23] Fugazza A, Troncone E, Amato A, Tarantino I, Iannone A, Donato G, D'Amico F, Mogavero G, Amata M, Fabbri C, Radaelli F, Occhipinti P, Repici A, Anderloni A. Difficult biliary cannulation in patients with distal malignant biliary obstruction: An underestimated problem? *Dig Liver Dis*. 2022; Apr 54 (4): 529–536. doi:10.1016/j.dld.2021.07.010 Epub 2021 Aug 4 PMID: 34362708
- [24] Dumonceau JM, Tringali A, Papanikolaou IS, Blero D, Mangiavillano B, Schmidt A, Vanbiervliet G, Costamagna G, Devière J, García-Cano J, Gyökeres T, Hassan C, Prat F, Siersema PD, van Hooft JE. Endoscopic biliary stenting: indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated October 2017. *Endoscopy*. 2018; Sep 50 (9): 910–930. doi:10.1055/a-0659-9864 Epub 2018 Aug 7 PMID: 30086596

OP020 EUS-guided choledochoduodenostomy with Lumen Apposing Metal Stent vs ERCP with self-expandable metal stent for distal malignant biliary obstruction: a systematic review and meta-analysis of randomized controlled trials

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DOI 10.1055/s-0046-1820675

Aims Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) has emerged as a viable alternative to endoscopic retrograde cholangiopancreatography (ERCP) for the primary management of distal malignant biliary obstruction (DMBO). Several randomized controlled trials (RCTs) have evaluated the performance of EUS-CDS with cautery-enhanced lumen-apposing metal stents (CE-LAMS) vs ERCP. This systematic review and meta-analysis aims to assess the efficacy and safety of EUS-CDS with CE-LAMS for DMBO, and compare its outcomes with ERCP

Methods A systematic search was conducted in the MEDLINE, Embase, and Scopus databases from inception until September 2024, to identify RCTs evaluating the performance of EUS-CDS with CE-LAMS for primary biliary drainage in patients with DMBO and dilated biliary duct, compared to ERCP with SEMS. Technical success was defined as the pooled rate of accurate placement of either LAMS (for EUS-CDS) or SEMS (for ERCP) within the CBD, with bile flowing through the stent. In case of technical failure the pooled rate of successful crossover to the other technique was reported. Clinical success the pooled rate of patients with a $\geq 50\%$ reduction in serum bilirubin to < 3 mg/dL within two weeks (and clinical improvement in case of concomitant cholangitis). Safety outcomes included adverse events, classified per the American Society for Gastrointestinal Endoscopy lexicon, with severe events including unplanned admissions > 10 days, ICU stays > 1 day, surgery, or permanent disability. Pooled mortality rate was also reported. Pooled estimates and relative risk (RR) with 95% confidence intervals (CI) were calculated using a random effects model, and heterogeneity was assessed using the I^2 statistic [1–4].

Results Four randomized controlled trials, including a total of 555 patients were included. The meta-analysis revealed a higher technical success rate of EUS-CDS performed with CE-LAMS compared to ERCP with SEMS placement, with a pooled relative risk (RR) of 1.17 (95% confidence interval [CI]: 1.07–1.28, $I^2 = 28.6\%$), and an absolute risk difference of 13.6% (95% CI: 6.0 to 21.2) No significant differences were found between the two groups in term of clinical success (RR = 1.00, 95% CI: 0.95–1.07, $I^2 = 0\%$), with a clinical success rate of 89.0% (95% CI: 84.1 to 93.9; $I^2 = 32.6\%$), and 88.5% (95% CI: 84.8 to 92.2; $I^2 = 0\%$) in EUS-CDS and ERCP group, respectively. The relative risk (RR) of the overall adverse event rate for EUS-CDS compared with ERCP was 0.97 (95% CI: 0.68–1.43, $I^2 = 0\%$). The pooled incidence of adverse events was 15.8% (95% CI: 10.6 to 21.0; $I^2 = 21.9\%$) among patients undergoing EUS-CDS, and 20.7% (95% CI:

11.3 to 30.1; $I^2 = 76.22\%$) among those undergoing ERCP. No difference were assessed for severe adverse events across the studies, with a pooled RR of 0.88 (95% CI: 0.38–2.07; EUS-CDS: 2.4% vs ERCP: 3.1%) In detail, EUS-CDS was associated with a reduced risk of post-procedural pancreatitis (RR = 0.13, 95% CI: 0.03–0.60; $I^2 = 0\%$), with an absolute risk difference of -4.7% (95% CI: -7.6 to -1.5), while EUS-CDS showed an higher risk of stent misdeployment/migration compared to ERCP (RR = 6.39, 95% CI: 1.61–25.40, $I^2 = 0\%$).

Conclusions EUS-CDS with CE-LAMS demonstrated superior technical efficiency compared to ERCP, while maintaining similar clinical with a lower risk of post-procedural pancreatitis. Considering EUS-CDS implies a higher risk of stent misdeployment, future research should aim to identify predictive factors that could improve patients selection, maximizing the benefits of the different approaches

Conflicts of Interest MS: Boston Scientific (Speaking honorarium), CF: Steris (Speaking honorarium), Q3 Medical (Speaking honorarium), Boston Scientific (Speaking honorarium), AA: Olympus Corp (consultancy), Boston Scientific (consultancy); CH: Fujifilm (consultancy); Medtronic Co. (consultancy), JJ: Boston Scientific (training honorarium), Olympus Corp (training honorarium), ERBE (consultancy, and training honorarium), Fujifilm (consultancy, and training honorarium), Pentax (training honorarium). AR: Fujifilm (consultancy); Olympus Corp (consultancy); Medtronic Co. (consultancy), Boston Scientific (consultancy), AF: Boston Scientific (consultancy)

References

- [1] Anderloni A, Spadaccini M, Binda C, Mauro A, Stigliano S, Carrozza L, Colombo M, Mazza S, Coluccio C, Amato A, Andreozzi M, Rizzo GEM, Facciorusso A, Radaelli F, Carrara S, Mangiavillano B, Di Matteo FM, Tarantino I, Hassan C, Repici A, Fugazza A, Fabbri C. Endoscopic ultrasound-guided choledochoduodenostomy vs endoscopic retrograde cholangiopancreatography in malignant distal biliary obstruction to prevent postprocedural pancreatitis: a randomized trial. *Gastroenterology*. 2025; Epub ahead of print
- [2] Gaheen A, Altonbary A, Hakim H, Deiaib A, Atwa M Endoscopic ultrasound-guided choledochoduodenostomy versus endoscopic retrograde cholangiopancreatography for primary biliary decompression in distal malignant biliary obstruction. *UEGJ*. 2023
- [3] Teoh AYB, Napoleon B, Kunda R, Arcidiacono PG, Kongkam P, Larghi A et al. EUS-Guided Choledochoduodenostomy Using Lumen Apposing Stent Versus ERCP With Covered Metallic Stents in Patients With Unresectable Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Trial (DRA-MBO Trial). *Gastroenterology*. 2023; 165 (2): 473–482.e2
- [4] Chen YI, Sahai A, Donatelli G, Lam E, Forbes N, Mosko J et al. Endoscopic Ultrasound-Guided Biliary Drainage of First Intent With a Lumen-Apposing Metal Stent vs Endoscopic Retrograde Cholangiopancreatography in Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Study (ELEMENT Trial). *Gastroenterology*. 2023; 165 (5): 1249–1261.e5

OP021 EUS-guided hepaticogastrostomy after failed ERCP in distal malignant biliary obstruction without duodenal stenosis: efficacy, safety, oncologic impact and biliary patency

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DOI 10.1055/s-0046-1820676

Aims After failed endoscopic retrograde cholangiopancreatography (ERCP), endoscopic ultrasound-guided biliary drainage (EUS-BD) is recommended in centers with appropriate expertise. Evidence remains heterogeneous and rarely focuses specifically on endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) for distal malignant biliary obstruction (dMBO) without duodenal stenosis. We aimed to evaluate the efficacy, safety, biliary stent patency and oncologic impact of EUS-HGS in this setting.

Methods Retrospective single-center cohort (2011–2024) including consecutive dMBO after failed ERCP without endoscopic/radiological duodenal ste-

nosis. Exclusions: duodenal tumor invasion, surgically altered anatomy, papillary involvement. EUS-HGS was performed via a standard transhepatic approach using self-expandable metal stents (SEMS); detailed stenting configurations are reported in the Results. Primary outcomes: technical and clinical success defined as resolution of cholangitis and normalization of total bilirubin (<1.5 mg/dL) or a $\geq 50\%$ decrease from baseline within 14 days after EUS-HGS. Safety: 30-day procedure-related morbidity and mortality per AGREE lexicon. Patency: Kaplan–Meier (KM) and competing-risk (Fine–Gray; death as competing event). Oncologic endpoint: resumption of systemic therapy at a pre-specified 61-day landmark among survivors. Multivariable logistic, Cox and competing-risk models (Firth penalized logistic for rare events). Follow-up was calculated from EUS-HGS to death or last contact (database lock 1st December 2024). Median follow-up was not reached by reverse KM.

Results Among 769 EUS-HGS procedures performed in the center, 51 patients met inclusion criteria; 50 technically successful procedures (98 %) were analyzed. Median age 78 years; 58 % women. Pancreatic adenocarcinoma was most frequent (86 %); ampullary cancer and cholangiocarcinoma were 6 % each; 48 % had metastatic disease. Stenting strategies varied: the predominant configuration was a partially covered (PC)-SEMS alone (34/50, 68 %); combined strategies were used according to anatomy and drainage needs: PC-SEMS + internal fully covered (FC)-SEMS (7/50, 14 %), PC-SEMS + coaxial plastic stent (5/50, 10 %), FC-SEMS alone (2/50, 4 %), and FC-SEMS + coaxial plastic stent (2/50, 4 %). Clinical success at D14 was 92 % (46/50). Median total bilirubin fell from 15.4 to 2.3 mg/dL (median relative reduction 80.8 %); median post-procedural hospital stay was 3 days. Procedure-related morbidity 8 % (4/50: one cholangitis, one mild hemobilia, two early stent dysfunctions managed endoscopically). Thirty-day mortality 10 % (5/50), including 4 % (2/50) procedure-related deaths due to one obstruction and one migration complicated by severe cholangitis, and 6 % (3/50) non-procedure-related deaths. At D61, 40/42 survivors (91 %) had resumed systemic therapy. Biliary patency by Kaplan–Meier (deaths without dysfunction censored) was 92 %, 76 % and 65 % at 30, 90 and 180 days, with a median of 429 days. In the competing-risk model (death as competing event), cumulative dysfunction was 8 %, 23 % and 35 % at 30, 90 and 180 days, with $\sim 45\%$ dying before any dysfunction; overall, 21/50 (42 %) developed stent dysfunction (4 early ≤ 30 days: two migrations, two obstructions; 17 delayed > 30 days, mostly obstructions). No independent predictors of clinical success, early events or dysfunction were identified. Median overall survival was 283 days (76 %, 60 % and 39 % at 90, 180 and 365 days). At database lock, 12 % of patients were alive; among survivors, the maximum observed follow-up was 1565 days.

Conclusions In a homogeneous cohort of dMBO after failed ERCP without duodenal stenosis or altered anatomy, EUS-HGS achieved high efficacy and acceptable 30-day safety (procedure-related morbidity 8 %, mortality 4 %), with durable biliary patency (median 429 days). The 91 % resumption of systemic therapy at D61 suggests preservation of the oncologic pathway. In experienced centers, EUS-HGS may be considered a rescue strategy after failed ERCP and warrants prospective validation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP022 From Pioneers to Practice: A Contemporary National Registry of Early EUS-Guided Cholangiopancreatography

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DOI 10.1055/s-0046-1820677

Aims The introduction of EUS-guided cholangiopancreatography (EUS-CP) represented a breakthrough in the management of patients with complex biliopancreatic disease. Initial national results of this technique showed moderate success¹. The aim of this study is to evaluate current outcomes of the first EUS-CP cases performed by each endoscopist and to analyze endoscopist- and center-related factors [1].

Methods Members of the ERCP and EUS working group of the national endoscopic society were invited to participate. Consecutive first EUS-CP cases performed independently by each endoscopist were collected, up to a maximum of 20 procedures. Endoscopists who participated in the previous national registry, those who started EUS-CP before 2013, or whose cases were not consecutive were excluded from the study. Additionally, a survey was conducted among the endoscopists to inquire about their training in EUS, ERCP, prior experience with EUS, volume of procedures performed, and assistance during procedures.

Results A total of 316 patients treated by 23 endoscopists from 18 centers were analyzed. Fourteen endoscopists (60.9 %) performed EUS-CP without prior center experience. The training time for endoscopists before performing an EUS-CP procedure was 13 ± 8 months for EUS and 14 ± 6 months for ERCP. The procedures included 147 choledochoduodenostomies (CDS), 60 hepatocogastrotomies (HG), 97 biliary rendezvous (EUS-RV), 8 pancreatic rendezvous, and 4 pancreaticogastrotomies (PG). LAMS stents were used in 42.4 % of procedures.

Overall technical success was 83.2 %, and by procedure: CDS 95.9 %, biliary EUS-RV 59.8 %, HG 91.7 %, pancreatic EUS-RV 62.5 %, PG 100 % ($p < 0.001$). Most technical failures (77.4 %) were related to guidewire manipulation difficulties. Technical success was significantly higher in transmural versus rendezvous procedures (94.8 % vs 60.0 %, $p < 0.001$).

A total of 55 adverse events occurred (17.4 %), with no differences among procedures. 54.5 % of all AE were managed conservatively, 32.7 % endoscopically, and 12.7 % by interventional radiology. Fifteen stent malpositions were reported.

Conclusions EUS-CP currently shows high technical success rates during initial implementation, particularly for transmural drainage techniques. The rendezvous approach is associated with greater technical difficulty, with guidewire manipulation being the most limiting step.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Vila JJ, Pérez-Miranda M, Vazquez-Sequeiros E, Abadia MA, Pérez-Millán A et al. Initial experience with EUS-guided cholangiopancreatography for biliary and pancreatic duct drainage: a Spanish national survey. *Gastrointest Endosc* 2012; 76 (6): 1133–41

OP023 Long-Term (>1-Year) Outcomes Following First-Intent EUS-Guided Choledochoduodenostomy Versus ERCP for Malignant Distal Biliary Obstruction: Data from the ELEMENT and DRA-MBO RCTs

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DOI 10.1055/s-0046-1820678

Aims EUS-guided choledochoduodenostomy using a lumen-apposing metal stent (EUS-CDS) is evolving as an effective alternative to endoscopic retrograde cholangiopancreatography (ERCP) for malignant distal biliary obstruction (MDBO). However, there are currently no long-term data beyond 1-year in the literature. We evaluated long-term (>1-year) outcomes, including stent dysfunction, defined as any unplanned stent related endoscopic or radiological re-intervention, adverse events, and mortality in patients originally enrolled in the ELEMENT and DRAMBO RCTs who survived beyond 1-year following randomization (► **Table 1**).

Methods This study is a long-term extension of the previously published ELEMENT and DRA-MBO RCTs, which prospectively compared EUS-CDS with ERCP for MDBO. For the present long-term analysis, we conducted a retrospective chart review of participants to capture clinical events occurring beyond 12 months. Retrospective data, including survival status, stent dysfunction, adverse events, were extracted. The resulting integrated dataset included prospective follow-up through 12 months and retrospective data thereafter. All long-term analyses were performed on this combined dataset [1,2].

► **Table 1**

Variable	Overall n = 299	EUS-CDS (n = 152)	ERCP-M (n = 147)	p-value
Borderline/locally advanced	243 (81.3%)	31 (20.4%)	25 (17.1%)	0.45
Unresectable	56 (18.7%)	121 (79.6%)	122 (83.0%)	0.08
Baseline Bilirubin level (umol/L)	240.6 ± 141.1	235.3 ± 130.3	246.0 ± 151.6	0.51
Stent dysfunction (missing data in 19 patients, 14 EUS-CDS and 5 ERCP)	29/280 (10.4%)	13/138 (9.4%)	16/142 (11.3%)	0.83
Time to death (days)	252.7 ± 273.4	259.6 ± 303.5	245.8 ± 240.2	0.68
30 days adverse event	42 (14.0%)	19 (12.5%)	23 (15.6%)	0.56
Fatal	11 (26.2%)	4 (21.1%)	7 (30.4%)	0.73
Severe	3 (7.1%)	1 (5.3%)	2 (8.7%)	1.00
Moderate	19 (45.2%)	13 (68.4%)	6 (26.1%)	0.01
Mild	9 (21.4%)	1 (5.3%)	8 (34.8%)	0.03
Adverse event occurring > 1 year	5/69 (7.2%)	3/31 (9.7%)	2/38 (5.2%)	0.65
Cholangitis	3 (60.0%)	1 (33.3%)	2 (100.0%)	0.17
Bleeding	1 (20.0%)	1 (33.3%)	0 (0.0%)	1.00
Pancreatitis	1 (20.0%)	1 (33.3%)	0 (0.0%)	1.00
Other	0 (0.0%)	0 (0.0%)	0 (0.0%)	-
Severity of Adverse events				
Severe	2 (40.0%)	1 (33.3%)	1 (50.0%)	1.00
Mild	3 (60.0%)	2 (66.7%)	1 (50.0%)	1.00

Results The ELEMENT and DRAMBO trials randomized an aggregate of 299 patients. Mean age of the cohort was 73 ± 12 years with 43.1 % of female sex. The most common etiology of obstruction was pancreatic cancer (93.3 %). There were no differences in baseline characteristics according to drainage allocation. Comparable survival was noted between the two groups with median time to death of 259.6 ± 303.5 days and 245.8 ± 240.2 days in the EUS-CDS and ERCP groups, respectively ($p = 0.68$). Stent dysfunction occurred in 9.4 % with EUS-CDS and 11.3 % with ERCP, $p = 0.83$. 30-day adverse events (AEs) occurred in 12.5 % of EUS-CDS and 15.6 % of ERCP, $p = 0.56$. Delayed AEs after 1 year follow up occurred in 9.7 % (3/31) of EUS-CDS and 5.5 % (2/38) of ERCP, $p = 0.65$. There was no significant differences in severity of the AEs.

Conclusions EUS-CDS and ERCP demonstrated comparable long-term clinical effectiveness and safety in patients with MDBO with no difference in overall patient survival. EUS-CDS appears to be a viable alternative in MDBO even in patients who survive beyond 1-year.

Conflicts of Interest A. Sahai is a consultant for Boston Scientific and Pentax. A. Sahai is a consultant for Boston Scientific and Pentax. B. B. Napoleon has received honoraria for proctoring endoscopy training from Maunea Kea, Boston Scientific, Olympus, and TaeWoong Medical. J. Jacques is a consultant for Boston Scientific, Fujii Medical, and ERBE. R. Kunda is a consultant for Boston Scientific, Olympus, M.I.Tech, Omega Medical Imaging, Q3 Medical-AMG International, and EndoGastric Solutions. Y.I. Chen is a consultant for Boston Scientific, has received research funding from Boston Scientific, and is the co-founder of Chess Medical Inc.

References

- [1] Chen YI, Sahai A, Donatelli G, Lam E, Forbes N, Mosko J, Paquin SC, Donnellan F, Chatterjee A, Telford J, Miller C, Desilets E, Sandha G, Kenshil S, Mohamed R, May G, Gan I, Barkun J, Calo N, Nawawi A, Friedman G, Cohen A, Maniere T, Chaudhury P, Metrakos P, Zogopoulos G, Bessissow A, Khalil JA, Baffis V, Waschke K, Parent J, Soulellis C, Khashab M, Kunda R, Geraci O, Martel M, Schwartzman K, Fiore JF Jr, Rahme E, Barkun A. Endoscopic Ultrasound-Guided Biliary Drainage of First Intent With a Lumen-Apposing Metal Stent vs Endoscopic Retrograde Cholangiopancreatography in Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Study (ELEMENT Trial). *Gastroenterology*. 2023; Nov 165 (5): 1249–1261.e5. doi:10.1053/j.gastro.2023.07.024 Epub 2023 Aug 6 PMID: 37549753
- [2] Teoh AYB, Napoleon B, Kunda R, Arcidiacono PG, Kongkam P, Larghi A, Van der Merwe S, Jacques J, Legros R, Thawee RE, Saxena P, Aerts M, Archibugi L, Chan SM, Fumex F, Kaffes AJ, Ma MTW, Messaoudi N, Rizzatti G, Ng KKC, Ng EKW, Chiu PWY. EUS-Guided Choledcho-duodenostomy Using Lumen Apposing Stent Versus ERCP With Covered Metallic Stents in Patients With Unresectable Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Trial (DRA-MBO Trial). *Gastroenterology*. 2023; Aug 165 (2): 473–482.e2. doi:10.1053/j.gastro.2023.04.016 Epub 2023 Apr 28 PMID: 37121331

OP024 EUS-Guided Choledochostomy for Benign Distal Bile Duct Obstruction: A Multicenter Retrospective Analysis of Effectiveness, Safety and Long-Term Outcomes (on behalf of the DACH EUS working group)

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DOI 10.1055/s-0046-1820679

Aims Endoscopic retrograde cholangiography (ERC) represents the gold standard for therapeutic interventions in the biliary tract. However, altered surgical anatomy, strictures in the upper gastrointestinal tract, or high-grade stenoses at the papilla or distal bile duct can render conventional ERC technically challenging or impossible. In these scenarios, endoscopic ultrasound-guided biliary drainage (EUS-BD), including direct drainage or rendezvous techniques, presents a valuable alternative to percutaneous transhepatic drainage (PTCD) or surgical approaches. While EUS-BD has been established for malignant distal bile duct obstruction, data on its application in benign distal strictures remain limited to case reports. This study aims to address this gap by evaluating the effectiveness, safety and long-term outcomes of EUS-guided choledochoduodenostomy (EUS-CDS) in benign distal bile duct obstruction.

Methods This multicenter retrospective analysis included all cases of EUS-CDS for benign distal biliary strictures performed since the introduction of the technique in the participating centers. Data were collected using a standardized case report form. The primary endpoint was clinical success, defined as a ≥ 50 % bilirubin decrease or normalization of inflammatory markers within 14 days. Secondary endpoints included technical success, type of stent, adverse events, stent patency time, type/timing of stent removal and frequency of stent-related complications (e.g., dislocation, occlusion).

Results Forty-six patients (52 % female; age 21–97 years) were included. The indications were extrahepatic cholestasis, with 20 % of cases presenting without and 72 % with cholangitis. Additionally, 35 % of patients had bile duct stones (isolated in 9 % and combined with cholestasis in 26 %). Underlying conditions were chronic pancreatitis (33 %), choledocholithiasis (30 %), postinflammatory strictures (13 %), acute pancreatitis (7 %), papillary sclerosis (2 %), iatrogenic causes (4 %) and others (11 %, incl. anastomotic strictures following liver transplantation, stenosing duodenitis, duodenal diverticulum).

Main reasons for performing EUS-CDS were failed ERCP access to the bile duct (62 %), failed access to the papilla due to duodenal stenosis (24 %), altered anatomy (7 %) and other causes, including anastomotic strictures after liver transplantation (7 %).

In total, 44 choledochoduodenostomies and 2 choledochogastrostomies were performed. Stents used were Hot AXIOS (91 %), plastic stents (4 %), biliary fSEMS (2 %), and Hot Plumber/BCF (2 %). Technical success was achieved in 96 %, with maldeployment in 4 %. Clinical success was 80 %. The rate of adverse events was 13 % (two bleedings, one cholangitis, two duodenal obstructions, one post-ERCP pancreatitis). Median follow-up was 102 days (range 7–2,065 days). The median stent patency time was 50 days (range 7–1061 days). Stent occlusion occurred in five events among four patients. Five stent dislocations occurred (one complete, four partial). At last follow-up, 19 stents remained in situ, 23 were removed endoscopically, one surgically, and one had migrated spontaneously. Among patients with endoscopic stent removal, the fistulous tract created by the LAMS remained patent in 12 cases and had closed in 11. The median time to endoscopic stent removal or spontaneous complete dislocation was 44 days (range 9–343 days).

Conclusions In this large multicenter cohort on EUS-CDS for benign distal biliary strictures, technical and clinical success was high, with moderate rates of AEs and stent occlusion. These data support EUS-CDS as a safe and effective option in benign distal bile duct obstruction. In patients with uncomplicated clinical course, elective stent removal after four weeks may be feasible, but standardized protocols are lacking.

Conflicts of Interest S. Freund: nothing to disclose C. Conrad: nothing to disclose V. Masaryk: nothing to disclose N. Grüner: nothing to disclose A. Arlt: consultant of Boston Scientific, Olympus, Astra Zeneca, Abbvie C. Juergensen: nothing to disclose K. Braun: nothing to disclose A. Meining: nothing to disclose U. Will: Fujifilm; Boston Scientific M. Ellrichmann: received consultancy honorarium, study support and travel expensed from Boston Scientific U. Denzer: lecture fees and sponsored teaching from Boston Scientific and Olympus

The Difficult ERCP: From failed access to successful cannulation

14/05/2026, 10:00–11:00

Sky 1

OP025 Comparative Safety and Efficacy of Difficult Biliary Cannulation Strategies during ERCP: A Network Meta-Analysis

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Aims Difficult biliary cannulation during ERCP is a major contributor to technical failure and post-ERCP pancreatitis (PEP). Multiple advanced cannulation strategies are used in clinical practice, but there are few head-to-head randomized comparisons. We performed a network meta-analysis (NMA) to compare the safety and efficacy of commonly used advanced cannulation strategies. **Methods** A systematic network meta-analysis of randomized controlled trials evaluating advanced ERCP cannulation techniques was performed. Techniques included standard cannulation (STD), early precut sphincterotomy, late precut sphincterotomy, transpancreatic sphincterotomy (TPS), double-guidewire technique (DGW), pancreatic duct stenting, forceps-assisted access, and EUS-guided rendezvous (EUS-RV). Two outcomes were analyzed: PEP and successful biliary cannulation. Treatment effects were pooled as risk ratios (RRs) using a frequentist random-effects NMA with STD as the reference. Treatments were ranked with P-scores (SUCRA-equivalent), and inconsistency was assessed by node-splitting analysis. Sensitivity analyses included alternative continuity corrections and leave-one-out influence analysis (► Table 1).

Results A total of 21 randomized controlled trials were included (n = 2764). Overall heterogeneity was low for both endpoints ($\tau^2 = 0.04$ – 0.05), and no evidence of local inconsistency was detected on node-splitting analyses (all $p > 0.05$). Compared to standard cannulation, PEP risk ranked lowest to highest as EUS-RV (RR 0.32), Early precut (RR 0.55), TPS, STD, DGW, Forceps, Pancreatic duct stent, and late precut. Transpancreatic sphincterotomy (TPS) showed a numerical, but not statistically significant, reduction in PEP. Successful biliary cannulation as compared with standard cannulation was highest with TPS (RR 1.35) followed by DGW (RR 1.25). Forceps-assisted access showed modest benefit. Late precut and pancreatic duct stenting were associated with inferior success rates. Findings were consistent across sensitivity analyses, with no single study influencing overall conclusions.

Conclusions Advanced ERCP cannulation techniques differ substantially in their safety and efficacy. EUS-RV and early precut sphincterotomy provide the greatest protection against post-ERCP pancreatitis, whereas TPS and the DGW offer the highest cannulation success rates. Late precut consistently performed worst across both outcomes. These results support a precision-based, early escalation strategy for difficult biliary access to optimize both procedural success and patient safety in difficult biliary access.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP026 Immediate double guidewire technique with systematic pancreatic stenting versus standard guidewire-assisted cannulation in patients undergoing ERCP – results from a propensity score matched trial

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DOI 10.1055/s-0046-1820681

Aims Biliary cannulation remains one of the crucial challenges of ERCP; several techniques have been proposed to improve the technical success. Among them, the double-guidewire technique (DGT) seems to be associated with an increased risk of post-ERCP pancreatitis (PEP); however, available studies differ in terms of timing of DGT application and the proportion of patients receiving pancreatic stenting (PS), despite guideline recommendations [1–3]. The aim of this study was to assess PEP risk in case of immediate use of DGT after first unintended pancreatic duct cannulation combined with systematic prophylactic PS placement (DGT + PS), and to compare PEP incidence to standard guidewire-assisted technique (ST).

Methods A retrospective analysis of a prospectively maintained database was conducted including all adult patients with naïve papilla who underwent ERCP from 2021–2025 in a single hospital center. Post-surgical anatomy, non-biliary indications and EUS-guided biliary access were excluded. ESGE criteria for difficult biliary cannulation and PEP were adopted. Clinical and procedural variables were collected. The primary outcome was the incidence of PEP; secondary outcomes were ERCP technical success and incidence of other adverse events. DGT + PS cases were compared to ST using 1:2 propensity score matching (PSM).

Results 613 ERCP were performed during the study period; of them, 388 (71.7%) patients with naïve-papilla underwent ERCP for biliary indications (49.5% male, median 75.5 [64.2 – 84.1] years old). Among the entire population, 120 (30.9%) cases matched ESGE criteria for difficult biliary cannulation. Immediate DGT + PS was used in 45 cases and other advanced cannulation techniques in 39 cases.

► Table 1 SUCRA (P-score) ranking of cannulation strategies for PEP (safety) and successful biliary cannulation (efficacy)

Cannulation strategy	PEP P score (%)	Sucra Rank PEP	Cannulation Success P score (%)	Sucra rank Cannulation success
EUS RV	93.6	1	54.4	4
Early Precut	76.0	3	45.5	5
TPS	76.3	2	96.3	1
DGW	40.8	4	71.8	2
Standard cannulation	40.8	4	20.4	8
Forceps assisted access	29.6	6	68.4	3
PD stenting	27.8	7	22.2	6
Late precut	15.1	8	20.9	7

After PSM, 135 patients were analyzed (45 DGT + PS and 90 ST); no baseline difference was observed in terms of gender, age, benign indication for ERCP, ASGE complexity, urgent ERCP, history of pancreatitis, rectal NSAIDs administration, aggressive hydration, presence of peri-ampullary diverticulum, and difficult biliary cannulation.

DGT + PS showed similar technical success compared to ST (97.8 % vs 93.3 %; $p = 0.42$), and similar incidence of adverse events (6.6 % vs 14.4 %; $p = 0.26$). PEP incidence was significantly lower in the DGT + PS group (2.2 % vs 14.4 %; $p = 0.03$). Logistic regression identified rectal NSAIDs (OR 0.18 (0.05-0.71); $P = 0.01$), aggressive hydration (OR 0.07 (0.01-0.98); $P = 0.04$), and benign indications (OR 0.17 (0.04-0.72); $P = 0.02$) as factors independently and inversely associated with PEP. DGT + PS showed a trend towards a further reduction in PEP risk on multivariate analysis (OR 0.10 (0.02-1.10); $p = 0.06$).

Conclusions When performed immediately after the first unintended PD cannulation and combined with systematic prophylactic PS, DGT appears to be a safe and effective advanced cannulation strategy. In this cohort, DGT + PS was associated with a significantly lower incidence of PEP while maintaining high procedural success compared to standard guidewire-assisted technique in a matched cohort of patients. Prospective multicenter trials are needed to confirm these findings.

Conflicts of Interest Boston ScientificOlympus CompanyMediGlobe

References

- [1] Jeong HT, Bae JH, Kim HG, Han J. Double-guidewire technique for selective biliary cannulation does not increase the rate of post-ERCP pancreatitis in patients with naïve papilla. *Clin Endosc* 2024; 57 (2): 226–236. doi:10.5946/ce.2023.128
- [2] Wang L et al. Comparison between different advanced cannulation techniques: a systematic review and meta-analysis. *Front Med (Lausanne)* 2024; 11:1344644. doi:10.3389/fmed.2024.1344644
- [3] Jeong HT et al. Safety of the double-guidewire technique versus conventional technique in biliary cannulation. *Gastrointest Endosc* 2023. doi:10.1016/j.gie.2023.09.012

OP027 Transpancreatic Sphincterotomy: The Key to Difficult ERCP Access

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DOI 10.1055/s-0046-1820682

Aims Achieving successful biliary access during endoscopic retrograde cholangiopancreatography (ERCP) can often be technically challenging, particularly in cases of difficult cannulation. Such situations frequently interrupt the flow of the procedure and may increase the risk of complications. In this context, transpancreatic sphincterotomy (TPS) has emerged as an alternative advanced cannulation technique designed to overcome these obstacles. The aim of our study was to assess the clinical efficacy of TPS when used in conjunction with prophylactic pancreatic stenting, to document the adverse events associated with the technique, and to explore whether specific patient- or papilla-related factors were associated with its use. Additionally, we sought to identify potential confounders that might influence the decision to employ TPS or the outcomes following its application.

Methods All consecutive patients who underwent ERCP in our department between 2020 and 2025 were screened for eligibility. TPS was performed only in cases where standard cannulation attempts failed, and the approach was routinely combined with the placement of a pancreatic duct stent as a preventive measure against post-procedure pancreatitis. Apart from basic demographic parameters, a detailed dataset was compiled for each patient. This included the primary indication for ERCP, the morphological characteristics of the papilla, the presence or absence of a periampullary diverticulum, and procedural variables such as the need for TPS or fistulotomy, the success of these techniques, and any complications encountered. Associations between TPS and

independent variables were first analyzed using the chi-square (χ^2) test. Variables showing statistical significance were then incorporated into a multivariable regression model to further examine their predictive value.

Results A total of 481 patients met the inclusion criteria. Of these, 233 (48.4 %) were male and 248 (51.6 %) were female, with a mean age of 70.81 ± 15.28 years. TPS was ultimately used in 43 patients (8.9 %). Despite the inherent technical difficulty of these cases, the method yielded a high cannulation success rate of 97.67 %. Neither papillary morphology nor the presence of a periampullary diverticulum demonstrated a statistically significant influence on the decision to proceed with TPS. However, both features showed a trend toward association with malignant obstruction of the common bile duct (CBD) as the procedural indication. Patients whose indication for ERCP was malignant CBD obstruction appeared more likely to undergo TPS, displaying an elevated relative risk (RR = 1.563, 95 % CI 0.99–2.4) and odds ratio (OR = 2.81, 95 % CI 0.99–7.94). Although these findings did not reach strong statistical certainty, the Pearson χ^2 test indicated borderline significance with a p -value of 0.048 at $\alpha = 0.05$. In terms of post-procedural adverse events, TPS did not increase the incidence of post-ERCP pancreatitis (PEP). Rates of bleeding were also unaffected. While the number of complications was low and therefore limited the statistical power of our analysis, no signal suggested that TPS heightened the overall risk profile of the procedure when accompanied by pancreatic duct stenting.

Conclusions Our findings suggest that transpancreatic sphincterotomy, when performed together with routine prophylactic pancreatic stent placement, is both a highly effective and a safe approach for managing difficult biliary cannulation. Given the excellent cannulation success rate of 97.67 % and the absence of increased complication rates, TPS could be considered as a preferred alternative strategy, particularly in cases where malignant CBD obstruction is suspected or confirmed. These results support the role of TPS as a valuable technique in advanced ERCP practice, especially when conventional cannulation attempts are unsuccessful.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP028 Influence of papilla morphology on advanced ERCP cannulation technique selection: an international survey

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DOI 10.1055/s-0046-1820683

Aims Endoscopic retrograde cholangiopancreatography (ERCP) remains the cornerstone of therapy for pancreaticobiliary disorders, yet bile duct cannulation fails in 5–20 % of cases, even in expert hands. The Haralldsson classification (2017) describes four major papilla types, some of which have been linked to increased cannulation difficulty and higher complication rates. However, evidence on how papilla morphology influences the selection and timing of rescue cannulation techniques remains limited.

This study aimed to evaluate how ERCP practitioners adapt their cannulation strategies to different papilla types. We hypothesized that adjustments based on papilla morphology may improve cannulation success and reduce procedure-related complications.

Methods An international web-based survey was distributed to ERCP-performing physicians to capture practice patterns related to major papilla morphology and cannulation techniques. The questionnaire was developed in REDCap, a secure web-based data collection platform, and disseminated through professional societies, mailing lists, and social media channels. It included items on respondent demographics, ERCP experience, use of papilla classification systems, and preferred primary and rescue cannulation techniques. Responses were collected anonymously. Descriptive statistics were used to summarize

practice patterns, and additional analyses explored associations between papilla morphology and technique selection. Participation was voluntary, and the survey period remained open long enough to ensure broad geographic and professional representation [1, 2].

Results A total of 150 ERCP practitioners completed the survey. Overall, 59 % worked in university hospitals, 45 % in high-volume centers, and 66 % had more than five years of ERCP experience; 53 % had performed over 1000 procedures, and 55 % practiced in certified training centers. Only 26 % routinely used a papilla classification system.

Rescue cannulation preferences varied according to papilla type and guidewire position. For type I papilla, when the guidewire did not enter the pancreatic duct, respondents most frequently selected needle-knife precut (NKP) (36.7 %), needle-knife fistulotomy (NKF) (32.3 %), or continued with standard cannulation (31 %). In contrast, inadvertent guidewire entry into the pancreatic duct shifted preference toward the double-guidewire technique (DGT) (51.8 %), followed by prophylactic pancreatic stent (PPS) placement combined with NKF (21.2 %) and transpancreatic precut papillotomy (TPPP) (10 %). For type II papilla, standard cannulation and NKP were equally preferred as primary strategies (41.7 % each), while DGT became the dominant choice (56.3 %) when the guidewire was already positioned in the pancreatic duct. For type III papilla, DGT was preferred in the presence of a pancreatic guidewire (48.2 %), whereas NKP was most frequently chosen when no guidewire was present (41 %). For type IV papilla, DGT was again the predominant choice when the guidewire entered the pancreatic duct (52.7 %), whereas standard cannulation was most often continued when no guidewire was in place (44.7 %).

Across all scenarios, notable differences in technique preference were observed between center types and operator experience: high-volume, university-based and teaching centers showed a clear tendency to select NKP more frequently, whereas lower-volume and community settings more often favored standard cannulation or PPS + NKF combinations.

Conclusions Rescue cannulation patterns showed considerable variability across papilla types and clinical settings. The findings illustrate the absence of uniform practice and highlight the need for clearer, evidence-based recommendations to support consistent decision-making in difficult biliary access.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tari E et al. Morphology of the papilla can predict procedural safety and efficacy of ERCP: a systematic review and meta-analysis. *Sci Rep* 2024; 14: 7341
- [2] Haraldsson E et al. Macroscopic appearance of the major duodenal papilla influences bile duct cannulation: a prospective multicenter study. *Gastrointest Endosc* 2019; 90 (6): 957–963

OP029 Periapillary diverticulum. Does it affect ERCPs safety and effectiveness? A real world study from Greece

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DOI 10.1055/s-0046-1820684

Aims The effect of periampullary diverticulum (PAD) on Endoscopic retrograde cholangiopancreatography (ERCP) safety and effectiveness is a controversial subject. Aim of our study was to evaluate PADs impact on ERCP safety and effectiveness in a real-world study in Greece.

Methods We retrospectively analysed prospectively documented clinical, epidemiological and data from ERCP from consecutive patients being submitted to ERCP, with an intact papilla, during a 20-year period (1/2001- 1/2021)

Results In total 3147 patients were included in our study (mean age: 68 ± 16, Female: 51 %, < 80 years old : 70.3 %). Existence of PAD was observed in 20 % of

the study population and was more common among patient ≥ 80 years old (17.0 % vs 27.6 %), $p < 0.001$). The cannulation of the common bile duct (CBD) was successful in 96.1 % and was observed in an increased rate; among patients without PAD (93.4 % vs 96.7 %, $p < 0.001$). Additionally, PAD existence was found to be independently factors correlated to successful CBD cannulation (OR: 1.678, $p < 0.001$). Upon the existence of a PAD, ≥ 5 attempts to cannulate were made in a lesser rate ($p < 0.001$) while the use of Needle Knife (NK) was observed in a decreased rate ($p < 0.001$). No difference in the probability of Pancreatic Duct cannulation was observed upon PAD existence or not ($p = 0.634$). Bleeding during the procedure was more common upon PAD existence PAD (37.9 % vs 32.9 %, $p = 0.020$), if antiplatelet or anticoagulants were used ($p < 0.001$ and $p = 0.012$) as also if NK was used ($p < 0.001$). All of the above were confirmed also in the multivariate analysis (OR: 1.354, $p = 0.002$, OR: 1.323, $p = 0.005$, OR: 1.275, $p = 0.049$ and OR: 1.610, $p < 0.001$ respectively). PAD existence was not correlated with post ERCP-pancreatitis ($p = 0.876$), perforation ($p = 0.704$) or post-ERCP clinically significant bleeding ($p = 1.000$).

Conclusions The existence of PAD is observed more commonly among the elders. PAD was independently correlated with decreased rate of CBD cannulation and increased rate of intraprocedural bleeding but not with ERCPs complications as post ERCP pancreatitis, clinical significant bleeding or perforation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP030 Comparison of Early Double Wire Technique with Repeat Single Wire Technique for Successful Bile Duct Cannulation: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1820685

Aims Inadvertent pancreatic duct cannulation during endoscopic retrograde cholangiopancreatography (ERCP) presents a dilemma in achieving selective bile duct cannulation. Two potential strategies include the early double-guidewire (EDG) technique where a second guidewire is introduced into the common bile duct, and repeated single-guidewire (RSG) technique, though comparative effectiveness remains unclear. We aim to evaluate the efficacy and safety of EDG versus RSG in patients with unintentional pancreatic duct cannulation during ERCP in patients undergoing ERCP for biliary interventions

Methods We conducted a systematic review and meta-analysis of randomized controlled trials and cohort studies comparing EDG and RSG from Cochrane Central Register of Controlled Trials, Embase and Ovid MEDLINE until February 25, 2025. The primary outcome was bile duct cannulation success. Secondary outcomes included time to cannulation and post-ERCP pancreatitis (PEP). Meta-analysis was performed using a random-effects model, and study heterogeneity was assessed using I² statistics. Risk of bias was assessed.

Results Three studies comprising 464 patients (228 EDG, 236 RSG) were included. The pooled risk ratio for successful biliary cannulation favoured EDG (1.38, 95 % CI 0.96–1.99, $p = 0.08$). Time to cannulation favored EDG (mean difference –3.22 minutes; 95 % CI –7.32 to 0.88), though not statistically significant ($p = 0.124$). Rates of PEP were similar between groups (risk ratio 1.12, 95 % CI 0.69–1.82, $p = 0.64$). Subgroup analyses suggested greater benefit of EDG when performed by expert endoscopists (risk ratio 1.42, 95 % CI 1.05–1.91, $p = 0.02$)

Conclusions EDG may improve cannulation success in select populations, particularly under expert operators, without increasing PEP risk. However, considerable heterogeneity underscores the need for further large-scale studies to clarify its role.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Fine-Tuning Endoscopy: Optimising Care at the Service Level

14/05/2026, 10:00–11:00

Aqua 1 + 2

OP031 Automated feedback reports to endoscopists improve polyp detection and other colonoscopy key performance indicators (KPIs) outside of a clinical trial environment: Outcomes from the interim analysis of the NED-APRIQOT pilot roll-out

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DOI 10.1055/s-0046-1820686

Aims The UK National Endoscopy Database (NED) automated performance reports to improve quality outcomes trial (APRIQOT) demonstrated that monthly automated feedback of colonoscopy key performance indicators (KPIs) to endoscopists improved polyp detection within a randomised controlled trial setting. [1] This year-long pilot, funded by the Health Foundation, tests the feasibility and impact of such reports delivered on a quarterly basis outside a trial environment, across two geographical regions of the UK. Now at its mid-point, we aimed to evaluate the impact of this intervention on colonoscopy outcomes.

Methods All procedures performed at centres enrolled in the pilot were extracted from NED from the pre- (Apr-Jun 2025) and post-intervention (Jul-Oct 2025) periods. For each endoscopist in both periods, median withdrawal time, Buscopan use, caecal intubation rate (CIR), moderate/severe discomfort rate, polyp detection rate (PDR), proximal PDR, mean number of polyps (MNP) and case-mix adjusted mean number of polyps (aMNP) were calculated and compared using Wilcoxon signed-rank tests. To estimate adjusted intervention effects, procedure-level mixed effects models were fitted with endoscopist as a random effect. Logistic regression was used for PDR and negative binomial regression for polyp counts, adjusting for age group, sex and indication for colonoscopy. A random slope for period assessed variation in improvement. Finally, an endoscopist-level linear regression model examined whether engagement with feedback reports (sum of individual email and report views and web page visits) predicted improvement in PDR, adjusting for baseline PDR.

Results Data from 125,521 procedures performed by 744 endoscopists were analysed. Pairwise comparison showed several KPIs improved after the introduction of automated feedback. Buscopan use doubled (median 5.01 % $\rightarrow$ 10.20 %, $p < 0.001$), and small but significant gains were seen in PDR (increase of 0.60 %, $p = 0.005$) and MNP (+ 3.19 polyps/100 procedures, $p = 0.022$). The improvement in aMNP was non-significant (+ 2.0 polyps/100 procedures, $p = 0.096$). In the mixed-effects models, post-intervention procedures had 6 % higher adjusted odds of polyp detection (aOR 1.06, 95 % CI 1.03-1.09, $p < 0.001$) and a 4 % higher adjusted rate of polyps detected per procedure (aIRR 1.04, 95 % CI 1.03-1.06, $p < 0.001$). Allowing random slopes indicated modest heterogeneity of improvement across endoscopists (slope SD 0.18; intercept-slope corr. -0.34), suggesting greater improvement among lower-baseline performers. Engagement analysis showed higher total interaction with the reports and NED predicted greater PDR improvement after adjusting for baseline (β 0.0011 $\pm$ 0.00035, $p = 0.001$). Comparing endoscopists, those who opened at

least one report demonstrated a 3.1 % improvement in PDR compared to those who didn't (β 0.031, SE 0.012, $p = 0.007$).

Conclusions Our results mirror those of the original NED-APRIQOT trial. Despite targeting all endoscopists rather than just those engaged in a trial, and lengthening the gap between reports to quarterly, the automated feedback reports significantly improve polyp detection. As was seen in the original trial, endoscopists with lower baseline performance and those engaging more with feedback saw the greatest gains, highlighting the value of sustained data-driven feedback.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Catlow J, Sharp L, Wagnild J et al. Nationally Automated Colonoscopy Performance Feedback Increases Polyp Detection: The NED APRIQOT Randomized Controlled Trial. Clin Gastroenterol Hepatol 2024;154235652400449X. doi:10.1016/j.cgh.2024.03.048

OP032 National Audit of Barrett's Surveillance Practice in Wales – key performance indicators and dysplasia detection rates are improved on dedicated Barrett's surveillance lists

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DOI 10.1055/s-0046-1820687

Aims 1) Define adherence to key performance indicators (KPIs) and dysplasia detection rates (DDR) in patients with Barrett's oesophagus having an upper GI endoscopy as part of an all Wales audit and 2) Evaluate differences in KPIs and DDR where patients had endoscopy for another symptomatic indication or a dedicated assessment of the Barrett's segment.

Methods We performed a retrospective, trainee-led, All-Wales audit of all diagnostic OGDs between 01/04/2025 and 30/06/2025 where Barrett's oesophagus (BO) was included in the diagnosis. Data was collected from the Medilogik EMS endoscopy database and the Welsh Clinical Portal using a standardized Excel proforma, anonymized at the local level, and submitted centrally for analysis. Data fields included age, sex, procedure details and findings (including Prague classification, inspection time, use of blue light imaging (BLI) or acetic acid chromoendoscopy (AAC), adherence to Seattle Biopsy Protocol (SBP), targeted biopsy and presence and assessment of visible nodules. Histological findings were also noted including presence of indefinite for dysplasia (IFD), low grade dysplasia (LGD), high grade dysplasia (HGD) or oesophageal adenocarcinoma (OAC). Planned follow-up was also noted. Adherence to inspection times (IT) was defined as at least 1 minute inspection for every 1 cm of BO, with short segment defined as < 3 cm, and long segment > 3 cm. Comparison between the two groups was performed using the Chi-squared test with significance set at a p-value of 0.05.

Results 557 patients were included in the analysis, 398 male. 293 patients had UGI endoscopy for a symptomatic indication (198 male, mean age 66.9yrs) and 264 had a dedicated UGI endoscopy for planned surveillance or where the only diagnosis was a Barrett's segment. Significantly more patients in the 'dedicated' group had longer segments (> 3 cms) 180 vs 132 in the 'symptomatic' group. Operator KPIs were significantly better in the 'dedicated' group compared to the 'symptomatic': BLI 56.1 vs 21.2 % ($p < 0.00001$); AAC 70 vs 6.4 % ($p < 0.00001$) and adherence to SBP 75.6 vs 34.6 % ($p < 0.00001$). Whilst there was no difference between IT adherence for short segments between 'dedicated' and 'symptomatic' groups, for longer segments (> 3 cm) the 'dedicated' group showed significantly better IT adherence ($p < 0.00001$).

Dysplasia detection rates (DDR) were calculated for each group. Rates of adenocarcinoma were not different between groups. Significantly higher rates of dysplasia were detected in the 'dedicated' group, both for all dysplasia and advanced dysplasia (see ► **Table 1**). Whilst in the Dedicated Group DDR rates were higher in short (4.2 % vs 1.4 %) and longer (11.1 vs 6.1 %) segments this did not reach statistical significance. Analysis of BO segments over 10cms did show a significant increased DDR: Dedicated 7/19 (36.8 %) vs Symptomatic 1/15 (6.6 %), $p=0.04$.

► **Table 1**

FINDINGS	SYMPTOMATIC INDICATION N = 293	SURVEILLANCE OR SOLE INDICATION FOR BARRETTS N = 264
Indefinite for dysplasia	8 (2.7 %)	11 (4.2 %)
Low grade dysplasia	4 (1.4 %)	10 (3.7 %)
High grade dysplasia	2 (0.7 %)	11 (4.2 %)
Oesophageal adenocarcinoma	4 (1.4 %)	3 (1.1 %)
ALL DYSPLASIA *	10 (3.4 %)	24 (9.1 %)
ADVANCED DYSPLASIA **	6 (2 %)	14 (5.3 %)

*Difference between groups significant, $p=0.005$; **Difference between groups significant, $p=0.04$

Conclusions This retrospective audit data reflects real world assessment of patients with Barrett's oesophagus. It suggests operator performance in terms of key performance indicators and adherence to guidance is improved when this is the dedicated focus of the endoscopic procedure and this is associated with an increased dysplasia detection rate. Increased focus on training to improve operator KPIs further and networked planned to increase the availability of dedicated lists may improve quality and outcomes of BO surveillance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP033 Looking Back Through a New Lens: Applying BSG/ACPGBI 2025 Guidelines on Colorectal Polyps Management in Patients with Limited Life Expectancy

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DOI 10.1055/s-0046-1820688

Aims The BSG/ACPGBI published guidelines in 2025 which provide a patient-centred framework for managing colorectal polyps in individuals with limited life expectancy (LLE). By combining comorbidity burden, polyp size, and antithrombotic use, these guidelines help clinicians balance the potential benefits of polypectomy against procedural risks in patients with significant comorbidities or frailty.

This study aimed to retrospectively evaluate how historical practice at University Hospitals Sussex NHS Trust, England, aligns with the updated BSG/ACPGBI recommendations and to determine how many procedures might, in hindsight, have been approached more conservatively under the new LLE guidelines.

Methods 950 large non-pedunculated colorectal polyps (LNPCP) managed between January 2016 and May 2025 were prospectively recorded in a digital LNPCP database. A retrospective analysis was performed using the LLE guidelines. The Charlson Comorbidity Index (CCI) and anticoagulant/antiplatelet use

at the time of procedure were extracted from clinic correspondence and endoscopy unit documentation. Each patient's estimated life expectancy was categorised according to the BSG/ACPGBI 2025 guidelines LLE framework, and cases were reviewed on a per-patient basis to evaluate the appropriateness of polypectomy. Patients were stratified as Green (favours polypectomy), Amber (marginal), or Red (favours conservative management). Demographic data, lesion size, lesion histology, recurrence rate and post-procedural complications were recorded and analysed descriptively.

Results This study included 950 LNCPs in 835 patients, with a mean age of 67.2 years; 47.5 % were female and 52.5 % were male. The mean lesion size was 29.8 mm. 601 polyps were SMSA (Size/Morphology/Site/Access) level 3 and 349 were level 4. On histological examination, 329 lesions were sessile serrated lesions (SSLs), 586 were adenomas, including 128 with high-grade dysplasia, and 35 were diagnosed as cancer.

At the first and second site check procedures, recurrence rates were 14 % and 3.8 %, with corresponding mean recurrent polyp sizes of 7.9 mm and 5.9 mm, respectively. The majority of recurrent polyps (99 %) were treated endoscopically, with one case requiring surgical management.

Complications included 5 cases of post-polypectomy syndrome, 10 delayed bleeds, 1 perforation, and 1 micro perforation with associated bleeding. There were 15 unplanned admissions, 1 case requiring both unplanned admission and transfusion, and 2 cases requiring surgical intervention. 17 patients died within nine years of the index procedure.

When reclassified according to the 2025 BSG/ACPGBI framework, 783 patients (93.77 %) were categorised as Green (favours polypectomy), 34 (4.07 %) as Amber (marginal), and 18 (2.15 %) as Red (favours conservative management). Furthermore, out of 17 recorded complications, 12 (71 %) occurred in the green cohort and 5 (29 %) in amber and red cohort. This corresponds to approximately a ten-fold higher relative risk of complications in amber and red cohort.

Overall, approximately 6 % of cases (Amber and Red categories) would, under new guidance, be considered for conservative rather than interventional management.

Conclusions Applying the BSG/ACPGBI limited life expectancy guidelines to nearly a decade of practice at a large UK centre showed that most historical polypectomy decisions were consistent with the new recommendations. However, a small but important subset of procedures might have warranted a more cautious, conservative approach.

Adopting the LLE guidelines and using them in decision making regarding all LNCPs, including SPEC (Significant Polyp and Early Cancer) should help further reduce performing polypectomy in patients who derive minimal or no benefit.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP034 Real-world performance of FIT triage for symptomatic colonoscopy: analysis of the UK National Endoscopy Database (NED)

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DOI 10.1055/s-0046-1820689

Aims Quantify diagnostic yield and independent effects of FIT, age, sex, and symptoms on cancer and polyp detection in symptomatic colonoscopy.

Methods Nationwide analysis of prospectively collected colonoscopy reports (June 2023–August 2025) through the National Endoscopy Database. Symptomatic procedures, including iron-deficiency anaemia (IDA), were identified and diagnostic yields calculated. Mixed-effects logistic regression estimated adjusted odds ratios (aORs) with age, sex, symptom group and FIT as fixed effects. Post-estimation margins modelled cancer yield by age, FIT, and symptoms.

Results Analysis of 447,109 symptomatic colonoscopies identified cancer yield of 1.9% (95% CI 1.8–1.9). FIT $\geq 10\mu\text{g Hb/g}$ cancer yield was 3.8% (95% CI 3.7–3.9) overall; 2.5% (95% CI 2.3–2.7) in patients aged 40–49 and 0.6% (95% CI 0.5–0.7) in those aged 16–39. Cancer yield in FIT < 10 was 0.3% (95% CI 0.2–0.3). FIT concentration was strongly associated with cancer; aOR 46.1 (95% CI 37.2–57.1) at ≥ 300 vs FIT < 10 . IDA was associated with cancer versus rectal bleeding (aOR 2.2, 95% CI 2.0–2.3; $p < 0.01$).

Modelled estimates showed that with FIT < 10 , cancer yield exceeded 1% only in IDA patients aged > 80 , remaining $< 0.5\%$ otherwise. A model combining FIT, age, and IDA detected $> 94\%$ of cancers while reducing colonoscopy demand by $> 40\%$.

Conclusions This national analysis demonstrates the superiority of FIT-based triage over symptom-based referral, with FIT ≥ 10 identifying high-risk patients, including those aged 40–49, while FIT < 10 signified very low risk across all ages and indications [1–5].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dobson C, Biran A, Rees C, Hamilton W, von Wagner C, Whelpton J et al. Practitioner perspectives on symptomatic faecal immunochemical testing in the UK: a qualitative interview study. *Br J Gen Pract* 2025; 75 (755): e390–6
- [2] Quantitative faecal immunochemical tests to guide referral for colorectal cancer in primary care | Guidance | NICE [Internet]. NICE; 2017 [cited 2025 Sept 15]. Available from: <https://www.nice.org.uk/guidance/dg30>
- [3] Beaton D, Sharp L, Lu L, Trudgill N, Thoufeeq M, Nicholson B et al. Diagnostic yield from symptomatic lower gastrointestinal endoscopy in the UK: A British Society of Gastroenterology analysis using data from the National Endoscopy Database. *Aliment Pharmacol Ther* 2024; June 59 (12): 1589–603
- [4] Cancer Research UK [Internet]. 2015 [cited 2025 Sept 14]. Bowel cancer mortality statistics. Available from: <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/bowel-cancer/mortality>
- [5] Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA Cancer J Clin* 2021; 71 (3): 209–49

OP035 Can introduction of a local protocol improve adherence to endoscopic guidance leading to a reduction in unnecessary biopsies whilst maintaining standards in Upper GI Endoscopy?

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DOI 10.1055/s-0046-1820690

Aims To determine whether implementation of a local biopsy guidance protocol could reduce unnecessary biopsies whilst improving overall adherence to best practice guidelines in upper gastrointestinal endoscopy. Secondary objectives included assessing baseline knowledge among endoscopists and evaluating the impact of educational intervention on different practitioner groups.

Methods This quality improvement project comprised three phases. Phase one involved developing an evidence-based guidance poster incorporating recommendations from British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) guidelines, organised by anatomical region (oesophagus, stomach, duodenum) with clear "do biopsy" and "don't biopsy" recommendations. Phase two consisted of a retrospective baseline audit of 100 randomly selected upper GI endoscopies performed over one week in 2024, documenting all biopsies taken, their indications, and correlation with clinical findings. Phase three involved knowledge assessment of local endoscopists through a seven-question survey targeting understanding of current guidance, particularly in areas prone to practice variability. Following baseline data analysis, the guidance poster was distributed throughout the endoscopy unit both physically and electronically, emphasising key messages including avoiding biopsies of typical fundic gland polyps below size criteria, eliminating D2 biopsies for iron deficiency anaemia when tissue transglutaminase (TTG) is

negative, not biopsying gastritis unless concerned about intestinal metaplasia or atrophy, and the limits of biopsy/CLO test for *Helicobacter pylori* assessment in patients taking PPI. A post-intervention audit of 100 upper GI endoscopies using identical methodology enabled direct comparison.

Results Survey results revealed variable endoscopist knowledge: 90% correctly identified eosinophilic oesophagitis biopsy protocols, whilst 60% would incorrectly biopsy Grade C oesophagitis. Only 20% recognised that CLO testing and biopsy are unreliable for *H. pylori* detection in patients on PPI therapy. Baseline audit demonstrated 77% overall guideline adherence (consultants 78.9%, registrars 88.9%, nurse endoscopists 70.5%). Common deviations included gastritis alone, duodenal biopsies despite negative coeliac serology and Barrett's oesophagus not biopsied per protocol. Post-intervention showed significant improvement in overall adherence (89%, $p < 0.05$), with notable reductions in inappropriate duodenal biopsies with negative TTG (75% reduction) and complete elimination of Barrett's surveillance protocol deviations. Nurse endoscopists demonstrated the greatest improvement (+13.6% adherence), while consultants and registrars showed modest improvements (+4.8% and +3.8% respectively). There was improved recognition of pathology not requiring biopsy, such as fundic gland polyps and a 50% reduction in unnecessary biopsies for gastritis alone

Conclusions Implementation of a simple educational intervention with clear visual guidance significantly improved adherence to best practice guidelines in upper GI endoscopy from 77% to 89%. The protocol was particularly effective in reducing unnecessary duodenal biopsies in patients with negative coeliac serology and eliminating Barrett's surveillance protocol deviations. Nurse endoscopists showed the greatest improvement, suggesting structured protocols may be particularly valuable for standardising practice. While not powered to demonstrate overall reduction in biopsy numbers, improved adherence indicates a shift toward more appropriate resource utilisation. The focus on appropriate sampling whilst avoiding unnecessary biopsies is particularly relevant given Post-Endoscopy Upper GI Cancer rates of 5.3–11.8%, where missed lesions during index endoscopy are significant contributors. By ensuring appropriate biopsies in high-risk scenarios whilst avoiding unnecessary sampling, this protocol promotes systematic endoscopic evaluation and may help focus endoscopy and histopathology resources on higher-risk cases. Further higher-powered studies could assess whether the protocol reduces total biopsy numbers and identify additional areas for tool development.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP036 Assessing endoscopist- and service-level engagement with automated colonoscopy key performance indicator feedback reports: Outcomes from the interim analysis of the NED-APRIQOT pilot roll-out

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DOI 10.1055/s-0046-1820691

Aims The United Kingdom (UK) National Endoscopy Database (NED) automated performance reports to improve quality outcomes trial (APRIQOT) demonstrated that providing endoscopists with regular automated feedback on colonoscopy key performance indicators (KPIs) can lead to measurable improvements in polyp detection. [1] Building on this evidence, a pilot funded by the Health Foundation is delivering similar reports every quarter across two

UK regions to test their real-world feasibility and impact at scale. Early analysis from the pilot indicates meaningful gains in detection, particularly among clinicians who engage with the feedback. In this analysis, we focus specifically on patterns of engagement with the programme during the first half of implementation.

Methods The pilot commenced in July 2025 in two regions of the UK. Information was dispersed to endoscopists and service leads via regional endoscopy networks. Services were encouraged to assign an “APRIQOT lead” (typically the service lead) prior to the pilot. Reports take the form of a summary email and a link through to the NED website, where the full report can be viewed along with summary KPIs and plots that allow endoscopists to anonymously compare themselves to their colleagues. APRIQOT-lead reports summarise the KPIs from all endoscopists at that unit. NED records when an email is opened, as well as logins to the website and individual page views. This data was extracted. Logins to NED from January to April (prior to the pilot being announced to endoscopists and services) were compared to those in the post-intervention period. Differences in baseline pre-intervention polyp detection rate between those who interacted with the reports vs. those who didn't were compared using a chi-squared test for proportions.

Results 744 endoscopists received quarterly performance emails, the first of which was on 01 July 2025. 66.8% (n = 497) read the first email and 52.3% (n = 389) read the second. 21.1% (n = 158) read neither. Of those who read the emails, 49.1% (n = 244) viewed further data on the NED website after the first email, and 57.1% (n = 222) after the second. The baseline pre-intervention polyp detection rate (PDR) of those who opened the emails (45.2%, 95% CI 44.8–45.7) was significantly higher than that of those who opened neither (40.5%, 95% CI 39.7–41.4, $p < 0.001$). NED logins increased significantly following the pilot (median logins per quarter 0 → 1, $p < 0.001$). The mean number of logins per quarter rose from 2.8 to 3.5 per endoscopist, and 43.4% of endoscopists increased their log-in frequency.

11 out of the 48 units in the catchment area (22.9%, n = 2 NHS & n = 9 Independent) did not assign an APRIQOT lead despite prompting. 44% of the allocated APRIQOT leads interacted with at least one report. By sector, at least one lead from 63.6% of NHS sites and 37.5% of independent sites interacted with at least one report. No significant improvement was seen in NED logins by Service Leads ($p = 0.20$).

Conclusions This interim evaluation shows strong endoscopist-level engagement with automated feedback, with most clinicians opening at least one report and a substantial proportion exploring further detail on NED. Importantly, those who opened the reports had significantly higher baseline PDRs, indicating that clinicians already invested in delivering high-quality colonoscopy may be disproportionately represented among those who engage. This is critical, as outcomes from the original trial and the pilot suggest that both those with lower baselines and those who engage derive the greatest benefit. [1] Engagement from service leads was more variable with uptake markedly poorer in the independent sector, where several sites did not nominate an APRIQOT lead and fewer leads accessed the reports. These findings suggest that while automated reporting is well received by many endoscopists, structural and organisational factors, particularly outside the NHS, may limit penetration. Targeted support for low-engagement users and sites may be required to ensure maximum benefit from national quality-improvement initiatives.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Catlow J, Sharp L, Wagnid J et al. Nationally Automated Colonoscopy Performance Feedback Increases Polyp Detection: The NED APRIQOT Randomized Controlled Trial. Clin Gastroenterol Hepatol 2024;S154235652400449X. doi:10.1016/j.cgh.2024.03.048

Management & Hygiene

14/05/2026, 10:00–11:00

Aqua 3 + 4

OP037 Tradition vs Innovation: automated brushless pre-cleaning as a green revolution in reprocessing: Preliminary Results of a Prospective Randomized Study

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DOI 10.1055/s-0046-1820692

Aims Endoscope reprocessing is a critical step in ensuring the safety of endoscopic procedures, as it eliminates the risk of cross-contamination and infection [1]. The increasing prevalence of multidrug-resistant organisms has further underscored the importance of strict adherence to every phase of the reprocessing cycle [2]. Protein debris contributes to biofilm formation, which protects microorganisms from disinfectants and plays a key role in antibiotic resistance. As a result, inadequate protein removal may reduce the efficacy of high-level disinfection and increase the risk of cross-contamination [3]. Furthermore, reprocessing is strongly influenced by human factors, particularly during manual cleaning with channel brushing, detergent-soaked cloths and enzymatic solutions [4]. The automated brushless pre-cleaning device used in this study is an innovative pre-cleaning system that enables automated brushless cleaning of all channels in just 2 to 7 minutes, thereby minimizing the impact of human factors during a critical phase of the reprocessing cycle. The aim of the study is to evaluate the efficacy of this new automated brushless cleaning system.

Methods This was a prospective randomized single-center study.

Three operators, trained in duodenoscopy swabbing and reprocessing, were included in the study. Duodenoscopes from the same manufacturer but with different distal-end configurations were evaluated: one with a fixed distal cap, one with a removable reusable cap, and one with a removable disposable cap. We estimated a sample size of 250 cases. After each endoscopic procedure, bedside cleaning was performed in the endoscopy room. The duodenoscope was then transferred to the reprocessing area, where a leak test was conducted. Subsequently, after the randomization, duodenoscope underwent pre-cleaning either using the automated brushless device or traditional manual with immersion and channel brushing. After the step with the automated pre-cleaner or manual pre-cleaning, a swab was inserted into the operating channel. Once the swab exited from the distal tip, its terminal portion was cut and placed into the test vial. Duodenoscopes pre-cleaned with the automated brushless pre-cleaning system subsequently underwent traditional manual pre-cleaning and the remaining reprocessing steps according to internal protocol. The primary outcome was to evaluate the efficacy of the automated brushless compared with traditional manual pre-cleaning, defined as the rate of contaminated duodenoscopes, measured by residual protein testing (Pyromol Test) of the operating channel. Contamination above the action level threshold ($\geq 6.4 \mu\text{g}/\text{cm}^2$) was considered positive. Secondary outcomes included distribution of samples across predefined contamination levels: target level 0–3 $\mu\text{g}/\text{cm}^2$, alert level 3–6.4 $\mu\text{g}/\text{cm}^2$ at the Pyromol Test.

Results We report the preliminary results from the first 55 cases performed between September and November 2025. None of the 27 duodenoscopes pre-cleaned with the automated brushless system reached the Pyromol test action level. In contrast, 1 out of 28 (3.5%) duodenoscopes pre-cleaned manually reached the action level. Regarding secondary outcomes, all 27 duodenoscopes pre-cleaned with the automated system tested negative at any level of Pyromol test. Among the 28 duodenoscopes pre-cleaned manually, 4 (14.3%) tested

negative, 22 (78.6%) showed positivity at the alert level, and 1 (3.5%) reached the target level.

Conclusions These preliminary results highlight the potential role of the automated brushless system in improving the quality and reliability of the pre-cleaning phase of duodenoscope reprocessing. The absence of action level contamination suggests that automated, brushless channel irrigation may enhance the removal of protein debris and reduce the risk of cross-contamination. In addition, this innovative automated pre-cleaning system could potentially decrease the variability associated with human factors.

Conflicts of Interest Consultancy Pentax

References

- [1] Ofstead Cori L et al. Duodenoscope-associated infection prevention Endoscopy International Open. 2020; 08: E1769–E1781
- [2] Beilenhoff U et al. ESGE±ESGENA guideline for quality assurance in reprocessing Endoscopy. 2007; 39: 175–181
- [3] Kenters N et al. Infectious diseases linked to cross-contamination of flexible endoscopes. Endosc Int Open 2015; 03: E259–E265
- [4] Beilenhoff U et al. Reprocessing in GI endoscopy: ESGE–ESGENA Position Statement – Update 2018. Endoscopy. 2018; 50:

OP038 Microbiological Monitoring of Endoscopes: A Single-Center Observational Study

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Aims Preventing endoscopy-related infections is a key patient-safety priority. Although reprocessing procedures are regulated by international guidelines [1], persistent contamination has been documented—particularly in duodenoscopes—due to their structural complexity [2]. Periodic microbiological monitoring is an essential tool for verifying reprocessing efficacy and identifying potential critical issues [3]. To evaluate the effectiveness of endoscope reprocessing through microbiological monitoring and to identify criticalities associated with specific endoscope types or individual instruments.

Methods A single-center observational study was conducted, including all microbiological samples collected from January to September 2024 on endoscopes in clinical use. For each sample, the following data were recorded: instrument type and ID, sampling date, isolation of High-Concern Organisms (HCO) or Low-Concern Organisms (LCO), bacterial load (CFU), and corrective actions undertaken. Absolute and relative frequencies of positive samples were calculated, stratified by endoscope type and by individual instrument. Descriptive statistical analyses were performed using R (version 4.2.3; R Foundation for Statistical Computing, Vienna, Austria).

Results A total of 71 samples were collected from 39 endoscopes. The overall rate of HCO positivity was 20.4%. Thirty-three resampling procedures were required, and one instrument was temporarily withdrawn from service; no corrective action was necessary in 37 episodes. The most frequently isolated microorganisms were *Neisseria subflava* (8 isolates) and *Micrococcus luteus* (7 isolates), followed by coagulase-negative staphylococci (*Staphylococcus epidermidis*, *S. hominis*). *Pseudomonas aeruginosa*, the clinically most relevant pathogen, was isolated in three episodes. Distribution by endoscope type showed higher HCO positivity in duodenoscopes and gastroscopes, whereas colonoscopes (including pediatric models) yielded almost exclusively LCO. Several instruments with ≥ 3 samplings (IDs: 2300238, 2201874, 2200941, 1210792) demonstrated recurrent HCO contamination.

Conclusions Microbiological monitoring revealed specific criticalities, particularly in duodenoscopes and in instruments exhibiting recurrent HCO positivity. These findings suggest that monitoring should not focus solely on isolated episodes but rather consider the longitudinal performance of each device. Instruments with recurrent HCO contamination may harbor micro-damage or structural defects that facilitate bacterial persistence. In such cases, intensified

surveillance, reinforced reprocessing protocols, or instrument replacement may be warranted. Our data confirm the essential role of microbiological monitoring in enhancing the safety of endoscopic procedures and provide insights for future personalized maintenance strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rutala WA, Weber DJ. Gastrointestinal endoscopes: a need to shift from disinfection to sterilization? JAMA 2016; 316 (14): 1405–1406
- [2] Ofstead CL, Quick MR, Eiland JE, Adams SJ. Persistent contamination on colonoscopes and gastroscopes despite guideline-compliant reprocessing. Am J Infect Control 2021; 49 (8): 952–959
- [3] Beilenhoff U, Biering H, Blum R et al. ESGE-ESGENA Guideline: cleaning and disinfection in gastrointestinal endoscopy. Endoscopy 2018; 50 (12): 1205–1234

OP039 Optimising Endoscopy Workflow Efficiency: A Multi-Level, Burnout-Aware Intervention Framework

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Aims To synthesise contemporary evidence on burnout, workload, ergonomics, and workflow efficiency in endoscopy, to examine their impact on quality indicators, and to develop a practical, multi-level intervention framework—including a “Burnout-Aware Endoscopy List” Toolkit—that integrates workforce well-being into endoscopy service performance.

Methods A narrative review (2019–2025) was conducted, drawing on peer-reviewed studies, systematic reviews, clinical guidelines, educational interventions, and organisational reports. A thematic synthesis explored the interplay between workload intensity, turnover dynamics, ergonomic design, team culture, and staff well-being. These stressors were mapped onto real endoscopy workflows—from scheduling and room setup to intraprocedural flow, turnovers, and post-list tasks—and integrated with ergonomic principles, quality-improvement models, and established endoscopy quality frameworks.

Results Burnout was strongly associated with reduced procedural quality, higher error rates, impaired situational awareness, and diminished capacity for supervision and training. Five major stressor domains emerged: high caseload and pace, ergonomic hazards, staffing and skill-mix constraints, cognitive load, and administrative burden. Mapping these stressors identified predictable workflow “pressure points” where efficiency demands conflict with staff well-being. Synthesised findings shaped a three-level intervention framework spanning individual ergonomics (micro), team structure and list design (meso), and unit-wide organisational practices (macro). From this, it was developed a Burnout-Aware Endoscopy List Toolkit, comprising a complexity-weighted list design template, staffing matrix, a brief burnout-aware team huddle, ergonomic micro-checks, a structured end-of-list debrief, and an integrated dashboard combining well-being, quality, and efficiency metrics. Units adopting similar workflow and ergonomic redesigns report better staff well-being and improved performance on key quality indicators [1–24].

Conclusions Burnout in endoscopy units is not simply an occupational health issue – it is a systems-level quality concern. Teams well-being must be embedded within endoscopy quality frameworks, and operational strategies such as complexity-balanced scheduling, ergonomic redesign, realistic turnover targets, and improved room flow should be treated as core quality interventions. Sustainable endoscopy services depend on a sustainable workforce. Aligning efficiency with staff safety directly supports the Quadruple Aim and leads to better patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Adarkwah C.C., Labenz J., Hirsch O. 2022; Burnout and work satisfaction are differentially associated in gastroenterologists in Germany. F1000Research 11: 368. doi:10.12688/f1000research.110296.3

- [2] Arnetz B.B., Goetz C.M., Arnetz J.E., Sudan S., vanSchagen J., Piersma K., Reyelts F. 2020; Enhancing healthcare efficiency to achieve the quadruple aim: An exploratory study. *BMC Research Notes* 13 (1): 1–6. doi:10.1186/s13104-020-05199-8
- [3] Babamohamadi H., Davari H., Safari A., Seifollah A., Pordanjani SR 2023; The association between workload and quality of work life of nurses taking care of patients with COVID-19. *BMC Nursing* 22 (1):. doi:10.1186/s12912-023-01395-6
- [4] Blythe J.C., Smith-Steinert R.M., Crouch J.L., Lehman M.E. 2024; Improving Endoscopy Nursing Staff's Patient Management Through the Implementation of an Education Initiative. *Gastroenterology Nursing* 47 (5): 326–330. doi:10.1097/sga.0000000000000814
- [5] Bodenheimer T., Sinsky C. 2014; From triple to quadruple aim: Care of the patient requires care of the provider. *The Annals of Family Medicine* 12 (6): 573–576. doi:10.1370/afm.1713
- [6] ColoWrap 2023; 5 Ways to Improve Endoscopy Unit Morale. *Colowrap.com*. <https://www.colowrap.com/blog/five-ways-to-improve-endoscopy-unit-morale>
- [7] Diehl E., Rieger S., Letzel S., Schablon A., Nienhaus A., Escobar Pinzon L.C., Dietz P. 2021; The relationship between workload and burnout among nurses: The buffering role of personal, social and organisational resources. *PLOS ONE* 16 (1):. doi:10.1371/journal.pone.0245798
- [8] Durić T., Cibulková I., Hajer J. 2023; Musculoskeletal Injuries in the Endoscopy Practitioner Risk Factors, Ergonomic Challenges and Prevention—Narrative Review and Perspectives. *Gastroenterology Insights* 14 (3): 352–362. doi:10.3390/gastroent14030026
- [9] Eurofound – living and working conditions | European Union. (n.d.). *European-Union.europa.eu* https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/search-all-eu-institutions-and-bodies/eurofound_en
- [10] Güngör S., Sönmez B. 2025; Work intensification and occupational fatigue on nurses: a cross-sectional and correlational study. *BMC Health Services Research* 25 (1): 163. doi:10.1186/s12913-025-12325-4
- [11] Min JK, Cha JM, Kwak MS, Yoon JY, Jung Y, Shin JE, Yang HJ. 2019; Quality Indicators and Outcome Measures of Endoscopy in the National Cancer Screening Program. *Yonsei Medical Journal* 60 (11): 1054–1054. doi:10.3349/ymj.2019.60.11.1054
- [12] Keswani R.N., Keefer L., Surawicz C.M. 2014; Burnout in Gastroenterologists and How to Prevent it. *Gastroenterology* 147 (1): 11–14. doi:10.1053/j.gastro.2014.05.023
- [13] Lipowska A.M., Shergill A.K. 2021; Ergonomics of Endoscopy. *Gastrointestinal Endoscopy Clinics of North America* 31 (4): 655–669. doi:10.1016/j.giec.2021.05.003
- [14] Oliveira R., Roseira J., Estevinho M.M., Tavares De Sousa H., Rolanda C., Meining A., Walter B. 2025; Endoscopy-related musculoskeletal injuries in gastrointestinal endoscopists: a systematic review and meta-analysis. *Endoscopy* 57 (S 02): S141–S142. doi:10.1055/s-0045-1805371
- [15] Ong J., Swift C., Bath M., Ong S., Lim W., Al-Naeeb Y., Shankar A., Dan Y.Y. 2021; The prevalence of burnout, risk factors, and job-related stressors in gastroenterologists: A systematic review. *Journal of Gastroenterology and Hepatology* 36 (9): 2338–2348. doi:10.1111/jgh.15488
- [16] Pawa S., Kwon R.S., Fishman D.S., Thosani N.C., Shergill A., Grover S.C., Al-Haddad M., Amateau S.K., Buxbaum J.L., Calderwood A.H., Chalhoub J.M., Coelho-Prabhu N., Desai M., Elhanafi S.E., Forbes N., Fujii-Lau L.L., Kohli D.R., Machicado J.D., Marya N.B., Ruan W. 2023; American Society for Gastrointestinal Endoscopy guideline on the role of ergonomics for prevention of endoscopy-related injury: summary and recommendations. *Gastrointestinal Endoscopy* 98 (4): 482–491. doi:10.1016/j.gie.2023.05.056
- [17] Pi R., Liu Y., Yan R., De Z., Wan Y., Chen Y., He Z., Liu F., Wang Y., Li S. 2025; Nurses' occupational fatigue level and risk factors: A systematic review and meta-analysis. *PubMed* 20 (7): e0326519–e0326519. doi:10.1371/journal.pone.0326519
- [18] Rangga Pribadi R. 2023; Patient Safety and Healthcare Worker Safety in Gastrointestinal Endoscopy during COVID-19 Pandemic. *Contemporary Topics in Patient Safety Volume 2:.* doi:10.5772/intechopen.109128
- [19] Rex D.K., Anderson J.C., Butterly L.F., Day L.W., Dominitz J.A., Kaltenbach T., Ladabaum U., Levin T.R., Shaikat A., Achkar J.-P., Farraye F.A., Kane S.V., Shaheen N.J. 2024; Quality indicators for colonoscopy. *Gastrointestinal Endoscopy* 100 (3): 352–381. doi:10.1016/j.gie.2024.04.2905
- [20] Nemati-Vakilabad R, Ebadi E, Homaei A, Hoseini S, Mirzaei A. 2024; The Relationship Between Perceived Nursing Workload and Occupational Fatigue in Clinical Nurses: The Moderating Role of Nursing Teamwork. *Journal of Clinical Nursing* 34 (10):. doi:10.1111/jocn.17616
- [21] Shiha MG, Manza F, Ong J, Rodríguez-Lago I, Müller M, Sidhu R. 2025; Global Prevalence of Burnout in Gastroenterology and Endoscopy: A Systematic Review and Meta-Analysis. *United European Gastroenterology Journal* 13 (7):. doi:10.1002/ueg2.70045
- [22] Čukljek S, Babić J, Ilić B, Režić S, Filipović B, Pavić J, Švigir AM, Smrekar M. 2025; Associations Between Quality of Nursing Work Life, Work Ability Index and Intention to Leave the Workplace and Profession: A Cross-Sectional Study Among Nurses in Croatia. *International Journal of Environmental Research and Public Health* 22 (8): 1192–1192. doi:10.3390/ijerph22081192
- [23] Socaciu A.I., Ionut R., Barsan M., Ungur A.P., Rajnovanu A.G. 2020; Burnout in Gastroenterology Unit Nurses. *International Journal of Environmental Research and Public Health* 17 (9): 3115. doi:10.3390/ijerph17093115
- [24] Yang Y.J., Baik G.H. 2016; Now, It Is Time to Consider Job Stress in the Field of Gastroenterology. *Clinical Endoscopy* 49 (3): 209–211. doi:10.5946/ce.2016.067

OP040 Standardized sedation protocol for endoscopy: safety and effectiveness

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DOI 10.1055/s-0046-1820695

Aims Sedation is essential in digestive endoscopy to enhance patient comfort and optimize procedural quality. The implementation of a Standardized Operating Procedure (SOP), based on ASA risk stratification and staff competency, enables systematic safety measures and comprehensive monitoring. Specialized nursing staff lead these critical processes, contributing significantly to the efficiency and safety of the service [1–6].

The objectives were to describe the organization and outcomes of the sedation model in our unit, highlight the role of nursing in preparation, administration, and recovery, define competency allocation according to ASA risk classification, and identify key indicators of safety and clinical effectiveness.

Methods A structured protocol was implemented across three clinical phases, based on ASA risk stratification:

1. Pre-procedure Phase: Stratification and Planning

Specialized nursing conducts a comprehensive clinical assessment through patient interview, medication review, and evaluation of airway-related risks and comorbidities.

Patients are classified according to ASA, determining:

- Sedation performed by gastroenterology staff for ASA I–II patients, by personnel accredited in deep sedation with propofol through SEED-endorsed specialized training (Spanish Society of Digestive Endoscopy).
 - Sedation performed by anesthesiology for ASA III–IV patients or when additional risks are identified.
- 2. Intra-procedure Phase: Administration and Monitoring** Nursing responsibilities include preparing the procedure area and administering medication according to protocol, continuous monitoring of vital signs from induction to the end of the procedure, and early detection of changes in the level of sedation, providing ventilatory support when needed, and managing pain.
- 3. Recovery Phase: Surveillance and Discharge**

- Led by nursing staff: serial monitoring of vital signs and neurological status.
- Discharge criteria based on standardized post-procedure recovery scales.**Results**
- **Safety:** Minor complications were infrequent (<2.5%), mainly transient mild desaturations, with no severe adverse events or sedation-related deaths. This favourable safety profile has remained consistent since 2019, particularly in low-risk patients (76% ASA I–II) managed by accredited nursing staff throughout preparation, propofol administration, and post-sedation monitoring.
- **Effectiveness:** The standardized sedation workflow proved highly effective in ensuring patient comfort and optimizing procedural times. Protocol implementation significantly shortened recovery, achieving a 30-minute mean, which improved patient flow and overall unit efficiency.
- **Patient Satisfaction:** The protocol substantially improved patient experience, achieving an overall satisfaction rate of 98%. Since 2019, 99% of endoscopic procedures have been performed under sedation, directly contributing to increased comfort, reduced anxiety, greater tolerance to the procedure, and enhanced perceived safety.
- **Efficiency:** Reorganization based on ASA stratification and the active role of nursing reduced waiting times from 730 to 30 days, improving accessibility and service performance. The model also increased team satisfaction, strengthened interdisciplinary coordination, and lowered procedure cancellations, reinforcing its operational sustainability.

Conclusions The implementation of a structured sedation protocol based on ASA risk classification is a safe and effective method for performing digestive endoscopy procedures. The training and leadership of specialized nursing staff are essential for comprehensive risk management and patient safety. Assigning sedation responsibilities according to ASA category standardizes clinical practice, optimizes resources, and ensures appropriate safety levels for each risk group. This model contributes to continuous quality improvement, enhances patient satisfaction, and supports the sustainability of the service.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hidalgo-Cabanillas M, Laredo-Aguilera JA, Barroso-Coroto E, López-González Á, Rabanales-Sotos J, Carmona-Torres JM. Nurse-Administered Sedation in Digestive Endoscopy: A Systematic Review. *Diagnostics*. 2025; 15 (8): 1030
- [2] Simón MA, Bordas JB, Campo R, González-Huix F, Igea F, Monés J. Documento de consenso de la Asociación Española de Gastroenterología sobre sedoanalgesia en la endoscopia digestiva. *Gastroenterol Hepatol* 2006; 29: 131–49
- [3] Riphaus A, Wehrmann T, Weber B et al. S3 Guideline: sedation for gastrointestinal endoscopy 2008. *Endoscopy*. 2009; 41: 787–815
- [4] Rex DK, Deenadayalu VP, Eid E et al. Endoscopist-directed administration of propofol: a worldwide safety experience. *Gastroenterology*. 2009; 137: 1229–37
- [5] LópezRosés L Subcomité de Protocolos de la Sociedad Española de Endoscopia Digestiva (SEED). Directrices “guidelines” de sedación/analgesia en endoscopia. *RevEspEnfermDig* 2006; 98: 685–92
- [6] Cohen LB, Delegge MH, Aisenberg J et al. AGA Institute review of endoscopic sedation. *Gastroenterology*. 2007; 133: 675–701

OP041 The Benefits of a Patient Safety Checklist for Endoscopy Assistants. Prospective Multicentric Study

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DOI 10.1055/s-0046-1820696

Aims While minimally invasive, endoscopic procedures present significant risks to patient safety, including complications such as perforation, bleeding, infection, and pancreatitis. Implementing safety checklists in various medical fields has been shown to improve patient outcomes by standardizing processes and enhancing communication. However, the role of safety checklists, specifically in endoscopic procedures, remains underexplored. To evaluate the effectiveness of safety checklists in improving patient safety, reducing complications, and enhancing procedural efficiency in endoscopic practices across multiple centers [1–4].

Methods This prospective, multicentric study was conducted across twenty endoscopic units, 14 national health service providers, and six private practices between 20.01.2025 and 14.02.2025. A total of 4,926 patients underwent endoscopic procedures. Hungarian endoscopy experts translated the safety checklist recommended by the European Society of Gastrointestinal Endoscopy into Hungarian and revised it before circulation. Online training was held twice with the participating centers before the study period. Key safety components included patient identification, consent, comorbidities, medication, anticoagulation, procedural plan, equipment, vital signs, observation, and post-procedural checks. We collected data on the identified deficiencies and preventable errors and performed a statistical descriptive analysis. We also collected and narratively reviewed all users' feedback on implementing the checklist [5, 6].

Results Among the 4,926 patients, 4,013 underwent procedures with the checklist protocol, and the use of the checklist identified 327 correctable deficiencies and errors in 4,013 (8.14%) endoscopies, with 117 (2.91%) procedures with more than one deficiency and error. The rate of endoscopies with correctable errors varied between 0% and 70.34% in the different centers. The checklist identified correctable errors in 2,054 colonoscopies, 1,648 gastroscopies, 326 endoscopic retrograde cholangiopancreatography, and endoscopic ultrasound with a rate of 9.01%, 6.43%, 4.29%, and 0%, respectively. Fourteen endoscopic (70%) units, including three private practices (50%), plan to continue using the checklist. Users commented on the following benefits: improved teamwork, more focused pre-procedural assessment, and more atten-

tion to crucial details such as coagulation. However, nearly all users stated that the additional time, lack of willingness to use, and more paperwork impeded its introduction into practice.

Conclusions Implementing safety checklists in endoscopic procedures significantly improves patient safety by identifying preventable errors. This study proves the feasibility of using safety checklists in endoscopy and highlights the importance of standardized safety protocols in endoscopic units. By verifying routine procedures, the checklist minimizes the potential for human error and problems arising from forgotten steps. Implementing a checklist has been shown to improve communication among members of the multidisciplinary team.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cripsin A, Birkner B, Munte A. et al. Process quality and incidence of acute complications in a series of more than 230,000 outpatient colonoscopies. *Endoscopy* 2009; 41: 1018–1025
- [2] Gralnek IM, Bisschops R, Matharoo M, Rutter M, Veitch A, Meier P, Beilenhoff U, Hassan C, Dinis-Ribeiro M, Messmann H. Guidance for the implementation of a safety checklist for gastrointestinal endoscopic procedures: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement. *Endoscopy* 2022; 54 (2): 206–210. doi:10.1055/a-1695-3244t
- [3] Dubois H, Schmidt PT, Creutzfeldt J. et al. Person-centered endoscopy safety checklist: development, implementation, and evaluation. *World J Gastroenterol* 2017; 23: 8605–8614
- [4] Bisschops R, Rutter MD, Areia M. et al. Overcoming the barriers to dissemination and implementation of quality measures for gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and United European Gastroenterology (UEG) Position Statement. *Endoscopy* 2021; 53: 196–202
- [5] WHO Surgical Safety Checklist
- [6] Gralnek IM, Bisschops R, Matharoo M, Rutter M, Veitch A, Meier P, Beilenhoff U, Hassan C, Dinis-Ribeiro M, Messmann H. Guidance for the implementation of a safety checklist for gastrointestinal endoscopic procedures: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement.

OP042 The Endoscopy Nurse: Profiling and Evaluating Advanced Competencies – Preliminary Results

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DOI 10.1055/s-0046-1820697

Aims The aim of this research is to define the core and advanced competencies of endoscopy nursing through an exploration of routine activities, required knowledge and skills and expected levels of professional autonomy.

Methods A qualitative study was conducted using the interview to the double methodology, in which 6 participants instruct the interviewer—imagined as their “double”—on how to replace them at work without being recognized by colleagues [2]. Nurses employed in a private healthcare facility, with at least three years of experience in endoscopy and adequate comprehension of Italian, were included. Interviews were audio-recorded, transcribed verbatim, and analyzed using NVivo 11.0.

Results Preliminary results reveal 5 main domains of nursing competence. Technical and care competencies include anatomical knowledge, infection prevention and control, pharmacological management, endoscopic instrumentation, reprocessing, emergency recognition, and direct patient support. Organizational and management competencies involve coordinating clean/dirty pathways, ensuring equipment functionality, stock management, documentation, and procedural traceability. Communicative and relational competencies encompass effective patient communication, anxiety reduction, teamwork, and collaboration with anesthesiologists and endoscopists. Educational com-

petencies refer to patient education, peer training, and promotion of best practices. Safety and infection-prevention competencies include adherence to sterilization norms, use of PPE, waste management, monitoring of sterile integrity, and prevention of cross-contamination.

Conclusions The emerging competency framework highlights the high degree of specialization required in modern endoscopy nursing [1]. The five identified domains reflect a complex professional role that integrates technical expertise, organizational leadership, communication skills, educational function, and rigorous infection-prevention practice. These findings underscore the need for updated national standards, structured training programs, and a clearly defined professional profile to support competency development and ensure the delivery of safe, high-quality, patient-centered endoscopic care. Further consensus work will refine competency levels and inform the creation of a standardized job description for the Endoscopy Nurse in Italy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ESGENA Core Curriculum for Endoscopy Nursing European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) ESGENA Education Working Group (EEWG) Planning Group September 2008
- [2] Fix GM, Kim B, Ruben MA, McCullough MB. Direct observation methods: A practical guide for health researchers. *PEC Innov.* 2022; 1: 100036

Inside matters: The best of the small bowel

14/05/2026, 10:00–11:00

Sky 2

OP043 Screening of neoplastic Lesions of the Small Bowel Using Capsule Endoscopy in Lynch Syndrome. The iCARE4Lynch Study

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DOI 10.1055/s-0046-1820698

Aims Lynch Syndrome (LS) is an autosomal dominant genetic predisposition responsible for multiple cancers, including the rare small bowel (SB) adenocarcinoma. There is no formal recommendation regarding the need for screening. Since the 2000s, small bowel capsule endoscopy (SBCE) has become the reference method for SB exploration. The diagnostic and therapeutic yield of screening for neoplastic lesions by SBCE is poorly documented. The aim of this study was to evaluate the diagnostic yield of a first (index) screening SBCE in patients with LS.

Methods We conducted a European multicenter cohort study. Patients carrying a pathogenic variant of a DNA mismatch repair (MMR) gene, who were

asymptomatic and screened by SBCE for suspected neoplastic lesions, were included. Data was collected between January 2000 and December 2024. The primary endpoint was the diagnostic yield of an index SBCE, defined as the proportion of patients diagnosed with neoplastic lesions. Secondary endpoints were the diagnostic yield of follow-up SBCE, adverse events, technical performance, age at lesion diagnosis, impact of SBCE on management, and lesion frequency depending on the type of pathogenic variant.

Results A total of 346 patients were screened in the study, with 21 (6.1 %) excluded due to symptoms. A total of 325 patients were included for analysis. The mean age was 51.0 ($\pm$ 11.2) years, and 146 patients (45 %) were male. The genetic variants identified were MLH1 (94, 29.2 %), MSH2 (144, 44.5 %), MSH6 (66, 20.5 %), PMS2 (21, 6.5 %), and EPCAM (0, 0 %). Two hundred and eighteen (63.0 %) patients had a personal history of LS-related cancer, and 289 (83.5 %) had a first-degree family history of small bowel adenocarcinoma.

SBCE was ingested in 324 (99.8 %) cases. Small bowel examination was complete in 325 (100 %) patients. The bowel cleanliness rate was adequate in 287 (88.2 %) of cases. In terms of adverse events, aspiration was noted in 0 (0 %) patients, and retention was noted in 2 (0.4 %) patients, requiring extraction (endoscopic or surgical) in 1 (0.2 %) patient.

The diagnostic yield of the index SBCE was 7.1 %, identifying a neoplastic lesion in 23 patients, including 4 adenocarcinomas. The mean age at diagnosis of neoplastic lesions was 64 ($\pm$ 11.7) years. Among the 302 patients with a normal SBCE, 111 underwent a second SBCE after a mean interval of 3.8 years ($\pm$ 1.9). The diagnostic yield for the second SBCE was 8.1 % (9 patients), none of whom had adenocarcinoma. The mean age at diagnosis of neoplastic lesions was 56 ($\pm$ 9.5) years.

Conclusions In this European multicenter study including 325 patients with LS, the first small bowel SBCE performed for screening purposes had a diagnostic yield of 7.1 %. The diagnostic yield of a second SBCE performed after a 3.8-year interval was 8.1 %. The adverse event rate was 0.4 %. These results suggest that screening SBCE is warranted or to the least has a definite role, in patients with LS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP044 OMOM SmartScan Provides Noninferior Assessment of Lewis Score and CECDAl in Crohn's Disease vs Full-Video Review

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DOI 10.1055/s-0046-1820699

Aims Small bowel capsule endoscopy (SBCE) is central to Crohn's Disease (CD) care but limited by lengthy review and reader variability. We tested whether an artificial-intelligence (AI)-triaged, human-reviewed workflow (SmartScan, SS) can replace full-video (FV) review while reducing reading time and maintaining safety (► **Table 1**).

Methods Single-center, randomized, assessor-blinded, dual-reader, 2 $\times$ 2 cross-over non-inferiority study of OMOM HD videos. Adults with established CD had paired FV and SS reads. The primary endpoint was non-inferiority of the agreement on Lewis Score [LS] activity category and stricture status. Secondary endpoints included LS category agreement, equivalence of continuous LS/CECDAl, within-tolerance agreement, stricture sensitivity, performance with short transit and low Brotz quality, and reading-time superiority [1, 2].

Results We analyzed 153 paired studies. SS and FV agreed on both LS category and stricture in 96.1 % (147/153), surpassing the non-inferiority margin (p = 0.005). LS category exact-match was 96.7 %. Continuous scores were equivalent, within-tolerance agreement was 91.5 % (140/153) and stricture sensitivity 100 %. Results were similar with short transit and low Brotz quality. Mean reading time fell from 41.5 to 12.8 minutes (p < 0.001).

Conclusions SS achieved non-inferiority, preserved continuous score equivalence, and markedly reduced reading time, while maintaining safety. These data support an AI-first, human-verified SBCE workflow with selective escalation to FV.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Giordano A, Romero-Mascarell C, González-Suárez B et al. Integration of artificial intelligence-enhanced capsule endoscopy in clinical practice: a review of market-available tools for clinical practice. *Dig Dis Sci* 2025. doi:10.1007/s10620-025-09099-4
- [2] Xie X, Xiao YF, Zhao XY et al. Development and validation of an artificial intelligence model for small bowel capsule endoscopy video review. *JAMA Netw Open* 2022; 5:e2221992

OP045 Diagnostic Yield of Small Bowel Capsule Endoscopy in Refractory Coeliac Disease: A systematic review and meta-analysis

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DOI 10.1055/s-0046-1820700

Aims Small-bowel capsule endoscopy (SBCE) is an established diagnostic modality, yet its role in coeliac disease remains limited. Current guidelines recommend SBCE as a second-line investigation in refractory or complicated coeliac disease, following serology, histology, and dietary adherence assessment. However, no prior systematic review and meta-analysis has synthesised evidence on SBCE specifically in refractory or active coeliac disease.

Methods We systematically searched EMBASE, MEDLINE, Cochrane Central, and PubMed for studies using capsule endoscopy in patients with coeliac disease, particularly those with persistent gastrointestinal symptoms or suspected refractory disease. Two reviewers independently screened studies and ex-

► **Table 1** Continuous agreement (equivalence) between SmartScan (SS) and full video (FV)

Endpoint	Mean Δ [90 % CI]	Margin	Decision(TOST)	Sensitivity Bounds
LS inflammatory subtotal (primary)	- 16.4 [- 30.5, - 2.3]	$\pm$ 120	Equivalent	Within $\pm$ 100/ $\pm$ 150
LS total (sensitivity)	- 44.9 [- 77.4, - 12.4]	$\pm$ 120	Equivalent	Within $\pm$ 100/ $\pm$ 150
CECDAl - full index	- 0.24 [- 0.39, - 0.10]	$\pm$ 3	Equivalent	Within $\pm$ 2/ $\pm$ 4
CECDAl A $\times$ B (inflammation)	- 0.20 [- 0.34, - 0.06]	90 % CI within $\pm$ 3(not driven by inflammation alone)		
CECDAl C (stenosis)	- 0.04 [- 0.07, - 0.01]	90 % CI within $\pm$ 3(not driven by stenosis alone)		

tracted data. Risk of bias was assessed using ROBINS-I, and certainty of evidence using GRADE. We performed random-effects meta-analyses using a generalised linear mixed model (GLMM) to estimate pooled diagnostic yields for active refractory coeliac disease and secondary outcomes (ulcerative lesions and small-bowel tumours). Random-effects meta-regression, fitted using restricted maximum likelihood (REML), explored whether variation in diagnostic yield was associated with prespecified covariates (mean age, ulcer and tumour diagnostic yield, completion rate, coeliac serology, proportion with known refractory coeliac disease, and symptom burden).

Results Twelve studies, including 715 patients, were eligible. The mean age was approximately 50.9 years, and 28.7% were male. Disease duration was variably reported, with a median duration of approximately 7.1 years among studies providing extractable data. The pooled diagnostic yield for active refractory coeliac disease was 0.68 (95% CI 0.57–0.77; $I^2 = 70\%$). Pooled diagnostic yield for small-bowel ulcers was 0.06 (95% CI 0.02–0.13; $I^2 = 71\%$), and for small-bowel malignancy 0.03 (95% CI 0.02–0.04; $I^2 = 0\%$). Neither univariate nor multivariate meta-regression identified any covariates that significantly modified diagnostic yield. Capsule retention ranged from 0.53% to 1.0%, and adequate bowel preparation ranged from 53% to 100%. Across seven eligible studies, the meta-analytic pooled estimate indicated that 40% of patients experienced a change in management following SBCE (95% CI 18–67%; $I^2 = 94\%$). Only one study reported using patency capsules, whereas three reported converting some selected procedures to device-assisted enteroscopy due to concerns about capsule retention.

Conclusions SBCE has a high diagnostic yield in refractory coeliac disease, with a relatively low frequency of ulcerative jejunitis and small-bowel malignancy, supporting its role as a second-line, non-invasive investigation and a filter test before device-assisted enteroscopy in complicated coeliac disease. Future studies should assess the role of artificial intelligence in improving the detection and characterisation of complex coeliac disease on SBCE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP046 Small bowel rebleeding after capsule endoscopy: Effects of device-assisted enteroscopy on rebleeding rate, risk factors, and mortality in a Nationwide Big Data Cohort

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DOI 10.1055/s-0046-1820701

Aims Although the use of device-assisted enteroscopy (DAE) has increased, few large-scale studies have examined long-term outcomes focused on small bowel (SB) bleeding. We analyzed National Health Insurance Service (NHIS) data to evaluate the clinical utility of DAE in patients with SB bleeding who underwent capsule endoscopy (CE).

Methods We constructed a cohort of 11,690 patients who underwent CE for SB bleeding (identified using ICD-10 codes) between 2002 and 2022. Patients were categorized into three groups: no DAE, diagnostic DAE, and therapeutic DAE. We assessed four major outcomes, including the probability and factors associated with SB rebleeding, severe SB rebleeding, rebleeding-related mortality, and all-cause mortality.

Results Of 11,690 patients, 5,221 were eligible for analysis (no DAE, $n = 4,960$; diagnostic DAE, $n = 173$; therapeutic DAE, $n = 78$). The probability of SB rebleeding and severe SB rebleeding was highest in the therapeutic DAE group, followed by diagnostic DAE and no DAE groups ($p < 0.001$), with 7-year rebleeding probabilities of 19.8%, 15.8%, and 5.0%, respectively. Rebleeding-related and all-cause mortality were also highest in the therapeutic DAE group, followed by diagnostic DAE and no DAE groups ($p < 0.001$ for both), with 7-year rebleed-

ing-related mortality probabilities of 9.3%, 5.9%, and 2.7%, respectively. Risk factors for both rebleeding-related and all-cause mortality included age, male sex, liver cirrhosis, and malignancy.

Conclusions In patients with SB bleeding, therapeutic DAE is associated with higher risks of rebleeding and mortality, likely reflecting greater underlying disease burden. Long-term, individualized monitoring and careful management of comorbidities are required, even after therapeutic intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP047 Performance measures of double-balloon enteroscopy from the largest tertiary centre in the UK: A two-year quality assessment

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DOI 10.1055/s-0046-1820702

Aims Double-balloon enteroscopy (DBE) plays a central role in the diagnosis and management of small-bowel disease, allowing direct visualisation of mucosal abnormalities, targeted tissue sampling, and the delivery of precise endotherapy within the same procedure [1]. As DBE is technically demanding and performance can vary across centres, the ESGE has introduced specific quality indicators to standardise practice and optimise clinical outcomes [2]. This study aimed to evaluate how DBE practice in our centre aligns with these established quality benchmarks over a two-year period.

Methods All DBE procedures performed at the Royal Free Unit for Endoscopy between July 2023, and October 2025 were retrospectively reviewed from our prospectively-maintained institutional database. Baseline characteristics, performance outcomes, major and minor performance indicators were analysed. ESGE performance indicators and their thresholds were used as reference standards.

Results A total of 359 DBE procedures were included in our study. DBE was performed for an appropriate indication in 98.3% of cases. Adequate pre-procedure preparation occurred in 345 patients (96.1%). Multidisciplinary team (MDT) discussion took place pre-procedurally in 200 cases (55.7%). Maximum insertion depth was documented in 99.7% of cases ($n = 358$) and marking with a submucosal tattoo of sterile carbon particles was performed in 72.7% of clinically indicated cases. The overall diagnostic yield was 79.4% and accurate photo-documentation was obtained in 70.8%. Among lesions requiring further therapeutic intervention, 95.1% were marked appropriately. Therapeutic intervention was performed in 60.2% of procedures, with therapeutic success achieved in 98.6%. Patient comfort was adequate in 96.9% of procedures, and adverse events occurred in 0.8% (3/359).

Conclusions Our 2-year quality assessment showed that achieving established ESGE quality thresholds for DBE is feasible in routine clinical practice. In our high-volume centre, both diagnostic yield and safety outcomes exceeded current ESGE targets, while the remaining indicators were consistently within expected benchmark ranges. These findings provide real-world support for the application of ESGE quality measures in DBE services and may help inform future updates as more data become available.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sidhu R, Shiha MG, Carretero C, Koulaouzidis A, Dray X, Mussetto A et al. Performance measures for small-bowel endoscopy: a European Society of

OP048 Comparative Diagnostic Performance of Intestinal Ultrasound and Capsule Endoscopy in Detecting Low-Grade Ileal Inflammation: A Prospective Blinded Study

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DOI 10.1055/s-0046-1820703

Aims Crohn's Disease (CD) demands accurate and repeated assessment of inflammatory activity. Capsule endoscopy (CE) and intestinal ultrasound (IUS) are patient-friendly non-invasive modalities to evaluate the small bowel, yet head-to-head comparisons are scarce, particularly for mild inflammatory burden [1]. We aimed to compare IUS with CE in detecting ileal inflammation.

Methods In this prospective, blinded study, patients with known or suspected CD referred for CE underwent same-day IUS, performed immediately prior to capsule ingestion. Inflammatory activity was quantified by the Lewis score (LS) for CE and the International Bowel Ultrasound Segmental Activity Score (IBUS-SAS) for IUS. Diagnostic accuracy was evaluated by ROC curve analysis.

Results We included 98 patients, 58.2% female, with a mean age of 41.5 ± 13.9 years, of those 68.4% had suspected CD and 31.6% established inflammatory type (B1) CD. CE was performed as small-bowel CE in 82.7% and pan-intestinal endoscopy in 17.3%. Median fecal calprotectin was 46.3 µg/g and CRP 1.9 mg/L. Spearman's rho was 0.432 (p < 0.001) between 3rd tertile LS and IBUS-SAS. The AUROC for IBUS-SAS was 0.65 (p = 0.09; 95% CI, 0.54–0.76) for non-significant inflammation (LS < 135), 0.798 (p < 0.001; 95% CI, 0.69–0.90) for mild inflammation at high-risk of flare (LS ≥ 350), and 0.810 (p < 0.001; 95% CI, 0.69–0.93) for moderate-to-severe inflammation (LS ≥ 790). For LS ≥ 350, an IBUS-SAS cut-off of 12.7 yielded 86.4% sensitivity, 68.5% specificity, 45.2% Positive Predictive Value (PPV), 94.3% Negative Predictive Value (NPV) and a κ = 0.416 (p < 0.001). For LS ≥ 790, a cut-off of 15.8 provided 78.6% sensitivity, 77.8% specificity, 37.9% PPV, 95.5% NPV and a κ = 0.390 (p < 0.001).

Conclusions IUS showed high accuracy and excellent negative predictive value for detecting clinically relevant ileal inflammation. These findings position IUS as an effective non-invasive strategy to exclude significant inflammatory activity in the ileum, while CE remains the reference for confirming and staging disease burden, by evaluating the whole extension of small bowel mucosa.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Khan S. et al. 2025; "A network meta-analysis of capsule endoscopy versus imaging modalities for diagnosing small bowel Crohn's disease.". Journal of Crohn's and Colitis 19 (9): pijaf127 Available at:. doi:10.1093/ecco-jcc/ijaf127

Evolving Standards in Endoscopic Gastric Resections

14/05/2026, 11:30–12:30

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OP049 Salvage Endoscopic Submucosal Dissection for Early Gastric Cancer with Positive Horizontal Margins After Initial Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1820704

Aims Endoscopic submucosal dissection (ESD) is one of the options for management of early gastric cancer (EGC) with positive horizontal margins (HM1) after initial ESD. Data regarding the feasibility and safety of ESD in this setting is limited, which we aimed to study.

Methods A retrospective analysis of patients who underwent salvage ESD for EGC after initial ESD showed HM1 between January 2014 and April 2024 at three centers was done. Technical success, procedure time, complications, and histologic outcomes were assessed.

Results A total of 5855 patients had undergone ESD for early gastric cancer in the three centers combined, out of which 75 (1.28%) turned out to have indeterminate (HMx) or positive (HM1) horizontal margins. Twelve out of these patients had undergone re-ESD. The Technical success rate was 100% (12/12). The median procedure time was 65.5 minutes for the re-ESD and 34 minutes for the initial ESD, and the difference was statistically significant (p = 0.0499). The median resection speed was similar in both groups (21.58 mm/min versus 14.43 mm/min, p = 0.239). There were no major adverse events (► Table 1). En-bloc resection rate could be achieved in all patients (12/12; 100%) and R0 resection in 9 patients (75%) (► Table 2). Out of the patients who did not have negative vertical margins, two had indeterminate vertical margins (VMx) whereas one had positive vertical margins (VM1). All the three patients have had no additional treatment and are currently under follow-up with no local recurrence noted till date.

► Table 1 Adverse events

		Initial ESD	Re-ESD	P value
Intraprocedural	Deep muscle injury	1 (8.33%)	1 (8.33%)	1
	Perforation	0 (0%)	0 (0%)	-
	Severe bleed	0 (0%)	0 (0%)	-
Delayed	Bleeding	0 (0%)	0 (0%)	-
	Perforation	0 (0%)	0 (0%)	-
	Other	0 (0%)	0 (0%)	-

► **Table 2** Histologic outcomes of re-ESD

Negative horizontal margins	12 (100%)
Negative vertical margins	9 (75%)
Lymphatic invasion	0 (0%)
Vascular invasion	0 (0%)
R0 resection	9 (75%)
Curative resection	9 (75%)

Conclusions Preliminary data from this study shows that salvage ESD for patients with EGC with positive horizontal margins after initial ESD appears to be feasible and safe at high volume centres.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP050 Outcomes of endoscopic resection of gastric dysplasia lesions in FAP: results from a large prospective registry

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DOI 10.1055/s-0046-1820705

Aims Familial adenomatous polyposis (FAP) is an autosomal dominant disease leading to extensive colorectal polyposis and a very high risk of colorectal cancer. Standardized management with prophylactic colectomy and endoscopic surveillance has markedly improved colorectal cancer prevention, shifting the main challenge toward the diagnosis and treatment of rarer extracolonic manifestations, notably gastric cancer [1, 2]. We recently described the endoscopic features of gastric dysplasia in Western FAP cohorts, characterized mainly by flat whitish fundic lesions overlying fundic gland polyps, and antral nodular lesions [3, 4]. However, no study to date has evaluated the outcomes of endoscopic treatment for these lesions. We aimed to assess the efficacy and morbidity of endoscopic resection for gastric dysplasia in a large prospective cohort.

Methods Within a large prospective FAP cohort (NCT01987518), we included all patients who underwent endoscopic resection of gastric dysplasia between 2015 and 2025. Efficacy outcomes included rates of en bloc and R0 resection, while morbidity was assessed by perforation rates. Survival analyses evaluated the occurrence of new dysplastic lesions, gastric cancer, or indications for gastrectomy. Subgroup analyses compared antral and fundic lesions.

Results Among 230 patients in the cohort, 28 endoscopic resections were performed in 22 patients. Fundic gland polyposis was present in 82 % of cases, and none had *Helicobacter pylori* infection. Most lesions were fundic (85 %), with 15 % located in the antrum. Resection techniques included endoscopic submucosal dissection (ESD) (46 %), hybrid ESD (7 %), hot-snare EMR (18 %), and cold-snare EMR (28 %). Mean lesion size was 41 mm. En bloc and R0 resection rates were 57 % and 53 %, respectively, with a perforation rate of 10 %. In the ESD subgroup, the en bloc resection rate reached 92 % with 7 % perforations. During follow-up (mean 52 months), 52 % of patients developed new dysplastic lesions, with a median time to recurrence of 71 months. Two patients (9 %) required gastrectomy due to excessive lesion burden. Only one intramucosal adenocarcinoma was identified, on gastrectomy specimen. Recurrence occurred in 65 % of fundic lesions (median 57 months) but in none of the antral lesions.

Conclusions This is the first study to evaluate the outcomes of endoscopic treatment for gastric dysplasia in patients with FAP, and to our knowledge the largest Western cohort addressing this issue. Endoscopic management appears

effective and safe, enabling timely referral for surgery when needed. However, the high recurrence rates suggest that gastric lesions should be better integrated into upper gastrointestinal surveillance strategies, which currently rely exclusively on the Spigelman score driven by duodenal disease.

Endoscopic treatment of gastric dysplasia in FAP patients appears effective and safe in a large prospective cohort and highlights the need to optimize upper gastrointestinal surveillance strategies for this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Shimamoto Y, Ishiguro S, Takeuchi Y, Nakatsuka SI, Yunokizaki H, Ezoe Y et al. Gastric neoplasms in patients with familial adenomatous polyposis: endoscopic and clinicopathologic features. *Gastrointestinal Endoscopy* 2021; 94: 1030–1042.e2
- [2] Calavas L, Rivory J, Hervieu V, Saurin JC, Pioche M. Macroscopically visible flat dysplasia in the fundus of 3 patients with familial adenomatous polyposis. *Gastrointest Endosc*. 2017; 85: 679–80
- [3] Mankaney G, Leone P, Cruise M, LaGuardia L, O'Malley M, Bhatt A et al. Gastric cancer in FAP: a concerning rise in incidence. *Familial Cancer* 2017; 16: 371–6
- [4] DelSignore M, Jeong T, Denmark G, Feldman D, Shih A, Zukerberg L et al. Incidence and natural history of gastric high-grade dysplasia in patients with familial adenomatous polyposis syndrome. *Gastrointest Endosc* 2023; 97: 25–34.e6

OP051 Risk factors for metastasis and prognosis in non-curative resection after endoscopic submucosal dissection for undifferentiated-type early gastric cancer in a nationwide cohort in Japan

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DOI 10.1055/s-0046-1820706

Aims Endoscopic submucosal dissection (ESD) for early gastric cancer (EGC) without the risk of lymph node metastasis (LNM) is now the standard treatment. Recently, a scoring system named the “eCura system” was developed in Japan to help in decision-making about the additional treatment for patients resulted in non-curative resection after ESD. The eCura system is a well-validated scoring model; however, over 80 % of the cases in the cohorts consisted of differentiated-type EGC, and its applicability to undifferentiated-type EGC in non-curative resection remains uncertain. Therefore, we conducted a multicenter retrospective study to investigate the risk factors for LNM in undifferentiated-type EGC in non-curative resection, establish a risk scoring system, and analyze long-term prognosis.

Methods This nationwide multicenter retrospective study included consecutive patients with undifferentiated-type EGC. These patients resulted in non-curative resection at 64 institutions in Japan between January 2011 and March 2019. Undifferentiated-type EGC was defined as a poorly differentiated adenocarcinoma, signet ring cell carcinoma, or mucinous adenocarcinoma. This study included two cohorts: patients who underwent additional surgery after ESD and those who were followed without additional surgery.

First, we investigated risk of LNM in patients who underwent additional surgery after ESD. Second, to establish a risk score for predicting LNM, we assigned weighted points proportional to the β regression coefficient values of factors that were statistically significant. The new exploratory scoring system was compared with the eCura system to evaluate the predictive performance for LNM. Third, the cancer-specific survival (CSS) and cumulative recurrence in the follow-up without additional surgery group were examined using a risk scoring system with the highest area under the curve (AUC) among risk score models compared.

Results Overall, 1049 patients were divided into additional surgery (716) and follow-up without additional surgery (333) groups. LNM was found in 5.7% of patients who received additional surgery. Tumor size > 30 mm and lymphatic invasion were independent risk factors for LNM. The area under the curve (AUC) for the new exploratory simple scoring system in LNM was 0.768 (95% CI 0.687–0.848), the AUC for the eCura system in LNM was 0.783 (95% CI 0.703–0.864), and there were no statistically significant differences ($p = 0.464$). Finally, the eCura system was applied to the additional surgery group; The CSS at 5 years significantly differed in the low-, intermediate-, and high-risk groups (99.6%, 96.9%, and 60.6%, respectively; $p < 0.001$). The HR of cancer recurrence for intermediate- and high-risk was 6.54 (95% CI 0.41–104.2), and 98.2 (95% CI 12.10–798.5), respectively ($p < 0.001$).

Conclusions Our findings suggest that lymphatic invasion and tumor size > 30 mm are associated with the risk for LNM, and the eCura system can be applied to undifferentiated-type EGC in non-curative resection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP052 Effect of Dabigatran Replacement on Post-ESD Bleeding in Anticoagulated Patients Undergoing Gastric ESD: A Multicenter Prospective Study

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DOI 10.1055/s-0046-1820707

Aims Patients taking anticoagulants, including direct oral anticoagulants (DOACs) and warfarin, are considered high-risk in gastric endoscopic submucosal dissection (ESD) because of their significantly increased risk of postopera-

tive bleeding and thromboembolic complications. In a previous retrospective study, we reported that post-ESD bleeding in patients taking dabigatran was less frequent compared to those with other anticoagulants, which can be explained by the differences in their metabolic pathways. We hypothesized that replacing other DOACs and warfarin with dabigatran after gastric ESD could reduce post-ESD bleeding.

Methods We conducted a single-arm multicenter prospective study in which anticoagulants were replaced with dabigatran after ESD in patients with gastric neoplasms eligible for ESD who were continuously taking rivaroxaban, apixaban, edoxaban or warfarin to prevent thromboembolism due to nonvalvular atrial fibrillation. Patient enrollment occurred from February 2019 to February 2025 at 20 institutions across Japan. DOACs were discontinued on the day of ESD, and dabigatran was taken starting from the next day for 28 days. Patients on warfarin either stopped the medication one day before or on the day of ESD depending on PT-INR. Another option was to discontinue warfarin four days prior and use heparin bridging. Dabigatran was initiated after ESD when PT-INR dropped less than 2.0. Anticoagulant therapy was switched back to the original agent on postoperative day 28, with follow-up continuing until day 56, at which point the patient underwent endoscopy and final evaluation. The primary outcome was the post-ESD bleeding rate. Delayed bleeding was significantly reduced with dabigatran bridge when the 90% confidence interval (CI) did not exceed the 18% threshold, which represented the estimated rate for patients on other anticoagulants.

Results In total, 150 patients were enrolled, and 140 patients completed the protocol treatment. Male patients accounted for 86%, with a median age of 77.5 years. Antiplatelet use was observed in 12%, and the median CHADS₂ score was 2. The post-ESD bleeding rate was 10% (90% CI, 6.3–15.0). Although thromboembolism occurred in one case (0.7%) as a cerebral infarction, the patient recovered without significant paralysis. Two cases (1.3%) of perforation during ESD were observed and were successfully managed with conservative treatment.

Conclusions Switching to dabigatran reduces postoperative bleeding following gastric ESD in patients taking anticoagulants for nonvalvular atrial fibrillation, and represents a simple and effective strategy that can be easily combined with other preventive measures. (UMIN-CTR000035353)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP053 Long-BANDING-SET: Five-year follow-up of the multicentre study on band ligation without resection of small subepithelial tumours

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DOI 10.1055/s-0046-1820708

Aims The BANDING-SET study demonstrated that endoscopic band ligation without resection combined with single-incision needle-knife (SINK) biopsy achieved successful clinical management in 92.7 % of subepithelial tumours (SETs) ≤ 10 mm at one-year follow-up (GIE 2023). The primary objective of this long-term study was to evaluate the 5-year recurrence rate in SETs with inadequate or potentially malignant histology (ip-SETs). Secondary objectives included all long-term SETs (g-SETs) global recurrence, associated risk factors, long-term clinical success and impact, follow-up of “unsuccessful” cases, and final biopsy diagnostic yield (► **Table 1**).

► **Table 1**

	GLOBAL	SETs ≤ 10 -mm	SETs > 10 -mm
Recurrence	5 (6.6%)	1 (1.6%)	4 (28.6%)
No Recurrence	71 (93.4%)	61 (98.4%)	10 (71.4%)

Methods A 5-year follow-up was conducted on patients included in a prospective multicentre study (7 centres), from March 2017 to May 2025. The ip-SET group underwent specific surveillance using endoscopic ultrasound (EUS) and tissue sampling. Overall recurrence was analysed for all g-SET included in BANDING-SET study (ClinicalTrials.gov NCT03247231).

Results SETs with clinical success at one-year accounted for = 78/122 (68.4%; 95 %CI: 59.1–76.8). The ip-SETs subgroup included 42 cases; 6 were lost to follow-up, yielding 36 patients for analysis (18 inadequate histology, 12 neuroendocrine neoplasms [NENs], 6 GISTs).

At 5-year follow-up, recurrence in the ip-SET group was 2.8 % ($n = 1/36$; 1 NEN). While overall recurrence in the g-SET group was 6.6 % ($n = 5/76$; 2 inflammatory fibroid polyps [IFPs], 1 ectopic pancreas, 1 inadequate histology, 1 NEN), recurrence subanalysis (g-SETs) by SET size showed a significantly higher rate in lesions > 10 -mm compared to ≤ 10 -mm (28.6 [$n = 4/14$] vs. 1.6 % [$n = 1/61$]; multivariable RR: 23.3 (95 %CI: 1.06–511; $p = 0.046$).

Clinical success among g-SETs was 65.7 % ($n = 71/108$), with an overall clinical impact of 77.6 % ($n = 90/116$), rising to 92.1 % ($n = 70/76$) in the ≤ 10 -mm subgroup [1–3].

Among the 37 “unsuccessful” SET cases, initial SINK biopsy revealed benign histology in 13; clinical decision against further follow-up due to age or comorbidities was made in 8; EUS surveillance was continued in 12; and definitive treatment was performed in 4 (endoscopic submucosal dissection: 2 IFPs, 1 GIST); surgical resection: 1 GIST). Overall histological diagnostic yield: 71.8 % ($n = 79/110$).

Conclusions The 5-year recurrence rate for both ip-SETs (with inadequate histology or potentially malignant histology) and all g-SETs was low (2.8 % and 6.6 %, respectively). SET size > 10 -mm was identified as a significant risk factor for recurrence. The BANDING-SET technique offers a safe and effective long-term alternative for the management of small SETs, with sustained clinical impact in lesions ≤ 10 -mm

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gornals JB, Maisterra S, Bas-Cutrina F. Banding-and-SINK for small (≤ 10 -mm) gastrointestinal subepithelial tumours: A valid and effective alternative. *Gastroenterol Hepatol* 2025; 502539. English, Spanish. doi:10.1016/j.gastrohep.2025.502539 Epub ahead of print PMID: 40882890
- [2] Bas-Cutrina F, Casellas-Grau A, Videla S, Loras C, Andújar X, Gil FL, Galán M, Fernández-Aranda F, Carmezim J, Gornals JB. Half of the patients with subepithelial tumors present borderline or pathologic anxiety-distress and carcinophobia: a multicenter cohort study. *Rev Esp Enferm Dig* 2023; Feb 115 (2): 80–84. doi:10.17235/reed.2022.8836/2022. PMID: 35607929
- [3] Bas-Cutrina F, Loras C, Pardo A, Ballester-Clau R, Huertas C, Guarnier-Argente C, Colan-Hernandez J, Consiglieri CF, Andujar X, Vilanova-Serra M, González-Huix F, Pardo-Grau L, Maisterra S, Ruiz-Ramírez P, García-Sumalla A,

Tebé C, Videla S, Gornals JB. Management of small subepithelial tumors by endoscopic banding without resection and single-incision needle-knife-assisted biopsy sampling: a prospective multicenter study. *Gastrointest Endosc*. 2023; Dec 98 (6): 911–921.e8. doi:10.1016/j.gie.2023.05.057 Epub 2023 May 30 PMID: 37263361

The Malignant Colon Polyp: What Next?

14/05/2026, 14:00–15:00

Aqua 3 + 4

OP054 Histological risk stratification for lymph node metastasis in pT2 rectal cancer following local excision: an international multicentre study

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DOI 10.1055/s-0046-1820709

Aims Local excision (LE) is increasingly used for early rectal cancer (cT1–2N0M0). However, its role in pT2 rectal cancer remains controversial due to a 20–30 % lymph node metastasis (LNM) risk. As LNM is strongly associated with adverse histological features, pT2 rectal cancer without risk factors may obviate the need for completion total mesorectal excision (cTME). Nevertheless, evidence supporting risk-adapted treatment strategies in pT2 rectal cancer is limited. This study aimed to evaluate the risk of LNM after complete LE in pT2 rectal cancer and explore whether the absence of histological risk factors permits safe omission of cTME.

Methods Patients with pT2 rectal cancer undergoing complete en bloc LE between 2015–2024 were retrospectively enrolled from eight international centres. Post-LE management consisted of cTME or active surveillance with at least two years of MRI-based follow-up. Exclusion criteria were positive resection margins (< 0.1 mm), synchronous/recurrent colorectal cancer, and (neo) adjuvant therapy. LNM were confirmed by TME histology or considered absent if no suspicious lymph nodes appeared on surveillance MRIs. A systematic histopathological re-assessment was conducted by dedicated pathologist at each centre. Predefined histological risk factors included: 1) adverse histology (poor differentiation, mucinous subtype, or signet ring cell), lymphovascular invasion, high-grade tumour budding and/or poorly differentiated clusters (grade 2–3), and perineural invasion. Active surveillance involved regular serum CEA measurements, endoscopies, and pelvic MRI with/without CT imaging. The primary outcome was the LNM rate in pT2 rectal cancer without risk factors. Secondary outcomes included associations between individual risk factors and LNM, and 3-year locoregional and distant recurrence rates after cTME and active surveillance, including pT2 cancer without risk factors

Results A total of 130 patients with pT2 rectal cancer were included (mean age 67 years; 57 % male; median lesion size 28 mm). Surgical LE was performed in 87 patients (67 %) and endoscopic LE in 43 (33 %). The median follow-up duration was 44 months (IQR 33.5).

Histopathological re-assessment of LE specimens revealed no risk factors in 36.2 % (47/130), one risk factor in 33.1 % (43/130), and multiple risk factors in 30.8 % (40/130).

Following LE, 87 patients (67%) underwent cTME, whereas 43 (33%) opted for active surveillance (19 without risk factors; 24 with at least one risk factor). The overall LNM rate was 20% (26/130). Among 47 pT2 rectal cancers without risk factors (36%), the LNM rate was 6.4% (3/47). In those with one or multiple risk factors, LNM rates were 14.0% (6/43) and 42.5% (17/40), respectively. In univariate analyses, all histological risk factors were significantly associated with LNM.

In the active surveillance group (n = 43), the 3-year locoregional recurrence rate was 14.3% (95% CI 3.6–25.1), comprising either intramural (n = 5) or nodal (n = 1) recurrences. The 3-year distant metastasis rate was 5.4% (95% CI 0–12.9). All four patients with isolated locoregional recurrences underwent successful salvage therapy, while only of two patients with combined locoregional recurrence and distant metastases was salvageable.

In the active surveillance group without risk factors (n = 19), the 3-year locoregional recurrence rate was 16.5% (95% CI 0–34.2), with two intramural and one nodal recurrence. The 3-year distant metastasis rate was 7.1% (95% CI 0–21.1). All locoregional and distant recurrences were successfully salvaged.

Among patients undergoing cTME (n = 87), no locoregional recurrences occurred at three years (0%, 95% CI 0–0). The 3-year distant metastasis rate was 8.6% (95% CI 1.9–15.1), with salvage treatment possible in one of six patients.

Conclusions After detailed histopathological re-assessment, LNM were observed in 6.4% of pT2 rectal cancers without histological risk factors. Among these 'low-risk' patients managed with active surveillance (n = 19), the 3-year locoregional and distant recurrence rates were 16.5% and 7.1%. All recurrences were detected promptly, permitting successful salvage treatment.

These findings provide preliminary support for risk-adapted management strategies in selected patients with pT2 rectal cancer. While further validation in larger cohorts is needed, our results suggest that cTME may be omitted after complete LE in patients with low-risk pT2 rectal cancer, provided rigorous surveillance is implemented.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP055 Prognostic value of conventional and novel histopathological markers in pT1 colorectal cancer: preliminary results of a two-center retrospective study

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DOI 10.1055/s-0046-1820710

Aims To assess the prognostic value of conventional and novel histopathological markers in pT1 cancers.

Methods A retrospective, two-center study was conducted including 150 patients with histologically confirmed pT1 colorectal adenocarcinoma treated between 2010 and 2023. Clinical follow-up data were verified and updated using the National Cancer Registry. The primary endpoint of the study was the local recurrence or distant and locoregional metastases. For the purpose of the analysis, patients were divided into two groups: group 1, consisting of patients who reached the primary endpoint (n = 20, 13.3%), and group 2, consisting of patients without recurrence or metastasis during follow-up (n = 130, 86.7%). The following novel prognostic factors included: width of submucosal invasion, poorly differentiated clusters (PDCs), desmoplastic response, tumor-infiltrating lymphocytes (TILs), and epithelial–mesenchymal transition (EMT). EMT was assessed using the following markers: β -catenin, SNAIL, GREM, alpha-smooth muscle actin (α SMA), caudal type homeobox 2 (CDX2), fibroblast activation protein (FAP) and transforming growth factor beta (TGF β). Selected conventional and novel histopathological factors are presented in the ► **Table 1**. All

histopathological evaluations were conducted by a single experienced gastrointestinal pathologist (AM) blinded to clinical information [1–32].

► **Table 1** Selected conventional and novel factors predicting negative outcome among patients with pT1 colorectal cancer. Not all markers had been assessed by the time the abstract was submitted.

Histopathological factor	Group 1 (n = 20)	Group 2 (n = 130)	P-value
Angioinvasion (hematoxylin-eosin staining)	1/17	16/120	0.383
Neuroinvasion (hematoxylin-eosin staining)	0/17	2/115	0.584
Lymphovascular invasion – D2-40	2/17	15/119	0.098
Tumour Budding Score (high, > 10)	6/15	36/120	0.430
Width of submucosal invasion (μ m)	13523	4962.5	0.023
Poorly differentiated clusters, PDC (> 10 clusters/ 0,785 mm ²)	15/20	114/119	0.469
Desmoplastic reaction	5/16	58/119	0.188
Tumour infiltrating lymphocytes (CD8)	15/16	110/120	0.842
Epithelial Mesenchymal Transition EMT – α SMA	14/17	54/117	0.008
Epithelial Mesenchymal Transition, EMT – SNAIL	9/18	90/121	0.033

Results The median patient age was 63 years, and 59.3% of the patients were male. The median lesion size was 22 mm (IQR 17–30 mm), and most were located in the sigmoid colon and rectum (74.7%). There were no statistically significant clinical or demographic differences between the two groups. Endoscopic treatment (endoscopic submucosal dissection, endoscopic mucosectomy or full-thickness resection) was performed in 50% of patients, surgery in 32.7%, and surgery following endoscopic treatment in 17.3%. Initial R0 resection was obtained in 118 patients (78.6%). During a median follow-up of 4.8 years 10 local recurrences and 10 distant metastases were detected (group 1). Our analysis showed that the median width of submucosal invasion was 4962.5 μ m, but was significantly greater in patients with recurrence or metastasis (13523 μ m vs. 4962.5 [JR1] μ m; p = 0.0226). Immunohistochemical evaluation demonstrated that EMT markers, specifically α SMA (p = 0.008) and SNAIL (p = 0.033), exhibited statistically significant associations with recurrence or metastasis.

Conclusions Our analysis demonstrates that of the novel histopathological factors studied, the width of submucosal invasion and Epithelial Mesenchymal Transition expressed by α SMA and SNAIL may influence the risk of recurrence and/or metastasis following treatment of pT1 colorectal cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] <https://gco.iarc.f>
- [2] Vogelstein B, Fearon ER, Hamilton SR et al. Genetic alterations during colorectal-tumor development. *N Engl J Med* 1988; 319: 525–32
- [3] Atkin WS, Valori R, Kuipers EJ et al. European guidelines for quality assurance in colorectal cancer screening and diagnosis. First Edition-Colonoscopy surveillance following adenoma removal. *Endoscopy* 2012; 44: (Suppl 3): SE151–SE163
- [4] Bretthauer M, Kalager M. Colonoscopy as a Triage Screening Test. *New Engl J Med* 2012; 366: 759–60

- [5] Cottet V, Jooste V, Fournel I et al. Long-term risk of colorectal cancer after adenoma removal: a population-based cohort study. *Gut* 2012; 61 (8): 1180–6
- [6] Hassan C, Pickhardt PJ, Kim DH et al. Systematic review: distribution of advanced neoplasia according to polyp size at screening colonoscopy. *Aliment Pharmacol Ther* 2010; 31: 210–217
- [7] Bugajski M, Kaminski MF, Orlowska J et al. Suspicious macroscopic features of small malignant colorectal polyps. *Scand J Gastroenterol* 2015; 50 (10): 1261–7
- [8] Quirke P, Riso M, Lambert R et al. Quality assurance in pathology in colorectal cancer screening and diagnosis. European guidelines for quality assurance in colorectal cancer screening and diagnosis – first edition. European Commission, Publications Office of the European Union, Luxembourg; 2010: 205–232
- [9] Beaton C, Twine CP, Williams GL, Radcliffe AG. Systematic review and meta-analysis of histopathological factors influencing the risk of lymph node metastasis in early colorectal cancer. *Colorectal Dis* 2013; 15: 788–97
- [10] Bussey HJ et al. Metachronous carcinoma of the large intestine and intestinal polyps. *Proc R Soc Med* 1967; 60 (3): 208–210
- [11] Bujanda L. Malignant colorectal polyps. *World Journal of Gastroenterology* 2010; 16: 3103
- [12] Hurlstone DP, Cross SS, Lobo AJ. A 1 mm depressed type IIc minute colorectal cancer: first reported case and discussion of clinical relevance, with special reference to endoscopic diagnosis. *J Gastroenterol Hepatol* 2003; 18: 880–884
- [13] Nalecz-Janik J, Zagórowicz E, Bartnik W et al. Outcomes of colonoscopic polypectomy for malignant adenomas: a prospective 30-year cohort study from a single center (STROBE 1a). *Pol Arch Med Wewn.* 2015; 125 (4): 272–81
- [14] Rutter MD, Chattree A, Barbour JA et al. British Society of Gastroenterology/Association of Coloproctologists of Great Britain and Ireland guidelines for the management of large non-pedunculated colorectal polyps. *Gut* 2015; 64 (12): 1847–73
- [15] Lieberman DA, Rex DK, Winawer SJ et al. Guidelines for colonoscopy surveillance after screening and polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology* 2012; 143: 844–57
- [16] Hassan C, Quintero E, Dumonceau JM et al. Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2013; 45: 842–851
- [17] Fasoli R et al. The management of malignant polyps in colorectal cancer screening programmes: A retrospective Italian multi-centre study. *Digestive and Liver Disease* 2015; 47: 715–719
- [18] Sekiguchi M et al. Surveillance after endoscopic and surgical resection of colorectal cancer. *Best Pract Res Clin Gastroenterol* 2016; 30 (6): 959–970
- [19] Kinoshita O, Kishimoto M, Murayama Y et al. The number of metastatic lymph nodes exhibiting polypoid differentiated clusters predicts survival in patients with pStage III colorectal cancer. *Int J Colorectal Dis* 2016; 31 (2): 283–90
- [20] Barresi V, Reggiani Bonetti L, Branca G et al. Colorectal carcinoma grading by quantifying polypoid differentiated cell clusters is more reproducible and provides more robust prognostic information than conventional grading. *Virchows Arch* 2012; 461: 621–8
- [21] Shibutani M, Noda E, Maeda K et al. Low expression of claudin-1 and presence of poorly-differentiated tumor clusters correlate with poor prognosis in colorectal cancer. *Anticancer Res* 2013; 33: 3301–6
- [22] Kevans D, Wang LM, Sheahan K et al. Epithelial-mesenchymal transition (EMT) protein expression in a cohort of stage II colorectal cancer patients with characterized tumor budding and mismatch repair protein status. *Int J Surg Pathol* 2011; 19: 751–60
- [23] Kalluri R, Weinberg RA. The basics of epithelial-mesenchymal transition. *J Clin Invest* 2009; 119: 1420–8. doi:10.1172/JCI39104.
- [24] Ueno H, Shinto E, Kajiwara Y et al. Prognostic impact of histological categorization of epithelial-mesenchymal transition in colorectal cancer. *Br J Cancer* 2014; 111: 2082–90. doi:10.1038/bjc.2014.509.
- [25] Ervine AJ, McBride KA, Kelly PJ, Loughrey MB. Double immunohistochemistry enhances detection of lymphatic and venous invasion in early-stage colorectal cancer. *Virchows Arch* 2015; 467: 265–271
- [26] Ueno H, Hase K, Hashiguchi Y et al. Novel risk factors for lymph node metastasis in early invasive colorectal cancer: a multi-institution pathology review. *J Gastroenterol* 2014; 49: 1314–23
- [27] Brzozowa M, Michalski M, Wyrobiec G et al. The role of Snail1 transcription factor in colorectal cancer progression and metastasis. *Contemp Oncol (Pozn)* 2015; 19 (4): 265–70
- [28] Dalerba P, Sahoo D, Paik S et al. CDX2 as a prognostic biomarker in stage II and stage III colon cancer. *N. Engl. J. Med.* 2016; 374: 211–222
- [29] Pages F, Mlecnik B, Marliot F. International validation of the consensus Immunoscore for the classification of colon cancer: a prognostic and accuracy study. *Lancet* 2018; 391 (10135): 2128–2139
- [30] Baba Y, Noshio K, Shima K, Freed E, Irahara N, Philips J, Meyerhardt JA, Hornick JL, Shivdasani RA, Fuchs CS et al. Relationship of CDX2 loss with molecular features and prognosis in colorectal cancer. *Clin Cancer Res* 2009; 15: 4665–4673
- [31] Segnan N, Patnick J, von Karsa L editors. 2010 European guidelines for quality assurance in colorectal cancer screening and diagnosis. 1st ed. Luxembourg: Publications Office of the European Union
- [32] Weichert W, Knösel T, Bellach J, Dietel M, Kristiansen G. ALCAM/CD166 is overexpressed in colorectal carcinoma and correlates with shortened patient survival. *J Clin Pathol* 2004; 57: 1160–4

OP056 Risk Factor Stratification for Residual Cancer and Lymph Node Metastasis after Non-Curative Endoscopic Resection of Colorectal Cancer: A Multi-center Retrospective Study

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DOI 10.1055/s-0046-1820711

Aims Following a non-curative endoscopic resection of T1 colorectal cancer, current guidelines recommend additional surgery based on high-risk pathological features. However, the actual rates of residual disease, such as residual cancer and lymph node metastasis (LNM), remain unclear and risk factors vary significantly across studies. We aimed to determine the true incidence of residual cancer and LNM and identify independent risk factors to guide surgical decision-making.

Methods This multicenter retrospective study included patients who underwent radical surgery after non-curative endoscopic resection of T1 colorectal cancer at four hospitals between 2015 and 2020. Non-curative resection was defined by positive margins, deep submucosal invasion ($\geq 1000 \mu\text{m}$), poor differentiation, lymphovascular invasion, or high-grade tumor budding in accordance with current guidelines.

Results Among 517 patients, residual cancer was found in 3.7% and LNM in 7.7% of the cases. Independent predictors of residual cancer were ESD procedure (OR 9.87, $P < 0.001$), piecemeal resection (OR 5.51, $P = 0.017$), positive lateral margin (OR 5.88, $P = 0.004$), and positive deep margin (OR 10.30, $P = 0.003$). For LNM, submucosal invasion depth $\geq 1000 \mu\text{m}$ (OR 4.66, $P = 0.015$), poor differentiation (OR 4.30, $P = 0.026$), lymphovascular invasion (OR 2.42, $P = 0.016$), and positive deep margin (OR 2.26, $P = 0.018$) were significant risk factors. Risk increased substantially with cumulative factors: patients with 0–1 risk factors had minimal residual cancer rates ($< 1\%$), while those with ≥ 2 factors showed exponentially higher risks.

Conclusions The actual incidence of residual cancer and LNM after non-curative endoscopic resection is relatively low. Our cumulative risk stratification model can help identify patients with low or high risks for residual disease. This model supports individualized risk stratification, potentially sparing low-risk patients from radical surgery while ensuring appropriate intervention for high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP057 Short Term outcome of Endoscopic Resection of Malignant, Non-Pedunculated Colorectal Polyps at Tertiary Centers in Norway and Sweden

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DOI 10.1055/s-0046-1820712

Aims Endoscopic resection of early T1 colorectal cancer without high-risk features for lymph node metastasis has emerged as an accepted alternative to conventional surgery. Traditionally, a free resection margin has been defined as ≥ 1 mm, although increasing evidence indicates no additional benefit beyond ≥ 0.1 mm. Furthermore, submucosal invasion > 1 mm (sm2/3) may not represent a strong risk factor in the absence of other adverse histologic features. Bærum Hospital (Oslo, Norway) and Sahlgrenska University Hospital/Östra (Gothenburg, Sweden) serve as referral centers for advanced colorectal polypectomy in Southern Norway and Western Sweden. The aim of this study was to report short-term outcomes after endoscopic resection of malignant, non-pedunculated colorectal polyps at two tertiary centers.

Methods Since 2019, all advanced polypectomy procedures at both centers have been prospectively registered. We performed a retrospective analysis of all malignant non-pedunculated lesions treated endoscopically. All JNET 3 lesions were discussed in a multidisciplinary setting and referred for planned endoscopic resection when considered technically feasible and oncologically acceptable by colorectal surgeons.

Results From 2019 to 2024, a total of 167 patients (59.3% male) with a median age of 72 years (range 33–90) underwent endoscopic treatment for malignant, non-pedunculated colorectal polyps. Median lesion size was 40 mm (IQR 20–60). The most common morphology was Paris 0-IIa + Is (38.9%). Nearly half of the lesions showed a JNET 2b vascular pattern (47.3%), while 32.1% were JNET 3. Lesions were most frequently located in the rectum (56.8%), with the proximal and distal colon each accounting for 21.6%. The most frequently used technique was ESD (36.5%), followed by uEMR (19.2%), eFTR (18%), c/pEMR (11.3%), hybrid techniques (9%), and EID (6%). *En bloc* resection was achieved in 124/166 (74.7%). Among piecemeal resections, the invasive carcinoma component was resected in a single fragment ("pseudo-*en bloc*") in 18/42 cases. Complications were infrequent: intraoperative perforation occurred in 6 cases (3.6%), delayed perforation in 1 case (0.6%), and delayed bleeding in 6 cases (3.6%). According to the Clavien-Dindo classification, complications were graded as I (4.8%), II (2.4%), IIIa (1.2%), and IIIb (0.6%). Most patients (91.6%) were managed as outpatients.

Free-margin rates varied by deep margin definition: 62/156 (39.7%) using ≥ 1 mm margin vs 124/165 (75.1%) using ≥ 0.1 mm definition. At least one histopathologic risk factor for lymph node metastasis was present in 42/126 (33.3%). Lymphovascular invasion was identified in 22/145 (15.2%), tumor budding grade 2–3 in 26/119 (21.8%), and poor differentiation in 7/145 (4.8%). Submucosal invasion depth was SM1 in 57/115 (49.6%), SM2 in 25/115 (21.7%), SM3 in 21/115 (18.1%); 11 patients had T2 invasion and 1 had T3. Overall, 62/150 (41.3%) patients met criteria for endoscopic curative treatment (free margin ≥ 0.1 mm, no LVI, tumor budding grade 0–1, and no poor differentiation). Applying a stricter margin requirement (≥ 1 mm), curative resections

decreased to 35/149 (23.5%). When adding a requirement for SM1 invasion only, the curative proportion was further reduced to 22/150 (14.7%).

Following multidisciplinary team (MDT) discussion, 78/158 (49.4%) were assigned to endoscopic follow-up, 66/158 (41.8%) were referred to surgery and 14/158 (8.9%) received supportive care due to comorbidity, patient preference, or advanced disease. Complementary surgery was performed in 64 cases; residual malignant tumor was detected in 13 colon specimens (including 2 with free deep margins—one after piecemeal resection and one with multifocal cancer). Following endoscopic removal, eight patients were diagnosed with metastatic disease (N1 in seven; M1 in three). Six patients received adjuvant chemotherapy and three radiotherapy.

Conclusions Endoscopic resection of malignant, non-pedunculated colorectal polyps at experienced tertiary centers is safe, with high *en bloc* resection rates and low complication rates. Using broader criteria, 41% of patients may be considered curatively treated endoscopically, whereas stricter definitions markedly reduce this proportion. MDT-guided decision-making remains essential for optimal post-resection management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP058 Comparison of laparoscopic surgery versus endoscopic mucosal resection (EMR) versus endoscopic submucosal dissection (ESD) for the resection of neoplastic right-colon lesions up to pT2 stage: analysis of cost-effectiveness and quality of life

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DOI 10.1055/s-0046-1820713

Aims Advances in gastrointestinal endoscopy have revolutionized the management of colorectal neoplasia, reducing the need for laparoscopic resections, shortening hospital stays, and lowering complication rates. While previous studies focus on procedural and oncological outcomes, limited evidence exists on socioeconomic and quality-of-life differences. This study compares EMR, ESD, and laparoscopic surgery for right-colon neoplastic lesions in terms of cost-effectiveness and patient-reported quality of life.

Methods This retrospective cohort study included patients referred for right-colon neoplastic lesion resection between January 2025 and October 2025 at two Greek tertiary hospitals. Patients underwent laparoscopic right hemicolectomy for neoplastic right-colon lesions $\leq$ pT2 stage, EMR or ESD for lesions $\leq$ pT1 stage. Data collected included baseline characteristics, lesion features, procedural and safety outcomes, complications, and material costs. Health-related quality of life was assessed using two validated questionnaires including the Gastrointestinal Quality of Life Index (GIQLI) two weeks post-procedure and the SF-12 questionnaire one month post-procedure, generating Physical Component Summary (PCS-12) and Mental Component Summary (MCS-12) scores. Statistical analyses included Kolmogorov-Smirnov, one-way ANOVA, and Kruskal-Wallis tests.

Results In total, 35 patients were included (mean age 68.3 ± 9.95 years; 45.7% female). 10 patients underwent EMR, 10 ESD, and 15 right hemicolectomy. Mean lesion size was 38.1 ± 15.94 mm. Surgically treated lesions presented more advanced pathological stage (66.6% pT2) compared to endoscopically resected lesions (80% LGD/HGD/Tis; $p < 0.001$). Lesion location was predominantly cecum (51.4%), followed by ascending colon (37.1%) and transverse colon (11.4%). Mean procedural times were shorter for EMR (43 ± 33.7 min), followed by ESD (79 ± 30.3 min), and longest for surgical treatment (207 ± 56.2 min; $p < 0.001$). Hospitalization averaged 1 day for EMR/ESD versus 5 days for surgery ($p < 0.001$). No complications occurred with endoscopic procedures, while one surgical patient experienced anastomotic leak (6.7%). Median material costs were 970€ (EMR), 1275€ (ESD), and 6500€ (surgery; $p < 0.001$).

Overall, there were no statistically significant differences in quality of life based on SF-12 and GIQLI questionnaires among patients submitted to endoscopic removal with EMR or ESD technique. Interestingly, GIQLI total score did not differ significantly among the three different techniques (EMR 136.4; ESD 138; surgery 125.1; $p=0.132$). Nevertheless, when separated GIQLI dimensions were analyzed, EMR and ESD were accompanied by higher physical functioning ($p=0.008$) and emotional well-being ($p=0.003$) scores. Similarly, the summary of the Mental Component of SF-12 (MCS-12) was significantly improved for endoscopic procedures compared to surgery ($p=0.002$) while no statistical difference was observed among the three techniques concerning the Physical Component Summary (PCS-12) ($p=0.547$).

Conclusions EMR or ESD for right-colon neoplastic lesions demonstrate shorter procedural duration, reduced hospitalization, lower material costs, and a more favorable safety profile compared to laparoscopic surgery. EMR or ESD are linked with superior mental and emotional quality of life compared to surgery, supporting EMR and ESD as cost-effective, safe, and clinically advantageous alternative to surgical resection for appropriately selected lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP059 Clinical impact and environmental footprint of diagnostic endoscopic dissection versus first line surgery for colorectal lesions harboring focal deep invasive pattern

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DOI 10.1055/s-0046-1820714

Aims Endoscopic submucosal dissection (ESD) can achieve curative resection for T1 colorectal cancers fulfilling low-risk histological criteria. However, optical diagnosis does not always accurately predict submucosal invasion depth, and lesions with focal deep invasive patterns (FDIP) are often referred directly to surgery. A first-line diagnostic ESD strategy, performing en bloc resection in these lesions to obtain definitive histopathology before deciding on surgery, may represent a safe and cost-effective alternative. This study compared the clinical, environmental, and economic impact of diagnostic ESD versus upfront surgery for FDIP lesions [1–6].

Methods This prospective multicenter study included patients with colorectal FDIP lesions (Connect IIC + /III, Kudo Vn or Sano IIIb; <10 mm in the colon or <20 mm in the rectum) from the FECCO database. We excluded patients with lesions without invasive patterns, ulcerated (Paris III) lesions, and with distant metastases, or stenosis. Surgery was recommended for high-risk lesions (>T1 or T1 with lymphovascular invasion, high-grade budding, or poor differentiation) and discussed for intermediate-risk cases (>1000 µm invasion without other risk

factors). Independent predictors of curative resection were identified by multivariable logistic regression. Carbon footprint (CO₂e) and economic analyses were based on life-cycle data for ESD, surgery, and hospitalization.

Results Between January 2024 and May 2025, 190 patients (16 centers) underwent diagnostic ESD. Curative resection was achieved in 43% ($n=86$) of cases. In 16% ($n=31$) of cases the resection was considered at intermediate (expanded curative resection), and after multidisciplinary discussion only 6 patients underwent surgery. Seventy-three per cent ($n=73$) were considered at high risk (non-curative resection) and surgery was recommended. Overall, 107 patients (56%) avoided surgery and continued with endoscopic surveillance. CONNECT III classification (OR 0.42, 95% CI 0.18–0.98) and presence of retraction sign (OR 0.48, 95% CI 0.23–0.99) were independent negative predictors of curative resection. Compared with systematic upfront surgery, the diagnostic ESD strategy resulted in lower carbon emissions (222.2 vs 240.2 kg CO₂e per patient), reduced hospital stay (0.98 vs 3.5 days), and lower overall cost (€7,930 vs €12,960 per patient).

Conclusions A diagnostic ESD-first strategy for FDIP colorectal lesions enables definitive staging while reducing the need for surgery, environmental impact, and healthcare costs, supporting its use as a sustainable alternative to upfront surgery in selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dahan M, Pauliat E, Liva-Yonnet S et al. What is the cost of endoscopic submucosal dissection (ESD)? A medico-economic study. *United European Gastroenterol J* 2019; 7: 138–145. doi:10.1177/2050640618810572
- [2] Prasad PA, Joshi D, Lighter J et al. Environmental footprint of regular and intensive inpatient care in a large US hospital. *Int J Life Cycle Assess* 2022; 27: 38–49. doi:10.1007/s11367-021-01998-8
- [3] Taylor AS, Au S, Krivankova B et al. Carbon footprint of laparoscopic right hemicolectomy. *British Journal of Surgery* 2024; 111:znad422. doi:10.1093/bjs/znad422
- [4] Taylor AS, Au S, Krivankova B et al. Carbon footprint of laparoscopic right hemicolectomy. *British Journal of Surgery* 2024; 111:znad422. doi:10.1093/bjs/znad422
- [14] Prasad PA, Joshi D, Lighter J, et al. Environmental footprint of regular and intensive
- [5] Grau R, Cottinet P-J, Le M-Q et al. Endoscopic En Bloc Versus Piecemeal Resection of Large Colonic Adenomas: carbon footprint post-hoc analysis of a randomized trial. *Clin Gastroenterol Hepatol* 2025; S1542–3565(25): 00150–8. doi:10.1016/j.cgh.2025.01.009
- [6] Zwager LW, Bastiaansen BAJ, Montazeri NSM et al. Deep Submucosal Invasion Is Not an Independent Risk Factor for Lymph Node Metastasis in T1 Colorectal Cancer: A Meta-Analysis. *Gastroenterology* 2022; 163: 174–189. doi:10.1053/j.gastro.2022.04.010

Does AI have a role in smarter colonoscopy?

14/05/2026, 14:00–15:00

Sky 1

OP060 A Prospective Multicenter Randomized Controlled Trial of the use of real time artificial intelligence for polyps detection, in a western population: Can Endoscopist experience make a difference?

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DOI 10.1055/s-0046-1820715

Aims Several RCTs have shown the positive impact of CAD-E on improving the polyp detection rates during colonoscopy. However, they were either early studies with potential for bias or single centre or performed in eastern population. The aim of our study was to perform this RCT in a western setting after the endoscopists have been using AI in routine practice.

Methods This was a prospective, randomized controlled trial (RCT) conducted across multiple tertiary centres. Patients were randomized (1:1) to either the control arm (AI off) or the intervention arm (AI on). The CAD-E device used for this study was WISE VISION (NEC Japan). This was a superiority trial, powered to demonstrate a 10 % difference in ADR between the two groups with an 80 % power. Adenoma per colonoscopy (APC) and ADR were calculated for the full sample and stratified for expert (> 2000 colonoscopy) and non-expert endoscopist (< 2000 colonoscopies). Finally, as a safety endpoint, we used the adenoma per extraction (APE) defined as the percentage of all adenomas, sessile serrated lesions, and large (> 10mm) hyperplastic polyps (only in the proximal colon) out of total number of polyps resected & extracted during colonoscopy in each arm.

Results A total of 653 patients were included, 328 and 324 in the control and intervention arm, respectively from three centres in UK. The mean age was 60.34 ± 12.28 and 60.44 ± 13.11 (p = 0.92), in the control and intervention group and a significantly lower rate of male (49.39 % vs 57.72 %, p = 0.04) was observed for control. No significant difference was observed in terms of total procedural length between control and intervention (31.62 vs 33.36 min, p = 0.17) and withdraw time (19.36 vs 22.84, p = 0.06). The ADR in the AI arm was 53.1 % which was statistically not different from the control arm at 46 % (p = 0.08). The APC rate was also similar between the control and AI arm at 1.11 vs. 1.32, p = 0.15, respectively.

APE rates indicative of unnecessary polypectomies were also similar between the control and AI arms at (0.65 vs 0.62, p = 0.25) respectively.

Interestingly, when data was stratified by endoscopist experience, there is a significant improvement in terms of APC 1.29(AI) vs 0.78 (control) (p < 0.001) for the non-experts but AI did not improve APC for the experts 1.34(AI) vs 1.33(control), (p = 0.96).

Similarly, we saw a significant improvement in ADR for non-experts from 40 % (Control) to 53.07 % (AI), (p = 0.049). The ADR for experts did not improve significantly with 49.8 % (control) vs 53.1 % (AI), (p = 0.57).

However, experts do show a lower APE in the intervention arm (0.64 vs 0.71, p = 0.04), while no significant difference has been observed for non-expert (0.53 vs 0.59, p = 0.19)

Conclusions Our data demonstrates that CAD-e doesn't improve ADR or APE across the board for AI experienced Endoscopists.

CAD-E does improve ADR and APE for non-expert endoscopists

Use of CAD-E doesn't cause any harm / hindrance / compromise care of colonoscopy patients as reflected in no difference in procedure times and APE (unnecessary polypectomy) rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP061 Learning and deskill effects of artificial intelligence in colonoscopy among endoscopists with different experience levels

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DOI 10.1055/s-0046-1820716

Aims The effect of computer-aided detection (CADe) on colonoscopists' performance across different experience levels is not well understood. This study aimed to assess whether CADe-use promotes learning or deskilling. We hypothesized that real-time use of CADe would increase PDR-5 (the proportion of at least one polyp ≥ 5mm per colonoscopy) in both inexperienced and experienced endoscopists. We also hypothesized that the increased PDR-5 would persist after CADe was removed.

Methods We performed a prospective, multicenter, crossover, registry-based, pragmatic clinical trial. From November 2021 until June 2025, we included outpatient colonoscopies for patients of all ages and clinical indications at one university hospital, one local hospital and one private outpatient practice. Each endoscopist performed colonoscopies in three successive phases: 1) before CADe-exposure, 2) during CADe-use, and 3) after CADe-removal. GI Genius from Medtronic was used as CADe system. We collected colonoscopy related data from the Norwegian quality registry for endoscopy (Gastronet) for 13 individual endoscopists with varying levels of experience. PDR-5, Gastronet's surrogate marker for adenoma detection rate, was used as a key measurement and is independent of histology. Experienced endoscopists were defined as having performed > 1000 colonoscopies in their career at the beginning of inclusion. We anticipated a PDR-5 of 30 % before CADe-use and an improvement to 35 % during CADe-use for both experience groups. To ensure adequate statistical power, we aimed to include 5,000 colonoscopies. Generalized linear mixed models were used, and analyses were performed both overall and stratified by the experience levels of the endoscopists. The primary endpoints of the study were changes in PDR-5 between phases 1 and 2, and between phases 1 and 3, for both inexperienced and experienced endoscopists.

Results 13 endoscopists (seven inexperienced and six experienced) performed 5013 colonoscopies; median patient age was 59 years (IQR 44-71), 2703 (53.9 %) were women and 2310 (46.1 %) men. Sex and age were similar across the two experience groups, whereas indications differed (e.g., more inflammatory bowel disease among the inexperienced). CADe temporarily increased PDR-5 among inexperienced endoscopists from phase 1 to phase 2 (31.9 % (216/678) to 39.5 % (257/651); OR 1.43, 95 % CI 1.11-1.84), while there was no significant change between phases 1 and 3 (31.9 % (216/678) to 36.3 % (173/476); OR 1.03, 95 % CI 0.79-1.34). There was no significant effect of CADe on PDR-5 of experienced endoscopists between each of the three phases, with a PDR-5 of 28.3 % (304/1075), 26.7 % (291/1088), and 27.2 % (284/1045), respectively.

Among the inexperienced, two endoscopists deskilled, two remained unchanged, and three were upskilled between phases 1 and 3. Similarly, among the experienced, three deskilled and three upskilled.

Conclusions In this study, in a real-world clinical setting, PDR-5 among inexperienced endoscopists increased during CADe-use. As for non-CADe-assisted colonoscopy, no upskilling nor deskilling was observed after CADe-exposure for endoscopists, regardless of experience level.

Conflicts of Interest T. A. Pedersen received the ESGE Metronic AI research award in 2021

OP062 A comparison of white-box and black-box models in computer-aided diagnosis for colon polyps: a randomized controlled trial

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DOI 10.1055/s-0046-1820717

Aims Computer-aided diagnosis (CADx) for optical characterization of colorectal polyps is introduced into colonoscopy practice, yet concerns regarding the poor collaboration and the "black-box" nature of deep learning (DL) models persist. Limited interpretability may impede clinicians' trust, appropriate reliance, and real-world adoption. "White-box" explainable AI (XAI) systems that provide human-interpretable reasoning have been proposed as a solution, but direct empirical evidence comparing white-box and black-box CADx models in

clinical decision-making remains scarce. This randomized controlled trial evaluated whether a white-box XAI model improves diagnostic performance, confidence calibration, and technology acceptance compared with a conventional black-box DL CADx model [1].

Methods We conducted a prospective, two-stage multicenter study involving 112 endoscopists. In the baseline ex vivo assessment, participants performed optical diagnosis without AI support on 200 narrow-band imaging (NBI) still images (120 adenomas, 80 hyperplastic polyps). Baseline overall accuracy (OA), high-confidence accuracy (HCA), and high-confidence rate (HCR) were calculated. After a one-month washout period to minimize recall bias, participants were stratified as high vs. low performers based on baseline HCA and HC, then randomized 1:1 to either a black-box DL CADx group or a white-box XAI CADx group. During the second stage, participants re-evaluated the identical image set using their assigned CADx system, which differed only in explainability features while maintaining comparable core classification architecture.

To evaluate psychological determinants of adoption, participants completed a validated Unified Theory of Acceptance and Use of Technology (UTAUT)-based questionnaire assessing performance expectancy, effort expectancy, social influence, facilitating conditions, and resistance bias. Structural equation modeling was applied to examine differential effects on behavioral intention across the two CADx modalities.

Results Baseline performance without AI showed moderate diagnostic proficiency across participants: OA 66.2%, HCA 70.8%, and HCR 62.0%. When CADx support was introduced, significant differences emerged between white-box and black-box models. The XAI group achieved higher OA than the DL group (80.6% vs. 77.2%; $p = 0.025$) and a markedly superior HCA (88.8% vs. 83.0%; $p < 0.001$). Conversely, the HCR was lower in the XAI group (61% vs. 71%; $p = 0.005$).

Stratified analyses revealed distinct effects based on baseline expertise. Among high performers, only HCA improved significantly with white-box XAI, while OA and HCR did not differ. Among low performers, however, XAI substantially improved OA, HCA, and HCR.

Technology acceptance analysis further differentiated the two systems. In the black-box DL group, resistance bias exerted a significant negative influence on behavioral intention. In contrast, in the white-box XAI group, resistance bias did not significantly predict behavioral intention. Other UTAUT constructs showed similar directional trends across groups, reinforcing explainability as the key distinction.

Conclusions The white-box XAI model significantly outperformed the black-box DL model in overall accuracy and high-confidence accuracy, with particularly striking benefits among lower-performing endoscopists. Crucially, white-box explanations neutralized the detrimental effect of resistance bias on behavioral intention, suggesting that interpretability is critical for clinician trust and future adoption. These results highlight explainability as a central determinant of effective human-AI interaction and underscore the importance of transitioning from black-box to white-box CADx systems for safe, trustworthy, and widely accepted optical diagnosis in colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Shin Y., Bae J.H., Kim J., Choi J., Kim Y.G. 2025; A novel approach to overcome black box of AI for optical diagnosis in colonoscopy. *Scientific Reports* 15 (1): 21220

OP063 Combination of artificial intelligence and mucosal exposure device to enhance adenoma detection in colonoscopy: a multicenter randomized controlled trial

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DOI 10.1055/s-0046-1820718

Aims Computer-aided polyp detection (CADE) could enhance adenoma detection rate (ADR) during colonoscopies. Adding mucosal exposure devices on top of CADE remains investigational (► **Table 1**).

Methods We performed a multicenter, parallel, randomized controlled trial in Hong Kong, Singapore and Germany from March 2023 to January 2025. Subjects aged 45–85 undergoing colonoscopies for screening, surveillance or diagnostic indications were randomized 1:1 to receive procedures with both CADE (ENDO-AID(OIP-1), Olympus Co., Japan) and Endocuff Vision (combined arm), or CADE alone. Randomization was stratified by endoscopist experience (junior vs senior, < 500 vs > 500 procedures). Treatment allocation was blinded to outcome assessors. Subjects with incomplete colonoscopies or inadequate bowel preparation were excluded. The primary outcome was ADR. Secondary outcomes were ADR for different sizes and locations, adenomas per colonoscopy (APC), and non-neoplastic resection rate [1–3].

Results 1726 subjects were randomized. After exclusion, 767 and 772 subjects were included in the combined and CADE alone arms during the modified intention-to-treat analysis. Baseline parameters were comparable, except a shorter intubation time in the combined arm (6.9 vs 8.4 minutes). The overall ADR was significantly higher in the combined arm (62.1% vs 55.6%, adjusted relative risk 1.18, 95%CI 1.04–1.34, $p = 0.01$). The left colon ADR (39.1% vs 32.1%) and non-pedunculated ADR (59.6% vs 53.6%) were also significantly higher in the combined arm. The overall APC (1.72 vs 1.38), < 5mm APC (1.09 vs 0.86), 5–10mm APC (0.58 vs 0.46) and left colon APC (0.72 vs 0.53) were significantly higher in the combined arm. The withdrawal time and non-neoplastic resection rate were similar between two arms.

Conclusions The additional use of EndoCuff could further enhance the performance of CADE during colonoscopies, with shorter intubation time and higher ADR/APC, especially in the left colon. (ClinicalTrials.gov: NCT05414448)

► Table 1			
Baseline and endpoint data	Combined arm (N = 767)	CADe alone (N = 772)	Relative risk & fold change
Age (mean, SD)	67.8 (8.3)	68.3 (8.3)	
Gender (male)	414 (54.0%)	407 (52.7%)	
Indications			
Screening	115 (15.0%)	95 (12.3%)	
Surveillance	221 (28.8%)	268 (34.7%)	
Diagnostic	431 (56.2%)	409 (53.0%)	
Endoscopists			
Junior	342 (44.6%)	338 (43.8%)	
Senior	425 (55.4%)	434 (56.2%)	
Procedures			
BBPS	7.59 ± 1.15	7.57 ± 1.15	
Intubation time (min)	6.92 ± 4.67	8.37 ± 7.03	
Withdrawal time (min)	13.82 ± 8.57	14.86 ± 10.76	
ADR (n, %)			
Overall	476 (62.1%)	429 (55.6%)	1.18 (p = 0.010) *
Right colon	344 (44.9%)	332 (43.0%)	1.06 (p = 0.471)
Left colon	300 (39.1%)	248 (32.1%)	1.27 (p = 0.004) *
Non-pedunculated	457 (59.6%)	414 (53.6%)	1.17 (p = 0.019) *
APC (mean, SD)			
Overall	1.72 (2.45)	1.38 (1.90)	1.25 (p = 0.001) *
<5mm	1.09 (1.65)	0.86 (1.29)	1.27 (p = 0.002) *
5-10mm	0.58 (1.23)	0.46 (0.97)	1.26 (p = 0.026) *
Left colon	0.72 (1.25)	0.53 (0.95)	1.36 (p = 0.001) *
Advanced ADR	55 (7.2%)	47 (6.1%)	1.18 (p = 0.397)
SSLDR	24 (3.1%)	14 (1.8%)	1.74 (p = 0.100)
Non-neoplastic rate	439 (57.2%)	426 (55.2%)	1.05 (p = 0.420)

Conflicts of Interest The study received financial support from Health and Medical Research Fund in Hong Kong, and equipment support from Olympus Co. Ltd. outside Hong Kong. LHSL has research collaborations with Olympus Co. Ltd., ASUSTeK Computer Inc. and GenieBiome Ltd., and served as advisory board for AstraZeneca and GenieBiome Ltd., and served as lecture speaker for Olympus Co. Ltd., Boston Scientific Co. Ltd., Pfizer Inc. and GenieBiome Ltd.

References

[1] ENDOAID-TRAIN study group Lau LHS, Ho JCL, Lai JCT, Ho AHY, Wu CWK, Lo VWH, Lai CMS, Scheppach MW, Sia F, Ho KHK, Xiao X, Yip TCF, Lam TYT, Kwok HYH, Chan HCH, Lui RN, Chan TT, Wong MTL, Ho MF, Ko RCW, Hon SF, Chu S, Futaba K, Ng SSM, Yip HC, Tang RSY, Wong VWS, Chan FKL, Chiu PWY Effect of Real-Time Computer-Aided Polyp Detection System (ENDO-AID) on

Adenoma Detection in Endoscopists-in-Training: A Randomized Trial. Clin Gastroenterol Hepatol 2024; 22 (3): 630–641.e4

[2] Hassan C, Spadaccini M, Mori Y, Foroutan F, Facciorusso A, Gkolfakis P, Tziatzios G, Triantafyllou K, Antonelli G, Khalaf K, Rizkala T, Vandvik PO, Fugazza A, Rondonotti E, Glissen-Brown JR, Kamba S, Maida M, Correale L, Bhandari P, Jover R, Sharma P, Rex DK, Repici A. Real-Time Computer-Aided Detection of Colorectal Neoplasia During Colonoscopy : A Systematic Review and Meta-analysis. Ann Intern Med 2023; 176 (9): 1209–1220

[3] Soleymanjahi S, Huebner J, Elmansy L, Rajashekar N, Lüdtke N, Paracha R, Thompson R, Grimshaw AA, Foroutan F, Sultan S, Shung DL. Artificial Intelligence-Assisted Colonoscopy for Polyp Detection : A Systematic Review and Meta-analysis. Ann Intern Med 2024; 177 (12): 1652–1663

OP064 The prognostic value of the AI-based Red Density score in ulcerative colitis – the PROCEED-UC trial

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DOI 10.1055/s-0046-1820719

Aims Red Density (RD) is an automated endoscopic scoring tool, and ESGE innovation of the year 2018, developed for the objective evaluation of endoscopic disease activity in ulcerative colitis (UC). RD correlates with established histological and endoscopic scoring systems. The PROCEED-UC trial aimed to assess and validate the predictive value of the Red density score for sustained clinical remission.

Methods Patients with UC in clinical remission included in 10 centers in the PROCEED-UC study (NCT04408703) underwent blinded endoscopic assessment with RD in the rectum and sigmoid at baseline, week 52 or early termination (ET) visit. Protocolised biopsies were scored for the Geboes score (GBS), Robert's Histological Index (RHI), Nancy Histological Index (NHI) and Picasso Histological Remission Index (PHRI) in a blinded fashion after initial scoring convention training. Primary endpoint was sustained clinical remission ((SC-CAI) < 3 AND no new UC treatment, escalation of therapy, UC related hospitalization or colectomy). Comparison of the means using t-test, cut-off assessment through receiver operating curve analysis (ROC), and correlation testing based on Spearman analysis.

Results In total 212 patients from 10 centers were enrolled, 120 completed the 52 weeks follow-up period, 16 had a relapse before 52 weeks, 36 did not complete 52 weeks follow-up and 40 patients had to be excluded (24 due to technical issues and 16 drop outs). A total of 4343 RD images of 1064 colonic segments with biopsies and corresponding RD score. Mean (± SEM) rectal RD score was 40.37 (± 3.19), 41.90 (± 3.91) and 66.49 (± 12.82) at baseline, week 52 and ET respectively. Mean sigmoidal RD score was 42.40 (± 2.98), 40.95

(± 3.77) and 101.9 (± 21.57) at baseline, week 52 and ET respectively. Pooled mean RD scores at baseline in patients with sustained clinical remission was 32.71 and 52.94 in patients with clinical relapse (difference 20.24 ± 18.52 ; $p = 0.033$). Pooled mean RD score at week 52 was 42.13 and 130.0 in case of clinical relapse (difference 87.87 ± 21.06 ; $p = 0.0008$). Based on ROC-analysis, the RD score cut-off at baseline for disease relapse within 52 weeks appears to be 63.50 (AUC 0.8291 (95% CI 0.7049 to 0.9533, LR 3.905). Correlation analysis with histology was moderate but significant for NHI ($r = 0.47$, $p < 0.0001$), PHRI ($r = 0.51$, $p < 0.0001$) and RHI ($r = 0.55$, $p < 0.0001$).

Conclusions Red Density demonstrates a significant predictive value for clinical relapse within 52 weeks with a sustainable cut-off and maintains meaningful correlations with multiple histological indices. These findings support RD as a reliable, objective tool for monitoring disease activity in UC and highlight its potential to guide earlier intervention and improve long-term patient management.

Conflicts of Interest PS was funded by a Pentax grant from 2019 to 2020

OP065 Economic Impact of AI-Assisted versus Conventional Colonoscopy – Randomized Controlled Trial

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DOI 10.1055/s-0046-1820720

Aims Artificial intelligence (AI)-assisted colonoscopy increases polyp and adenoma detection, but its real-world economic impact remains unclear. Studies suggest higher short-term costs due to additional polypectomies and subsequent surveillance, which may be offset by long-term savings through reduced colorectal cancer incidence. However, evidence remains mainly simulation-based and highly heterogeneous. Robust, trial-based economic data are needed to guide policy. We therefore aimed to compare costs and resource use between AI-assisted and conventional colonoscopy.

Methods We conducted a randomized controlled trial between January 19, 2023, and October 10, 2024. Participants were randomly assigned to one of two groups: (1) AI-assisted colonoscopy using a CADx system (GI Genius or CAD EYE) or a CADe system (ENDO-AID), or (2) conventional colonoscopy (CC). Patients aged 40–90 years undergoing colonoscopy in the Region of Västra Götaland, Sweden, were eligible. Procedures were performed at both university and community hospitals. Direct costs for each investigation were recorded prospectively and included the cost of the AI system, procedure and histopathology costs, procedure-related fees, and additional costs associated with the follow-up strategy.

Results A total of 1,117 colonoscopies were included, of which 560 (50.1%) were performed with AI assistance and 557 (49.9%) without AI. The groups were comparable in terms of age (mean 66–67 years, SD 11), males were slightly more prevalent in the non-AI (46% and 54%, respectively, OR 1.35 95% CI 1.06, 1.70). Most colonoscopies were indicated due to red flag symptoms (44%) and organized screening (17%), and the vast majority were performed by senior consultants or experts (> 90%), these parameters were all comparable between the AI and non-AI group.

AI assistance led to the identification of more polyps than conventional colonoscopy (70% vs 62%; OR 1.42, 95% CI 1.11–1.83), with more polyps removed (OR 1.38, 95% CI 1.07–1.76) and a modest increase in the number sent for histopathology (OR 1.19, 95% CI 0.94–1.51). Use of procedural materials between the two groups was comparable in terms use of hyoscine butylbromide, biopsy forceps, hot snares, clips and endoloops, however, a greater number of cold snares was utilized in the AI group compared to non-AI, OR 1.56 (95% CI 1.23, 1.97). Rates of polyp surveillance colonoscopies, repeat colonoscopy for polypectomy and surgery referrals were comparable between the two groups. The median total cost per colonoscopy was the same between AI and non-AI groups, i.e. 1,618€ (interquartile range 1,520, 1,703) and 1,618€ (1,520, 1,667). There was no difference in cost by trainer level, however, the cost was marginally higher in those undergoing organized screening using AI compared to non-AI, median €1,695 (1,619, 1,747), €1,644 (1,610, 1,702) with a moderate standardized mean difference of 0.35 which had a wide confidence interval (95% CI 0.05, 0.64).

Conclusions AI-assisted colonoscopy increased polyp detection and the use of cold snares without increasing overall or short-term costs compared with conventional colonoscopy. Long-term follow-up is needed to determine whether these short-term benefits translate into cost-effectiveness through cancer prevention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Barrett's Esophagus: Next-Generation Diagnostic Frontiers

14/05/2026, 14:00–15:00

Sky 2

OP066 Should Systematic Biopsies Still Be Performed During Surveillance of Barrett's Esophagus? A Prospective Multicenter Tandem Comparative Study

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DOI 10.1055/s-0046-1820721

Aims Barrett's esophagus (BE) is a premalignant condition that predisposes to the development of dysplasia—low-grade (LGD), high-grade (HGD)—and eventually esophageal adenocarcinoma (EAC). Current surveillance recommendations for patients with known BE include targeted biopsies of visible lesions and systematic four-quadrant biopsies (Seattle protocol) during careful examination with white-light endoscopy (WLE) and chromoendoscopy. With the advent of high-resolution endoscopes capable of detecting subtle lesions, the question arises whether surveillance could be limited to targeted biopsies, especially since systematic biopsies are time-consuming and not always performed by gastroenterologists. The aim of this study was to evaluate the impact of high-resolution endoscopy combined with electronic chromoendoscopy (EC) on the detection of HGD and EAC compared with WLE combined with Seattle protocol.

Methods This was a prospective tandem comparative study conducted in 11 French centers. Inclusion criteria were adult patients with long-segment non-dysplastic BE or flat dysplastic BE scheduled for endoscopy between May 2022 and December 2024, who provided informed consent. Main exclusion criteria were previously treated BE, known EAC, and coagulation disorders. BE was examined sequentially with WLE and EC by two blinded expert operators. Targeted biopsies were performed on lesions identified by either or both operators, followed by systematic four-quadrant biopsies. Diagnostic performance of the different modalities (CE, WLE + Seattle protocol, WLE + CE) was compared.

Results A total of 110 patients were enrolled, of whom 95 (mean age 67 years; 86% male) were analyzed. Mean BE length was 6 cm. Before the procedure, BE was classified as nondysplastic, LGD, HGD, or indeterminate in 16%, 53%, 29%, and 2% of patients, respectively.

After the procedure, final diagnoses were nondysplastic BE (35%), LGD (37%), HGD (16%), and EAC (13%). A total of 59 HGD and EAC lesions were detected in 27 patients.

EC with targeted biopsies (34/59) did not detect significantly more HGD/EAC lesions than WLE combined with systematic biopsies (47/59; $p < 0.001$), with a sensitivity of 58% vs 80%, a specificity of 72% vs 5%, a positive predictive value of 25% vs 12% and a negative predictive value of 92% vs 78%, respectively. Combination of EC and WLE detected 47 lesions and therefore had a sensitivity of 80%, a specificity of 60%, a positive predictive value of 24% and a negative predictive value of 96%.

EC with targeted biopsies, WLE with systematic biopsies and combination of EC and WLE had a patient-level sensitivity for HGD/EAC diagnosis of 74%, 93% and 89%, respectively, a specificity and a positive predictive value of 100%, a negative predictive value of 92%, 78% and 96%, respectively. HGD was detected only by systematic biopsies in 3 of 15 patients. EAC was always detected by the combination of WLE and CE. LGD was identified only through systematic biopsies in 15 of 35 patients.

Mean procedure time of electronic chromoendoscopy, biopsies after electronic chromoendoscopy, white light endoscopy, biopsies after white light endoscopy, and Seattle protocol was 6.7 min $\pm$ 3.0, 4.8 min $\pm$ 6.3, 5.1 min $\pm$ 2.6, 3.9 min $\pm$ 5.9 and 5.9 min $\pm$ 3.7, respectively.

Conclusions Systematic four-quadrant biopsies remain valuable for detecting HGD despite the high sensitivity of combined WLE and CE. They remain indispensable for the detection of LGD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP067 Evaluating the quality of Barrett's oesophagus surveillance in the UK: Findings from the National Endoscopy Database (NED)

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DOI 10.1055/s-0046-1820722

Aims Barrett's oesophagus predisposes to oesophageal adenocarcinoma, and surveillance upper GI (UGI) endoscopy aims to detect early neoplasia. High-quality surveillance is required to reduce post-endoscopy upper GI cancer (PEUGIC) and associated harm from delayed diagnoses or failing to prevent cancer. [1] The UK National Endoscopy Database (NED) provides a platform for large-scale evaluation of endoscopic performance. [2] As part of a broader assessment of UGI endoscopy quality, we evaluated Barrett's surveillance practice across the UK and examined sources of potential variation.

Methods All UGI endoscopies submitted to the latest iteration of NED (NEDi2) for the year 2024 were analysed. Barrett's surveillance procedures were identified using recorded indication fields. Key performance indicators (KPIs) assessed included sedation use, procedure duration, compliance with the recommended Barrett's inspection time (≥ 1 minute per centimetre of Barrett's segment), and compliance with the Seattle biopsy protocol (four biopsies per 2 cm). Focal lesion detection was captured using NED diagnostic fields. Mixed-effects multivariable regression models were used to evaluate the association between annual procedure volume (all UGI endoscopies), and Barrett's surveillance frequency (≥ 25 procedures per year vs. < 25) and KPI performance, adjusting for endoscopist profession, Barrett's length, patient age and sex, with endoscopist as a random effect (to account for clustering).

Results A total of 653,803 UGI endoscopies were submitted to NEDi2 in 2024, of which 26,898 (performed by 2,828 endoscopists) were labelled as Barrett's surveillance. Sedation was used in 45.5% (95% CI 44.9-46.1). Among sedated patients, 55.2% (95% CI 55.4-56.0) received combined opioid + midazolam, and 13.4% (95% CI 12.8-14.0) received above the recommended dose for age. The focal lesion detection rate was 3.7% (95% CI 3.5-4.0). 68.7% (95% CI 67.8-69.6) of procedures were compliant with the Seattle biopsy protocol, and 74.7% (95% CI 73.9-75.6) met the Barrett's inspection-time target. 14.8% of endoscopists undertook ≥ 25 surveillance procedures per year.

In adjusted analyses, sedated procedures showed significantly greater odds of focal lesion detection (OR 1.66, 95% CI 1.36-2.01, $p < 0.001$). Endoscopists performing ≥ 25 surveillance procedures per year showed significantly higher focal lesion detection (OR 1.36, 95% CI 1.11-1.68, $p = 0.003$). Those performing ≥ 25 surveillance procedures per year had longer total procedure durations (+0.79 minutes, 95% CI +0.27 - +1.31, $p = 0.003$), but were not associated with increased Barrett's inspection time recommendation compliance (OR 1.48, 95% CI 0.92-2.38, $p = 0.11$).

Conclusions Substantial variation exists in the quality of Barrett's surveillance across UK endoscopists. Endoscopists performing regular surveillance appear to achieve better lesion detection. Variation in sedation practice, particularly under-use of combined sedation, represents a potentially modifiable factor that may further improve performance. NED data are limited as it relies on endoscopists completing thorough and accurate reports, but it may provide a scalable mechanism for national quality assurance and future enhancement of Barrett's surveillance practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] The Joint Advisory Group on GI Endoscopy. National Endoscopy Database <https://nedpilot.thejag.org.uk> (accessed 12 August 2025)
- [2] Weusten BLAM, Bisschops R, Dinis-Ribeiro M et al. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2023; 55: 1124-46. doi:10.1055/a-2176-2440

OP068 Long-Term Outcomes of Endoscopic Surveillance for Barrett's Esophagus: A 15-Year Real-World Community-based Cohort Study

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DOI 10.1055/s-0046-1820723

Aims Despite its widespread use to enable early detection of neoplastic progression in non-dysplastic Barrett's esophagus (NDBE), endoscopic surveillance

lacks robust evidence of clinical benefit in esophageal adenocarcinoma (EAC)-specific survival, overall survival, or cost-effectiveness. Therefore, recent revisions of the Dutch national guideline advise against routine endoscopic surveillance in low-risk patients, defined as NDBE < 5 cm, age > 55 years, and no prior dysplasia. This study assesses the long-term risk of progression to high-grade dysplasia (HGD) or EAC in a large, community-based NDBE cohort.

Methods We initiated a prospective cohort study in 2003, enrolling patients with NDBE or low-grade dysplasia (LGD) with ≥ 1 cm BE extent across six Dutch community hospitals. Primary outcome was the annual risk for HGD or EAC. Data were collected prospectively until 2017. Follow-up then continued retrospectively using prospectively recorded histological data from the nationwide pathology archive, extended through 2024. Additional clinical information was retrieved from electronic health records in neoplastic cases. Progression risk and predictors were assessed using descriptive statistics and multivariable Cox regression. A predefined subgroup analysis included patients classified as low-risk per Dutch guidelines.

Results Of 985 patients initially enrolled, 973 (99%) were matched with the national pathology database for extended follow-up. 74.1% were male; mean age was 57.1 years at index endoscopy. Median BE length was C1M3. The median surveillance duration was 11.3 (IQR 6.8–15.9) years. The annual progression risk to HGD/EAC was 0.84% (95% CI 0.68–1.02%). Of the 98/973 patients (10.1%) who progressed to HGD/EAC, 75.5% had early disease amenable for endoscopic treatment, 13.3% had curative non-endoscopic treatment, and 5.1% were managed palliatively due to advanced stage. In multivariable analysis, age (HR 1.05, 95% CI 1.03–1.08), BE length (HR 1.13, 95% CI 1.07–1.19), and baseline LGD (HR 2.32, 95% CI 1.51–3.51) were independent predictors of progression (all $p < 0.001$). Overall, the number needed to test (NNT) to detect one case of HGD/EAC was 59 endoscopies. Among 553/973 patients (57%) classified as low-risk, under the revised Dutch guideline, the annual progression risk was 0.32% (95% CI 0.20–0.49) with an NNT of 144. In contrast, the remaining 420/973 patients (43%) who still qualify for surveillance had an annual progression risk of 1.50% (95% CI 1.19–1.88%), and a NNT of 35.

Conclusions Among 973 BE patients with a median follow-up of 11 years, the annual progression risk was low. Most patients (57%) are classified as low-risk, with an annual progression risk of only 0.32% versus 1.50% in surveillance-eligible patients. Moreover, not all cases were detected at an early, endoscopically treatable stage, and the NNT was high. Surveillance, therefore, appears neither fully effective nor efficient. These findings challenge the clinical value of routine endoscopic surveillance for all BE patients, particularly in patients with low-risk features.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP069 Evaluation of a real-time Computer-aided Detection and Diagnosis system for Barrett's neoplasia during live endoscopic procedures: A multicenter prospective study

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DOI 10.1055/s-0046-1820724

Aims Computer-aided detection (CADE) systems have the potential to improve endoscopic detection of early neoplasia in Barrett's esophagus (BE). Additionally, computer-aided diagnosis (CADx) systems may assist in subsequent characterization of detected lesions. We aimed to test a recently developed combined CADE/CADx system for BE neoplasia during live endoscopic procedures [1, 2].

Methods CADE and CADx were evaluated during endoscopic procedures of BE patients undergoing regular surveillance or endoscopic work-up for low-grade dysplasia (LGD), high-grade dysplasia (HGD), or esophageal adenocarcinoma (EAC) in 3 tertiary centers. All procedures were performed by expert endoscopists with over 5 years' experience with diagnosis and treatment of early BE neoplasia. First, ground truth for CADE (i.e. the presence or absence of a visible lesion requiring targeted biopsy) was established by the expert endoscopist using white light endoscopy (WLE). If a visible lesion was identified, it was subsequently characterized using narrow band imaging (NBI) as either normal mucosa or suspicious of neoplasia, serving as ground truth for CADx. Then, the CADE/CADx study protocol was initiated, which involved endoscopic examination in 2cm intervals throughout the BE segment, with real-time support of CADE. Any lesion identified by CADE was then evaluated by CADx after which targeted biopsies were obtained or the lesion was resected. Random biopsies were obtained according to standard protocol. Primary outcomes were the stand-alone sensitivity of CADE, and the mean number of false-positive CADE detections per patient. Secondary outcomes were the stand-alone sensitivity of CADx for characterizing CADE-detected lesions, and the reduction of CADE false-positive detections by CADx.

Results In total, 182 patients were enrolled in the study. In 74 patients, a visible lesion was found in WLE by the expert endoscopist. The CADE system detected 67/74 of these lesions, resulting in a sensitivity of 91%. Of all detected lesions, histopathological examination confirmed neoplasia in 63% (i.e. EAC, HGD, or LGD). Of the 7 lesions missed by CADE, 5 were neoplastic (2x EAC, 1x HGD, 2x LGD), and 2 did not contain neoplasia. In 108 procedures, no visible lesion was identified by the expert endoscopist in WLE. In these procedures, CADE generated 69 false-positive detections in total, resulting in 0.63 false-positives per procedure.

Of all 67 CADE-detected lesions, 58 were considered suspicious for neoplasia during NBI assessment by the expert endoscopist. All 58 lesions were correctly classified as neoplastic by CADx, resulting in a sensitivity of 100%. Furthermore, CADx discarded 35 of the 69 CADE false-positive detections, reducing the mean number of false positives per procedure from 0.63 to 0.31. Extrapolated to clinical practice, this would result in one additional targeted biopsy every 3 patients.

Conclusions This is the largest study to date to evaluate a combined CADE/CADx system for real-time detection of BE neoplasia. The CADE system demonstrated a per-patient sensitivity of 91% for all visible lesions identified by the expert endoscopist, with an acceptable number of false positive detections. The CADx system showed potential to further reduce false-positives, without discarding any prior CADE true positive detections.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jukema JB, Kusters CHJ, Jong MR et al. Computer-aided diagnosis improves characterization of Barrett's neoplasia by general endoscopists (with video). *Gastrointestinal Endoscopy* 2024. doi:10.1016/j.gie.2024.04.013
- [2] Jong MR, van Eijck van Heslinga RAH, Kusters CHJ et al. Evaluation of an improved computer-aided detection system for Barrett's neoplasia on real-world imaging conditions. *Endoscopy* 2025. doi:10.1055/a-2642-7584

OP070 Comparing WATS3D and Random Forceps Biopsy in Barrett's Esophagus: Interim Analysis on Diagnostic Value from the Prospective WATS-EURO2 Study

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DOI 10.1055/s-0046-1820725

Aims While some guidelines suggest Wide-Area Transepithelial Sampling with 3D analysis (WATS3D) as adjunct to random forceps biopsies (RFB) in Barrett's Esophagus (BE) surveillance, its clinical benefit in detecting high-grade dysplasia (HGD) and esophageal adenocarcinoma (EAC) remains uncertain as longitudinal follow-up (FU) data on WATS3D-positive-RFB-negative cases is lacking.

Methods Patients with C ≥ 2 +/- M ≥ 4 BE without visible lesions were enrolled in 6 expert centers for a 3-year FU and grouped into those with non-dysplastic BE (NDBE) and those with low-grade dysplasia (LGD), HGD or EAC. RFB were evaluated by expert pathologists. WATS3D brushes were evaluated by CDx Diagnostics expert cytopathologists, blinded to each other assessment. Primary endpoints were a) concordance in detecting HGD/EAC between WATS3D and RFB, and b) progression to HGD/EAC in WATS3D-positive-RFB-negative cases during FU. Secondary endpoint was concordance in LGD/HGD/EAC detection. A training phase was included to ensure adequate WATS3D sampling.

Results In study training phase, 183 baseline endoscopies revealed an initial 40% WATS3D sample inadequacy rate. After retraining and individual feedback, this rate dropped to 8%. Of 363 enrolled patients, 290 cases had complete baseline results: n = 129 LGD/HGD/EAC, n = 161 NDBE (Fig 1). An intention-to-diagnose (ITD) analysis found no significant difference in HGD/EAC detection between WATS3D and RFB (16/290 vs 10/290; p = 0.32, McNemar test, Fig 2A). In the post-training phase (n = 179), WATS3D again showed no significant diagnostic advantage for diagnosing HGD/EAC (4/179 vs 9/179, p = 0.32). Results were comparable in per-protocol analysis (4/158 vs 8/158, p = 0.34, Fig 2A). For detecting all dysplasia (LGD/HGD/EAC), both ITD and per-protocol analyses demonstrated diagnostic superiority of RFB over WATS3D, (p < 0.001, Fig 2B). WATS3D identified 13 HGD/EAC cases negative on RFB, which were prospectively followed for median 19 (95%CI: 14–24) months and median 3 (95%CI: 2–3) endoscopies: 10/13 developed HGD/EAC in RFB during FU and underwent curative endoscopic treatment, all these ten RFB-progressors had multifocal LGD in RFB at baseline; 1/13 completed 3-year FU without progressing to HGD/EAC, showing NDBE on RFB across four separated endoscopies. Two remaining patients are still under FU without demonstrating progression to HGD/EAC.

Conclusions Under optimized WATS-sampling, a comparable number of discordant HGD/EAC cases for WATS3D and RFB was found. WATS3D was inferior to RFB for detecting LGD/HGD/EAC. In this population, enriched for BE neoplasia, the adjunctive value of WATS3D was virtually absent: all discordant HGD/EAC cases detected by WATS3D that truly progressed had already been identified as at-risk due to baseline multifocal LGD in RFB. In all 161 NDBE cases no HGD/EAC diagnosed by WATS3D was confirmed in RFB during 3 years FU.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP071 Barrett's Esophagus with Low Grade Dysplasia : Impact of Expert Histopathological Review and Expert Endoscopic Reassessment on Oncological Staging : A Retrospective Bicentric Belgian Study

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DOI 10.1055/s-0046-1820726

Aims Low grade dysplasia (LGD) in Barrett's esophagus (BE) carries a heterogeneous risk of progression and substantial diagnostic variability. Previous studies have shown that up to 85% of LGD diagnoses made in community settings are downgraded to non-dysplastic BE (NDBE) or indefinite for dysplasia (IND) after expert panel review. In contrast, when LGD is confirmed by a panel of at least two expert pathologists, the risk of progression rises sharply.

Additionally, patients should undergo restaging endoscopy at a specialized center, using high-definition imaging, acetic acid or virtual chromoendoscopy, and meticulous inspection to detect visible lesions. Previous multicenter data have shown that expert endoscopic restaging significantly altered patient management, with 25% of the patients ultimately reclassified as having high grade dysplasia (HGD) or esophageal adenocarcinoma (EAC).

Expert histopathological review and expert endoscopic reassessment are recommended by international guidelines, but their real-world practice implementation added value requires further studies.

Our aim was to evaluate the diagnostic impact of expert histopathological review and expert endoscopic restaging in patients with LGD managed in two Belgian expert centers.

Methods We conducted a retrospective bicentric cohort study across two Belgian BE expert centers including all endotherapy-naïve patients with at least one diagnosis of LGD between January 2018 and December 2024 and at least one follow-up endoscopy. Data were extracted from electronic endoscopy and pathology records and manually validated. Patients with prior HGD, EAC, IND or previous endoscopic therapy were excluded. Three main subcohorts were defined: (1) a **Histopathology Review Cohort**, including patients whose LGD biopsies underwent expert gastrointestinal (GI) pathology review; (2) an **Expert Endoscopy Cohort**, including patients referred for LGD restaging by a Barrett's expert endoscopist; and (3) a **Combined Expert Cohort**, including patients who underwent both expert histology review and expert endoscopy. Primary outcomes were (1) diagnostic reclassification after expert histopathological review and (2) detection of visible lesions and histologic outcomes at the first expert endoscopy. The secondary outcome was the diagnostic concordance and clinical impact of combined expert histological and endoscopic reassessment. Only descriptive statistics were performed.

Results A total of 148 patients with a diagnosis of LGD in the context of BE were included. Median age was 67 years and 79.7% were male. The median Prague classification was C1M4. Expert histopathology review was performed in 107/148 patients (72.8%). A diagnostic change occurred in 27 cases (25.2%). LGD was confirmed in 80 patients (74.8%). Among reclassified case, 10 (9.3%) were upgraded to HGD and 17 (15.9%) were downgraded (14 to IND, 3 to NDBE). Expert endoscopic reassessment was performed in 85 patients referred specifically for LGD evaluation; 79 were included after excluding 6 upgraded to HGD on expert pathology review. At the first expert endoscopy, histologic outcomes were: HGD/EAC in 11 patients (13.9%), persistent LGD in 26 (32.9%), IND in 6 (7.6%) and NDBE in 36 (45.5%). A visible lesion was identified in 18/79 patients (22.8%). The combined expert cohort (patients with expert-confirmed LGD undergoing expert endoscopy) included 62 patients. In this group, first expert endoscopy revealed HGD/EAC in 15 (24.2%), persistent LGD in 24 (38.7%), IND in 6 (9.7%) and NDBE in 17 (27.4%). Among 10 patients whose LGD was not confirmed by expert pathology, none showed dysplasia on expert endoscopy. Overall, expert pathological review and expert endoscopic restag-

ing led to substantial diagnostic reclassification, frequently identifying previously unrecognized visible lesions and higher-grade neoplasia.

Conclusions LGD in BE requires cautious management given its diagnostic variability. Our findings align with international series in demonstrating the critical role of expert histopathology review and expert endoscopy to confirm the diagnosis, detecting missed visible lesions and guiding the appropriate therapy. These results support systematic referral of all patients with suspected or confirmed LGD to expert centers before any therapeutic decision.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

The esophageal third space—lets take a deep dive!

14/05/2026, 14:00–15:00

Aqua 1 + 2

OP072 A Selective Resection Algorithm for Barrett's Neoplasia Favors Endoscopic Submucosal Dissection for Cancer

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Aims Oncological principles favor en bloc, R0 excision of cancer to achieve curative resection. In Barrett's neoplasia, endoscopically curable cancers include T1a and early T1b disease. Although both endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) are accepted treatments, criteria for selection remain a subject of debate. Our aim was to compare two Barrett's cancer resection strategies, (1) Historical strategy (HS, 2004-2016): ESD reserved for more advanced lesions (predominantly T1b), or (2) Selective resection algorithm (SRA, 2017-2024): ESD applied to all suspected Barrett's cancers > 15 mm, with EMR used for the remaining lesions. Allocation was based on endoscopic prediction of depth of invasion.

Methods Outcomes compared between strategies included R0 (basal) excision, recurrence, curative resection and adverse events (delayed bleeding and deep muscle injury).

Results A total of 581 resections were performed in 542 patients (median lesion size 20 mm, IQR 10-30). Adverse events occurred in 2.2% (5.3% ESD vs 0.3% EMR).

Cancer was present in 271 cases (T1a 178, T1b 93). Of these, basal R0 was achieved in 233/271 (86%). For T1a, R0 was similar between ESD and EMR (96.9% vs 90.2%, $p = 0.067$). For T1b lesions, R0 was higher with ESD (77.6% vs 41.2%, $p = 0.003$).

Under the HS ($n = 189$), ESD was performed in 19 cases (14 cancers; 7 T1a, 7 T1b), achieving basal R0 in 10/14 (71.4%; 42.9% T1b, 100% T1a). EMR ($n = 170$; 118 dysplasia, 38 T1a and 14 T1b) achieved basal R0 in 36/52 (69.2%) cancers (T1a 84.2%; T1b 28.6%).

Under the SRA ($n = 392$), ESD was performed in 207 cases (158 cancers; 89 T1a, 69 T1b), achieving basal R0 in 142/158 (89.9%; 96.6% T1a, 81.9% T1b). EMR ($n = 185$; 138 dysplasia, 44 T1a and 3 T1b), achieved basal R0 in 45/47 (95.7%) cancers (T1a 95.5%; T1b 100%).

Overall basal R0 improved from 46/66 (69.7%) under the HS to 187/205 (91.2%) under the SRA ($P < 0.001$). For T1a disease, R0 improved (86.7% vs 96.2%, $p = 0.021$), but there was no difference in curative resections or recurrence. For T1b disease, R0 improved (33.3% to 81.9%), curative resection in-

creased (9.5% vs 30.5%, $p = 0.043$), and recurrence decreased (55.6% vs 23.6%, $P = 0.048$).

Overall 2 year cancer-free survival (follow-up adherence 230/240 of eligible) was 92%, with no difference between periods ($P = 0.656$). There was no difference in precursor lesions treated by EMR between strategies (HS 69.4% vs SRA 74.6%).

Conclusions Transitioning to a structured algorithm prioritising ESD for lesions > 15 mm resulted in substantial improvement in R0 resection, cure and recurrence for T1b disease. This approach maintained safety and durable cancer-free survival, without the over-treatment of precursor lesions by ESD. These results provide strong support for routine use of ESD in larger Barrett's cancers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP073 Combined muscle quantity and quality predict outcomes after ESD for superficial esophageal squamous cell carcinoma

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Aims While sarcopenia is recognized as a prognostic factor in advanced esophageal cancer, its relevance in patients undergoing endoscopic submucosal dissection (ESD) for superficial esophageal squamous cell carcinoma (SESCC) remains unclear. Bioelectrical impedance analysis (BIA) allows simultaneous assessment of muscle quantity and quality using the skeletal muscle mass index (SMI) and extracellular water/total body water ratio (ECW/TBW). In recent years, elevated ECW/TBW—reflecting poorer muscle quality—has been associated with reduced physical performance and a higher prevalence of sarcopenia compared with individuals with lower ratios. We examined whether these parameters influence clinical outcomes after ESD for SESCO.

Methods We retrospectively analyzed 251 consecutive patients with SESCO who underwent ESD between 2018 and 2023. Muscle quantity was assessed using SMI, and low muscle quantity (sarcopenia) was defined as $SMI < 7.0 \text{ kg/m}^2$ for men and $< 5.7 \text{ kg/m}^2$ for women. Muscle quality was evaluated using ECW/TBW, and poor muscle quality was defined as an elevated ECW/TBW (> 0.39). Patients were categorized as: Group A: normal muscle quantity and quality, Group B: abnormality in either muscle quantity or quality, Group C: abnormalities in both muscle quantity and quality. Patient and lesion characteristics, short-term outcomes, and long-term survival were compared across the groups.

Results The three groups were almost evenly distributed (A/B/C: 32.2%/34.3%/33.5%). Tumor size increased across groups (A/B/C: 17.0 / 22.1 / 23.2 mm), and procedure time also lengthened (A/B/C: 38.3 / 45.9 / 49.6 min). The incidence of delayed adverse events (DAE) was 1.2%, 3.5%, and 8.3% in Groups A, B, and C, respectively, and post-procedural pneumonia occurring in 0%, 1.2%, and 4.8%. Length of hospital stay was 7.0, 7.1, and 7.5 days in Groups A, B, and C. Compared with Group A, Group C showed significantly more DAEs ($P = 0.036$), a trend toward higher pneumonia rates ($P = 0.065$), and longer hospitalization ($P = 0.045$).

Regarding long-term outcomes, tumor depth and additional treatment rates did not differ across groups. The median follow-up duration was 965 days (range, 15–2178 days). The cumulative 3-year overall survival rates were 100%, 92.0%, and 88.7% in Groups A, B, and C, respectively. Compared with Group A, Group C showed significantly shorter overall survival ($P = 0.019$), while Group B tended to have shorter survival ($P = 0.053$). In multivariate analysis, combined low muscle quantity and poor muscle quality (Group C) remained an independent predictor of mortality (HR 10.53, $P = 0.028$). $PNI \leq 45$ (HR 3.29, $P = 0.018$) and SM2 or deeper invasion (HR 3.23, $P = 0.048$) were also independent predictors.

Conclusions Patients with concurrent low muscle mass and poor muscle quality experienced more procedural complications and significantly poorer long-term survival after ESD for SECC. These findings highlight that muscle quality, not only quantity, is clinically relevant and that incorporating BIA into pre-ESD evaluation may help identify high-risk patients before treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP074 Vessel-specific Factors to Predict Intra-Procedural Bleeding in Third Space Endoscopy

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Aims Intra-procedural bleeding (IPB) is the most frequently encountered adverse event during third space endoscopy (TSE). It poses several challenges, including reducing the visibility of the dissection field, prolonging the duration of the procedure, and increasing the risk of perforation or delayed bleeding. These factors can contribute to less desirable outcomes, primarily lower en bloc and complete (R0) resection rates, as well as the risk of incomplete or aborted procedure if there is inadvertent injury to the underlying muscularis propria layer [1–7].

By exploiting the control group—i.e. without pre-coagulation of a recent randomized controlled trial on vessel pre-sealing, we performed a post hoc analysis to identify the main predictive features of IPB.

Methods This is a post-hoc analysis of the CURRENT trial to assess the efficacy and safety of a new pre-sealing technique for reducing IPB risk during endoscopic submucosal dissection (ESD). Briefly, consecutive patients aged ≥ 18 years who were referred for ESD for superficial GI neoplastic lesions in the upper or lower gastrointestinal tract, or POEM for esophageal achalasia, were included (Trial NCT05804266, conducted at Humanitas Research Hospital, Rozzano, Italy). In the control group, vessels were dissected without any pre-sealing treatment (control arm) in order to have a reliable estimate of IPB without a pre-sealing intervention. In detail, vessels greater than 1.2 mm in diameter allocated in the control arm were dissected with a standard high-voltage current without the use of coagulation forceps or alternative currents. For the purpose of the study, all procedures were performed in a CO₂ setting and with the same knife. Thus, the control group of this RCT represents an ideal setting to identify the vessel-specific risk factors contributing to IPB.

The primary aim of this post-hoc analysis is to identify specific vessel related risk factors contributing to IPB during TSE, after adjusting for patient, procedure, and anatomical confounding factors.

Results 33 patients in the control group were included in the modified intention-to-treat analysis. A total of 421 vessels with a diameter of at least 1.2 mm in the 33 patients were considered for evaluation in the post-hoc analysis. After excluding clips with low image quality or lack of video footage recording, a total of 204 vessels were incorporated into the post-hoc analysis. In the multivariable model including all covariates (N = 204), two variables remained independent predictors of IPB: large vessel diameter with adjusted OR 3.19 (1.58–6.43; P = 0.001), and penetrant morphology with adjusted OR 3.97 (1.05–16.60; P = 0.049). Vessel pulsatility and bifurcation did not reach statistical significance (all P > 0.3). Model fit: LR $\chi^2(8) = 45.91$, P < 0.001; pseudo-R² = 0.1788.

Conclusions Large vessel diameter and penetrant morphology increased the risk of IPB by approximately 3-fold. These significant findings provide the en-

doscopist with additional insight into a vessel's risk of bleeding, which may then alter their approach in terms of utilizing pre-coagulation with coagulation graspers, or performing vessel pre-sealing under saline immersion.

Conflicts of Interest Alessandro Repici is a consultant of ERBE, Medtronic, Fujifilm and Olympus. Antonio Capogreco is a consultant of ERBE. Cesare Hassan is a consultant of Alphasigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax. Roberta Maselli is a consultant of ERBE, Fujifilm, 3DMatrix and Boston Scientific.

References

- [1] Weusten BLAM, Barret M, Bredenoord AJ et al. Endoscopic management of gastrointestinal motility disorders – part 2: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020; 52: 600–614
- [2] Weusten BLAM, Barret M, Bredenoord AJ et al. Endoscopic management of gastrointestinal motility disorders – part 1: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020; 52: 498–515
- [3] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy* 2022; 54: 591–622
- [4] Capogreco A, Hassan C, De Blasio F et al. Prophylactic underwater vessel coagulation for submucosal endoscopy. *Gut*. 2024; 1–3
- [5] Capogreco A, Maselli R, Enderle M et al. Different behavior of electrosurgical currents between air and saline immersion therapeutic endoscopy. *Sci Rep* 2025; 15: 4388
- [6] Capogreco A, Hassan C, De Blasio F et al. Prophylactic underwater vessel coagulation for submucosal endoscopy. *Gut* 2024; 73: 1049–1051
- [7] Capogreco A, de Sire R, Massimi D et al. Underwater coagulation using hybrid knife in peroral endoscopic myotomy for achalasia. *Endoscopy* 2024; 56: 547–548

OP075 Strictures After Widespread Endoscopic Resection in Esophageal Neoplasia

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Aims Endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) are established methods for removing Barrett's-related esophageal lesions. A major limitation is the risk of post-resection strictures, often requiring repeated dilatation. Reported stricture rates vary widely and can reach 94% when two-thirds or more of the esophageal circumference is removed. The primary objective of this study was the incidence of post-endoscopic resection stricture in a large patient cohort with neoplastic BE and at least 50% circumferential resection by either EMR or ESD. Secondary objectives were success rates of endoscopic dilatation therapy and identification of risk factors for stricture formation.

Methods We performed a retrospective bicentric analysis (2009–2023) of endoscopically resected Barrett's-associated esophageal lesions, using a general strategy of removing half of the lesion-bearing circumference. Demographic, clinical (including dysphagia resolution), endoscopic, and histological data were collected for patients with and without post-resection strictures requiring endoscopic dilatation, along with treatment outcomes.

Results A total of 440 resections were performed: 275 EMR, 153 ESD and 12 hybrid, with cancer diagnosed in 335 cases (76.1%). Median resection length was 60 mm, and 96.7% involved the attempted > 50% of the circumference. The overall stricture rate was 11.4%. On multivariable analysis, resection of $\geq 75\%$ of the circumference was the only independent predictor of stricture formation, while strictures occurred in 7.3% when the extent was 50%. Strictures were most common after circumferential resections (58.3%) and occurred more often in cancer lesions. Clinical success of stricture therapy was 86.7%: initial dilatation (1–5 sessions) resolved 62.2%, and additional dilatation (me-

dian 8 sessions) succeeded in 24.5 %. In six patients, dilatation failed, requiring stenting or surgery.

Conclusions Esophageal strictures are uncommon even after extensive (>50 %) endoscopic resection of Barrett's-associated lesions, but the risk rises when 75 % or more of the luminal circumference is removed. Most cases resolve with repeated endoscopic dilatations, without requiring early salvage therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP076 Peroral endoscopic myotomy (Z-POEM) vs. flexible endoscopic septotomy for treatment of Zenker diverticulum: multicenter, randomized, single-blind, clinical trial

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DOI 10.1055/s-0046-1820731

Aims Flexible endoscopic septotomy (FES) is considered standard treatment of Zenker diverticulum (ZD) because of its safety and excellent efficacy. However, it usually requires multiple sessions and recurrences seem frequent because of incomplete cutting of the septum. Moreover, it involves an incision of the full thickness of diverticular septum hence, the risk of adverse events might be higher. Peroral endoscopic myotomy for ZD (Z-POEM) is a new emerging technique, with theoretical potential to overcome the limitations mentioned above. Our aim was to compare the efficacy and safety of the Z-POEM and FES.

Methods We performed a prospective, randomized multicenter, single-blind, trial in 7 centers across Europe and the United States. Patients with symptomatic ZD (at least 3 points as per Kothari–Haber Symptom Score (KHSS) measuring 10–50 mm were eligible. All investigators had extensive experience with both third space endoscopy (including Z-POEM) and FES. Procedures were standardized through online meetings and shared instructional videos. Symptoms were assessed at baseline and 1, 6, 12 and 24 months after treatment using multiple scores, with the KHSS as a primary measure. Main outcome was clinical success at 24 months. Clinical success was defined as KHSS <3 points without a need for additional treatment. Adverse events were assessed 1 month after the procedure according to the appropriate classification (AEs during third space endoscopy).

Results A total of 158 patients (mean age 70 years, 43.7 % female, mean Charlson comorbidity index 2.9) were randomly assigned to Z-POEM (79 patients) or FES (79 patients). Baseline ZD size was 26.8 mm, median symptom duration 22 months, and mean KHSS 6.6; Milano–Zenker scores were similar between groups (mean 4.8). All procedures were technically successful. Mean procedure time was 25.1 min in the Z-POEM group and 17.2 min in the FES group ($p=0.001$). Adverse events were observed in 2 patients (2.5 %) in the Z-POEM group and in 6 patients (7.6 %) in the FES group ($p=0.14$). All four (5.5 %) severe adverse events were observed in the FES group ($p=0.036$).

Of the 158 patients, 111 (70.3 %) completed full 2-years follow-up (47 patients died, dropped out due to severe illness or were lost to follow up) and 154 (97.5 %) underwent at least one follow up visit. Among patients completing full follow-up, clinical success at 24 months was achieved in 89.7 % (52/58) with Z-POEM and 81.1 % (43/53) with FES ($p=0.199$). In the cohort with at least one follow-up assessment, clinical success at the last available visit was 90.9 % (70/77) following Z-POEM and 79.2 % (62/77) after FES ($p=0.042$).

Conclusions Z-POEM demonstrates a trend toward higher long-term clinical success compared with FES and is associated with fewer severe adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP077 Comparative Outcomes of Conventional Flexible Endoscopic Septotomy and Third-Space Per-Oral Endoscopic Septotomy for Zenker's Diverticulum: A Propensity Score–Matched Analysis

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DOI 10.1055/s-0046-1820732

Aims Endoscopic management of Zenker's diverticulum (ZD) is increasingly shifting toward third-space techniques. Per-oral endoscopic septotomy (POES) may enable a more controlled and complete cricopharyngeal myotomy compared with conventional flexible endoscopic septotomy (FES), but direct comparative data remain scarce. We evaluated the efficacy and safety of POES versus FES in symptomatic patients with naïve ZD.

Methods Consecutive patients undergoing endoscopic treatment for symptomatic naïve ZD at two tertiary referral centers were retrospectively identified. Propensity score matching (1:1) was performed based on age, sex, ASA class, septum length, and operator expertise. Primary outcomes were technical success and 12-month clinical success. Adverse events (AEs) were classified using the ASGE lexicon and assessed for safety. Secondary endpoints included procedure time and length of hospital stay [1].

Results A total of 106 matched procedures (53 POES, 53 FES) were included with well-balanced baseline characteristics (54 % <75 years; 39 % male; 65 % ASA I–II; 63 % short septum; 81 % deep sedation without intubation; 75 % expert operators; all $p>0.05$). Technical success was achieved in all cases (100 % for both; $p>0.99$). AE rates were low and comparable (FES 7.5 % vs POES 1.9 %; $p=0.4$). POES was associated with one perforation, while FES with two intraprocedural bleedings and two perforations. Twelve-month clinical success did not differ significantly (POES 94.3 % vs FES 84.9 %; $p=0.20$). Mean procedure time was shorter with FES (17 ± 4 min) than POES (23 ± 5 min; $p<0.001$). Length of hospitalization favored POES (1.3 ± 0.2 vs 1.9 ± 0.4 days; $p<0.01$).

Conclusions In this multicenter propensity-matched analysis, POES and FES achieved equivalent technical and clinical outcomes for naïve ZD. Although POES required slightly longer procedure time, it offered similar safety with shorter hospital stay. These findings support POES as a safe, effective, and feasible alternative to conventional FES in appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Delgado LM, Meine GC, Santo P, Magalhães CM, Pimenta de Figueiredo VL, Ramos JA, Arantes VN. Endoscopic submucosal tunneling techniques versus flexible endoscopic septotomy for Zenker's diverticulum: a systematic review and meta-analysis. *Gastrointest Endosc* 2025; 101 (4): 751–761.e30. doi:10.1016/j.gie.2024.11.043

Predicting and Preventing Post-ERCP Pancreatitis: Staying Ahead of the Curve

14/05/2026, 15:30–16:30

Aqua 3 + 4

OP078 Novel method for immediate prediction of post-ERCP pancreatitis by using serum trypsin

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DOI 10.1055/s-0046-1820733

Aims Post-endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis (PEP) is the most common and potentially serious adverse event after ERCP. Because trypsin activation occurs at the earliest stage of pancreatitis, serum trypsin (TRY) may serve as a rapid biomarker for predicting PEP. Recently, a latex agglutination turbidimetric immunoassay has enabled quick and automated measurement of TRY, allowing immediate clinical use. This multicenter prospective study aimed to evaluate the diagnostic performance of TRY measured immediately and two hours after ERCP compared with conventional serum pancreatic enzymes.

Methods This multicenter prospective study was conducted at 12 tertiary centers in Japan between February 2024 and February 2025. TRY, serum amylase (AMY), pancreatic-type AMY (P-AMY), and lipase (LIP) were measured immediately after ERCP (0 h), and 2 h post-ERCP. All pancreatic enzymes were analyzed using a latex agglutination turbidimetric immunoassay, which provides results within minutes on standard automated chemistry analyzers. The primary outcome was to evaluate the diagnostic performance of 0-h TRY and 2-h TRY for predicting PEP. Diagnostic accuracy was assessed using four cutoff strategies: (1) the optimal value yielding the highest area under the receiver operating characteristic curve (AUC) and (2) fixed cutoffs of 2 ×, 2.5 ×, and 3 × the upper limit of normal (ULN), based on previous studies. Secondary outcomes included comparisons of the AUC of TRY with AMY, P-AMY, and LIP at 0 h and 2 h using DeLong's test. For patients who developed PEP, the magnitude of enzyme elevation was expressed as a ratio to the respective ULN. PEP was defined and graded according to consensus and Cotton's criteria [1–4].

Results A total of 463 patients were analyzed, and 48 (10.3 %) developed PEP (mild 40, moderate 6, severe 2). The optimal 0-h TRY cutoff was 2043 ng/mL, yielding an AUC of 0.83, with 68.7 % sensitivity and 84.6 % specificity. When defined as multiples of the ULN, the sensitivity of 0-h TRY was 75 % at 2 × ULN, 71 % at 2.5 × ULN, and 69 % at 3 × ULN, while specificity increased stepwise (69 %, 76 %, and 81 %, respectively). The optimal 2-h TRY cutoff was 2436 ng/mL, with an AUC of 0.89, 81.2 % sensitivity, and 84.3 % specificity. Using ULN-based val-

ues, sensitivity was 92 % at 2 × ULN, 90 % at 2.5 × ULN, and 85 % at 3 × ULN, with corresponding specificities of 66 %, 74 %, and 78 %.

TRY outperformed conventional enzymes in early prediction. The AUC of 0-h TRY was significantly higher than those of AMY (0.74, $p = 0.002$), P-AMY (0.78, $p = 0.007$), and LIP (0.80, $p = 0.048$). At 2 h, 2-h TRY (AUC 0.89) remained significantly superior to AMY (AUC 0.84, $p = 0.033$) and comparable to P-AMY (AUC 0.89) and LIP (AUC 0.90). In addition, when cut-off values were defined as multiples of the ULN according to previous studies, AMY and P-AMY showed very low sensitivities at 0 h (≤ 44 %). Although their sensitivities improved at 2 h (AMY 60–69 %; P-AMY 52–77 %, depending on the threshold), they consistently remained inferior to those of 0-h TRY and 2-h TRY across all ULN-based cutoffs. TRY also tended to demonstrate higher sensitivity than LIP when fixed ULN-multiple thresholds were applied. Among patients who developed PEP, TRY showed the greatest proportional increase relative to ULN immediately after ERCP (median ratio: TRY 6.85, AMY 1.53, P-AMY 1.53, LIP 4.07). At 2 h, LIP exhibited the most pronounced elevation (median ratio: LIP 16.37, compared with TRY 13.52, AMY 3.03, P-AMY 5.02). These temporal patterns highlight the earlier rise in TRY compared with other pancreatic enzymes, underscoring its potential as the earliest measurable biochemical indicator of PEP. Taken together, these findings indicate that measuring 0-h TRY enables highly accurate prediction of PEP at an ultra-early stage, well before conventional pancreatic enzymes show meaningful elevation.

Conclusions TRY can be measured immediately after ERCP using a rapid, automated latex agglutination immunoassay, demonstrating superior early diagnostic performance compared with conventional pancreatic enzymes. This simple and rapid assay has the potential to improve the safety and efficiency of post-ERCP patient management by providing real-time risk assessment during the critical early phase of PEP development.

Conflicts of Interest Dr. Masayuki Kitano has received grants from Boston Zeon Medical, Medtronic, and Medicus Hirata outside the submitted work. All other authors have no conflicts of interest or financial ties to disclose. This study received funding from Sumitomo Bakelite.

References

- [1] Cotton PB, Lehman G, Vennes J, Geenen JE, Russell RC, Meyers WC et al. Endoscopic sphincterotomy complications and their management: an attempt at consensus. *Gastrointestinal endoscopy* 1991; 37: 383–93
- [2] Tamura T, Ashida R, Emori T, Itonoga M, Yamashita Y, Hatamaru K et al. Serum trypsin as an early predictor of post-endoscopic retrograde cholangiopancreatography pancreatitis. *Journal of hepato-biliary-pancreatic sciences* 2024; 31: 917–25
- [3] Goyal H, Sachdeva S, Sherazi SAA, Gupta S, Perisetti A, Ali A et al. Early prediction of post-ERCP pancreatitis by post-procedure amylase and lipase levels: A systematic review and meta-analysis. *Endoscopy international open* 2022; 10: E952–e70
- [4] Dumonceau JM, Andriulli A, Deviere J, Mariani A, Rigaux J, Baron TH et al. European Society of Gastrointestinal Endoscopy (ESGE) Guideline: prophylaxis of post-ERCP pancreatitis. *Endoscopy*. 2010; 42: 503–15

OP079 Does Fatty Pancreas Matter? Evaluating the Risk of Post-ERCP Pancreatitis in Patients with Pancreatic Steatosis: A systemic review and meta-analysis

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DOI 10.1055/s-0046-1820734

Aims To systematically evaluate the association between pancreatic steatosis and the risk and severity of PEP.

Methods Systematic review and meta-analysis were conducted following PRISMA guidelines. MEDLINE, Embase, and Cochrane databases were searched through May 2025 for studies comparing PEP incidence in patients with and

without PS. Pooled relative risks (RRs) were calculated using random-effects models. Subgroup analyses examined the impact of demographic factors, procedural variables, and diagnostic indications.

Results Six studies involving 2,611 patients were included. PS was associated with a significantly increased risk of PEP [Relative Risk (RR):2.87; 95% confidence interval:1.53–5.40; $p < 0.001$], with an incidence of 21% in patients with PS compared to 8% in those without. PS was also linked to higher risk of mild (RR: 2.79), moderate (RR: 5.73), and severe PEP (RR: 4.92). Compared to non-PS, patients with PS had higher prevalence of diabetes (RR: 1.41) and female sex (RR: 1.15). No significant differences in procedural variables or diagnostic indications were observed between the PS and non-PS groups.

Conclusions Pancreatic steatosis is associated with an increased risk and severity of PEP. Further high-quality prospective studies are warranted to validate this association and determine whether PS should be incorporated into pre-procedural risk stratification and targeted preventive strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP080 Aggressive hydration associated to NSAIDs versus NSAIDs alone for post-ERCP pancreatitis prevention: a meta-analysis with meta-regression

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DOI 10.1055/s-0046-1820735

Aims Post-endoscopic retrograde cholangiopancreatography pancreatitis (PEP) remains the most frequent adverse event after ERCP. Although rectal nonsteroidal anti-inflammatory drugs (NSAIDs) and aggressive intravenous hydration are guideline-recommended prophylactic strategies, the incremental benefit of combining both interventions compared with NSAIDs alone remains uncertain. We conducted a systematic review and meta-analysis of randomized controlled trials (RCTs) to assess the efficacy of NSAIDs plus aggressive hydration versus NSAIDs alone for PEP prevention.

Methods This review was conducted in accordance with PRISMA and registered in PROSPERO (CRD420251006252). Comprehensive searches of MEDLINE, Scopus, and the Cochrane Library were performed up to October 2025. Eligible studies included RCTs with patients undergoing ERCP, assigned to receive either rectal NSAIDs + hydration or NSAIDs. The primary endpoint was assessing PEP risk; secondary endpoints included post-ERCP amylase/lipase levels. Random-effects models (DerSimonian–Laird) were used to estimate pooled risk ratios (RRs) with 95% confidence intervals (CIs). Statistical heterogeneity was assessed using I^2 statistics. Arm-specific PEP incidences were estimated via single-arm meta-analysis using the Freeman–Tukey transformation. Meta-regression on hydration volume in the form of a weighted linear regression analysis was performed. The certainty of evidence was assessed using GRADE.

Results Nine studies (7 fully published, 2 abstracts) encompassing 2,863 patients met the inclusion criteria. The pooled incidence of PEP was 3% (95% CI 1–6) in the NSAID + hydration group versus 7% (95% CI 5–9) with NSAIDs alone. The combined intervention significantly showed a reduction of PEP risk (RR 0.72; 95% CI 0.54–0.96; $p = 0.03$; $I^2 = 0\%$). Sensitivity analysis restricted to fully published RCTs yielded consistent results (RR 0.73; 95% CI 0.54–0.98). Subgroup analysis of studies explicitly excluding control-group with any hydration confirmed the benefit (RR 0.66; 95% CI 0.45–0.96). Post-ERCP amylase (mean difference –36.2 U/L; $p = 0.07$) and lipase (mean difference –122.9 U/L; $p = 0.37$) reductions did not reach significance, but these outcomes were reported only by two and three studies respectively. Meta-regression revealed a dose-dependent association between higher hydration volumes and greater PEP risk reduction ($p = 0.046$). GRADE rated the certainty of evidence for the primary outcome as moderate, with importance deemed critical.

Conclusions This meta-analysis of RCTs shows that combining rectal NSAIDs with aggressive periprocedural hydration significantly reduces PEP risk compared with NSAIDs alone, with low heterogeneity and moderate-quality evidence. Given its safety, simplicity, and low cost, NSAID + hydration prophylaxis represents a pragmatic and potentially superior approach for PEP prevention when aggressive hydration is not contraindicated. Further adequately powered, standardized RCTs are warranted to define the optimal hydration protocol (type, timing, and volume).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP081 Impact of Drugs on the Incidence of Post-ERCP Pancreatitis: The PEP-TALK Study

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DOI 10.1055/s-0046-1820736

Aims Endoscopic retrograde cholangiopancreatography (ERCP) has a pivotal role as an endoscopic procedure performed for the treatment of pancreatobiliary disorders. Post-endoscopic retrograde cholangiopancreatography pancreatitis (PEP) is the most frequent and clinically relevant adverse event of ERCP, with an incidence ranging from 3% to 10% in unselected populations. Despite advances in pharmacologic and procedural prophylaxis, PEP still accounts for significant morbidity and hospital costs. While rectal NSAIDs and pancreatic stenting are well-established preventive measures, the potential role of chronic medications, particularly statins, acetylsalicylic acid (ASA), remains uncertain. This study aimed to assess the association between chronic drug therapy and the incidence and severity of PEP in a large Italian cohort.

Methods A retrospective single-center cohort study was conducted at the UOC of Gastroenterology and Endoscopy, Morgagni–Pierantoni Hospital (Forlì, Italy). Patients undergoing ERCP between January 2019 and June 2025 were included. Chronic pharmacological therapies were recorded and categorized (statins, ASA, thyroid hormones, antihypertensives, anticoagulants, and others). The primary endpoint was the association between chronic drug use and PEP occurrence; the secondary endpoint was the relationship between chron-

ic therapies and PEP severity. Multivariate logistic regression identified independent predictors of PEP.

Results A total of 1,001 patients that performed ERCPs were analyzed. The overall incidence of PEP was 6.4% ($n=64$), predominantly mild (90.3%), with moderate and severe cases accounting for 6.5% and 3.2%, respectively. In univariate analysis, statin therapy was significantly less frequent among patients who developed PEP (9.4% vs. 21.9%; $p=0.018$), suggesting a potential protective effect. Conversely, thyroid hormone use was more common in patients with PEP (15.6% vs. 7.5%; $p=0.02$). In multivariate analysis, low BMI (OR 0.92, $p=0.034$) and cirrhosis (OR 6.7, $p=0.005$) emerged as independent risk factors, whereas statin therapy retained a significant protective association (OR 0.37, 95% CI 0.15–0.89; $p=0.03$). Thyroid hormone therapy did not remain significant after adjustment ($p=0.17$). Prophylactic pancreatic stenting was associated with PEP (OR 0.34, 95% CI 0.15–0.81; $p=0.016$), likely reflecting selection bias due to its preferential use in high-risk patients.

Conclusions PEP is a complication influenced by clinical, anatomical, procedural, and pharmacological factors. In this large Italian cohort, chronic statin therapy was independently associated with a reduced risk of PEP, supporting its potential anti-inflammatory and endothelial-stabilizing role. Cirrhosis and low BMI were confirmed as strong predictors of PEP. Thyroid hormone therapy showed a possible association with greater PEP severity but did not retain significance after adjustment. These findings are exploratory and should be interpreted cautiously; prospective multicenter studies and randomized controlled trials are needed to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP082 Prospective multicenter evaluation of the ARCHIMEDES biodegradable pancreatic stent for the prevention of post-ERCP pancreatitis

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DOI 10.1055/s-0046-1820737

Aims Post-ERCP pancreatitis is the most frequent complication of ERCP. Two preventive measures are currently recommended: rectal indomethacin for all patients and temporary pancreatic stenting for those at high risk. However, stents may cause ductal injury, require follow-up imaging, and often need a second endoscopy for removal. A biodegradable stent could provide the same preventive benefit while avoiding these drawbacks. The ARCHIMEDES biodegradable pancreatic stent has demonstrated encouraging feasibility and safety results in preliminary studies. We conducted a prospective multicenter study to assess the safety, efficacy, and spontaneous clearance of this stent for the prevention of post-ERCP pancreatitis.

Methods A polymer resorbable stent (Archimedes, Q3 Medical, USA) with fast resorption (12 days) was positioned under endoscopic and fluoroscopic control during high-risk ERCP defined following ESGE guidelines (Endoscopic papillectomy, known or suspected sphincter of Oddi dysfunction, pancreatic sphincterotomy, precut sphincterotomy, pancreatic guidewire-assisted biliary cannulation, and papillary dilation) or the combination of 2 among 3 risk factors (Women gender, Thin biliary duct, history of pancreatitis). Patients signed informed consent. The main outcome was clearance of the stent at D-30 after ERCP.

Secondary outcomes included side effects (Pancreatitis among others, graded regarding AGREE classification) and the ability to technically insert the stent during the procedure. The study was single armed, multicenter (Paoli Calmette Institute, Marseille & France Beaujon Hospital, Clichy, France). We planned to include 46 patients in the study with 45 days of follow-up.

Results A total of 52 patients were included in the study. The median age was 65 years (IQR 20–93), and 55.8% were male while 44.2% were female. Indications for pancreatic prophylactic stenting were the following: 22 patients underwent endoscopic papillectomy, 3 had sphincter of Oddi dysfunction, 18

underwent pancreatic sphincterotomy, 3 required an endoscopic precut, 1 underwent papillary dilation, 19 required double-guidewire technique for difficult biliary cannulation, 11 had a narrow biliary duct, and 9 had a history of pancreatitis.

Regarding the primary outcome, 3 patients (5.8%) still had residual stent fragments at day 30. None developed pancreatitis, and the stents fully resorbed during follow-up.

Technical success for stent insertion was 100%.

Regarding ERCP-related complications, 4 patients (7.7%) developed acute pancreatitis (mild to moderate, AGREE ≤ 2), 8 experienced bleeding (15%) (AGREE = 3), 1 had a perforation (1.9%), and 1 developed cholangitis (1.9%); the latter two were also classified as severe (AGREE = 3).

Conclusions This is the first prospective study evaluating the benefit of Archimedes biodegradable stents in preventing acute pancreatitis during high-risk endoscopic procedures. No patient required subsequent endoscopy for stent removal. Because the study was single armed and involved high-risk interventions, analyzing complication rates is challenging; however, fewer than 8% of patients developed pancreatitis, none of them being severe.

These findings are encouraging regarding the safety profile of Archimedes stents and support their potential use for preventing post-ERCP pancreatitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP083 Pancreatic Duct Stenting to Prevent Post-ERCP Pancreatitis: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1820738

Aims Prophylactic pancreatic duct (PD) stenting has been proposed to mitigate the risk of post-ERCP pancreatitis (PEP), particularly in high-risk populations. The aim of this study was to systematically review the evidence of the efficacy of prophylactic PD stenting in reducing the incidence of PEP in patients undergoing ERCP, including subgroup analyses of high-risk and average risk populations (▶ **Table 1**).

Methods A systematic review and meta-analysis were conducted according to PRISMA guidelines. Randomized controlled trials (RCTs) evaluating prophylactic PD stenting versus no stenting in adults undergoing ERCP were included. The primary outcome was incidence of PEP. Secondary outcomes included PEP incidence in high-risk subgroups, adverse events unrelated to PEP, mortality.

Results Eighteen RCTs comprising 4,637 participants (2,380 in the stent group and 2,257 in the no-stent group) were included. Prophylactic PD stenting significantly reduced the risk of PEP compared to no stenting (RR 0.45; 95% CI 0.32–0.62), with moderate heterogeneity ($I^2=57.2\%$). In the subgroup analysis, stenting reduced PEP risk in high-risk and average-risk populations (RR 0.48; 95% CI 0.31–0.73; $I^2=66.4\%$ and RR 0.41; 95% CI 0.25–0.69; $I^2=41\%$, respectively). The pooled incidence of adverse events unrelated to PEP was low (1%; 95% CI 0–3%), and mortality rates did not differ between groups (RR 0.44; 95% CI 0.09–2.07).

Conclusions Prophylactic PD stenting appears to significantly reduce the risk of PEP, in both high- and average-risk patients. However, considerable heterogeneity and methodological limitations across studies highlight the need for future trials to refine patient selection, stent characteristics and combination of prophylactic strategies.

► Table 1

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Stent	No stent	Relative(95 % CI)	Abso-lute(95 % CI)		
Post-ERCP Pancreatitis (assessed with: Risk Ratio)												
18	ran-domised trials	not serious	not serious	not serious	not serious	publica-tion bias strongly suspec-ted ^a	223/2380 (9.4%)	387/2257 (17.1%)	RR 0.45(0.32 to 0.62)	94 fewer per 1,000(from 117 fewer to 65 fewer)	Moderate ^a	CRITI-CAL
Mortality post ERCP (assessed with: Risk Ratio)												
4	ran-domised trials	not serious	not serious	not serious	not serious	none	1/1127 (0.1%)	5/1128 (0.4%)	RR 0.44(0.09 to 2.07)	2 fewer per 1,000(from 4 fewer to 5 more)	⊕⊕⊕⊕High	CRITI-CAL
New outcome												
	ran-domised trials	not serious	not serious	not serious	not serious	none	173/1842 (9.4%)	284/1755 (16.2%)	RR 0.48(0.31 to 0.73)	84 fewer per 1,000(from 112 fewer to 44 fewer)	⊕⊕⊕⊕High	CRITI-CAL

Conflicts of Interest AR – Consultant for Fujifilm and Medtronic; MS – Consultant for Boston Scientific, Speaker for Olympus; JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; Yen-I Chen is a consultant for Boston Scientific and Cook Medical; All the authors have no relevant financial disclosures or conflicts of interest to declare.

See More, Know More: AI for Detection and Optical Diagnosis

14/05/2026, 15:30–16:30

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OP084 A Nationwide study of Artificial Intelligence in Adenoma Detection during Colonoscopy – Result from the NAIAD trial

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DOI 10.1055/s-0046-1820739

Aims The detection and resection of adenomatous polyps during colonoscopy decrease the incidence of colorectal cancer and associated mortality [1, 2] with adenoma detection rate (ADR) being a key quality performance indicator. While higher ADR is associated with lower post-colonoscopy colorectal cancer (PCCRC) rates, the latter varies significantly across the UK, and the true 'baseline' ADR is unknown [3, 4]. Meeting the rising demand for high quality colonoscopy is a significant challenge.

The use of computer assisted detection (CADe) is associated with a significant improvement in ADR across multiple clinical trials [5, 6], but real-world performance data is lacking.

We sought to evaluate effect on adenoma detection of implementing CADe in a 'real-world' setting, in the largest such study to date.

Methods This was randomised; stepped-wedge, open-label trial evaluated the site-level effect of the GI Genius (GIG) computer-aided detection (CADe) system on adenoma detection. Both District General Hospitals and Teaching Hospitals participated, with procedures performed by expert ($\geq 2,000$ lifetime colonoscopies; PDR $> 40\%$) and non-expert ($< 2,000$ lifetime colonoscopies) endoscopists.

All patients undergoing routine colonoscopy were eligible, excluding those attending for polyp or IBD surveillance. The study reflected real-world practice, with no procedural modifications other than CADe activation.

Data were collected over three consecutive 3-month phases: Phase 1 (baseline; CADe inactive), Phase 2 (intervention; CADe active), and Phase 3 (post-intervention; CADe withdrawn).

The primary outcome, adenoma detection rate (ADR), was analysed using generalised linear mixed-effects models, with study phase, patient age, endoscopist gender and expertise, bowel preparation quality, hospital type, and withdrawal time as fixed effects, and site and endoscopist as random effects to account for clustering.

Results Between November 2023 and February 2025, 4,514 colonoscopies from 25 hospitals (England, Scotland, Wales) were analysed. ADR increased from 30.0% in Phase 1 to 34.8% during the GI Genius intervention (Phase 2) and declined to 27.6% post-intervention ($p < 0.001$) (► Table 1). After adjustment, Phase 2 was associated with a 17% higher ADR (aOR 1.17, 95% CI 1.01–1.35, $p = 0.040$). Older age, endoscopist expertise, male gender, and withdrawal time independently predicted higher ADR.

► **Table 1** Adenoma detection rates across the three phases

	Phase 1	Phase 2	Phase 3	p-value
Overall ADR	30.0% (27.8–32.3)	34.8% (32.4–37.3)	27.6% (25.3–29.9)	<0.001
Average Site	29.9% (7.9; 16.4–45.3)	34.3% (8.9; 14.7–47.9)	27.9% (7.4; 15.2–44.2)	0.001†
DGH	27.3% (24.6–30.2)	35.0% (31.9–38.2)	27.6% (24.8–30.6)	<0.001
TH	34.4% (30.7–38.3)	34.5% (30.9–38.4)	27.5% (24.0–31.3)	0.014
Expert	33.8% (29.9–37.8)	37.6% (33.6–41.9)	30.7% (26.7–35.0)	0.068
Non-expert	28.0% (25.3–30.8)	33.3% (30.3–36.3)	26.1% (23.4–28.9)	0.002

Conclusions CAde use was associated with an average 4 % absolute and 17 % relative increase in adenoma detection after adjustment for covariates. However, this effect was not sustained following system withdrawal. These findings support the integration of real-time CAde to enhance colonoscopy quality, while emphasising the importance of preserving endoscopist skill and long-term performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang P et al. "Effect of a deep-learning computer-aided detection system on adenoma detection during colonoscopy (CADE-DB trial): a double-blind randomised study. The Lancet Gastroenterology & hepatology 5 (4): 2020; 343–351
- [2] Shaikat A, Lichtenstein DR, Somers SC, Chung DC et al Computer-Aided Detection Improves Adenomas per Colonoscopy for Screening and Surveillance Colonoscopy: A Randomized Trial. Gastroenterology 2022; 163 (3): 732–741. doi:10.1053/j.gastro.2022.05.028 Epub 2022 May 25 PMID: 35643173
- [3] Corley D.A., Jensen C.D., Marks A.R. et al. Adenoma detection rate and risk of colorectal cancer and death. N Engl J Med 370: 2014; pp 1298–1306
- [4] Burr NE, Derbyshire E, Taylor J, Whalley S, Subramanian V, Finan PJ et al. Variation in post-colonoscopy colorectal cancer across colonoscopy providers in English National Health Service: population based cohort study. BMJ 2019; 367: l6090. doi:10.1136/bmj.l6090
- [5] Kaminski M.F., Wieszczyn P., Rupinski M. et al. Increased rate of adenoma detection associates with reduced risk of colorectal cancer and death. Gastroenterology 153: 2017; pp 98–105
- [6] Kaminski M.F., Regula J., Kraszewska E. et al. Quality indicators for colonoscopy and the risk of interval cancer. N Engl J Med 362: 2010; pp 1795–1803

OP085 Computer-Aided Colonoscopy Alert Fatigue and Its Effect on Adenoma Detection

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DOI 10.1055/s-0046-1820740

Aims Computer-aided detection (CADE) can improve colonoscopy adenoma detection rates (ADR). However, prolonged exposure to repeated alerts may lead to alert fatigue, potentially diminishing its effectiveness. We aimed to determine whether alert fatigue occurs during CAde use and, if so, how it influences ADR throughout the day [1–5].

Methods We conducted a secondary analysis of a prospectively collected cohort to evaluate how ADR varied with and without CAde in a pragmatic, real-world implementation. Elective colonoscopies performed at the University of Montreal Hospital Center were analyzed according to their position within the endoscopist's daily schedule. The primary outcome was ADR across procedure order, adjusted for withdrawal time (WT). Secondary outcomes included adenomas per colonoscopy (APC), ADR by time of day, and ADR across different WT categories.

Results A total of 1,700 colonoscopies were analyzed, including 880 with CAde assistance and 820 without. In the CAde-unassisted group, ADR remained stable throughout the day (1st–3rd procedures: 39.4 %, 95 % CI [35.1–43.8]; 4th–7th procedures: 40.9 %, 95 % CI [32.9–49.5]). By contrast, ADR in CAde-assisted procedures was markedly higher in the first three procedures (49.9 %, 95 % CI [45.5–54.3]) but dropped significantly to 39.9 % (95 % CI [33.8–46.3]) in later procedures. This pattern was consistent when ADR was assessed by time of day. Similarly, APC were significantly higher in early CAde-assisted procedures (mean increase + 0.27, 95 % CI [0.14–0.41], $p < 0.001$), but this benefit disappeared in later procedures (+ 0.11, 95 % CI [–0.09–0.31], $p = 0.51$). WT analysis further supported this effect: ADR gains per additional minute were higher in unassisted colonoscopies (21.6 % early vs. 15.3 % late) than in CAde-assisted colonoscopies (10.5 % early vs. 10.1 % late).

Conclusions CAde assistance significantly improved ADR during early-day colonoscopies, but this benefit disappeared in later-day procedures. This pattern suggests that alert fatigue may limit endoscopists' responsiveness to CAde prompts as the day progresses.

Conflicts of Interest Daniel von Renteln has received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Satisfai Health, Fujifilm, and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Medtronic, and Pendopharm. Roupen Djinbachian has received speaker fees from Fujifilm. Douglas K Rex is a consultant for Boston Scientific Inc., Olympus Corporation, Braintree Laboratories, Sebel Pharmaceuticals, Laborie, and Medtronic; has received research support from Boston Scientific Inc., Sebel Pharmaceuticals, Medtronic, Olympus Corporation, and ERBE Elektromedizin GmbH, and has ownership interest in Satisfai Health. The remaining authors declare that they have no conflict of interest.

References

- [1] Djinbachian R., Taghiakbari M., Calce S.I., Michal V., Deslandres E., Bouin M., Liu Chen Kiow J., Panzini B., Bouchard S., Daoud D.C., von Renteln D. 2025 Withdrawal time, CAde and adenoma detection: a prospective study. Gut gutjnl-2025-335380. Advance online publication. doi:10.1136/gutjnl-2025-335380
- [2] Marcondes F.O., Gourevitch R.A., Schoen R.E., Crockett S.D., Morris M., Mehrotra A. 2018; Adenoma Detection Rate Falls at the End of the Day in a

Large Multi-site Sample. Digestive diseases and sciences 63 (4): 856–859. doi:10.1007/s10620-018-4947-1

[3] Sanaka M.R., Deepinder F., Thota P.N., Lopez R., Burke C.A. 2009; Adenomas are detected more often in morning than in afternoon colonoscopy. The American journal of gastroenterology 104 (7): 1659–1665. doi:10.1038/ajg.2009.249

[4] Corley D.A., Jensen C.D., Marks A.R., Zhao W.K., Lee J.K., Doubeni C.A., Zauber A.G., de Boer J., Fireman B.H., Schottinger J.E., Quinn V.P., Ghai N.R., Levin T.R., Quesenberry C.P. 2014; Adenoma detection rate and risk of colorectal cancer and death. The New England journal of medicine 370 (14): 1298–1306. doi:10.1056/NEJMoa1309086

[5] Shaukat A., Rector T.S., Church T.R., Lederle F.A., Kim A.S., Rank J.M., Allen J.I. 2015; Longer Withdrawal Time Is Associated With a Reduced Incidence of Interval Cancer After Screening Colonoscopy. Gastroenterology 149 (4): 952–957. doi:10.1053/j.gastro.2015.06.044

OP086 Automated Lewis Score Binary Classification From Frame Probabilities

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DOI 10.1055/s-0046-1820741

Problem to solve The Lewis Score (LS) is an established capsule endoscopy (CE) index for grading small-bowel inflammation in Crohn's disease (CD) and guiding therapy decisions. However, deriving an LS requires full CE video review, making it time-consuming and prone to inter-observer variability. As the number of CE procedures grows, manual scoring has become increasingly impractical. While most AI models operate at the frame level, clinical interpretation depends on the study level. Bridging this gap requires automated tools that provide both accuracy and interpretability at clinically meaningful LS thresholds.

Innovation We developed a video-level classification framework that transforms frame-wise probabilities into interpretable temporal features, facilitating automated LS classification across severity thresholds. A fine-tuned convolutional network produced frame probabilities for four categories: normal mucosa, ulcer, stricture, and uninterpretable frames. From these probabilities, we derived 42 summary features for each study, including the longest contiguous ulcer sequence, the duration above high-probability thresholds, and the distribution of ulcer and stricture signals throughout bowel segments [1–3].

These features served as inputs to logistic regression and a multilayer perceptron (MLP). In parallel, a 1D convolutional neural network (CNN) with attention operated directly on the sequence of per-frame probabilities. We evaluated how accurately these models assigned videos above vs below predefined LS thresholds (► **Table 1**).

The dataset included 1,135 CE videos analyzed using five-fold, patient-grouped cross-validation to prevent patient leakage and ensure robust generalization. Models were trained and tested across LS thresholds of ≥ 135 (mild), ≥ 790 (moderate), and ≥ 2000 (severe).

Results Across thresholds, models achieved substantial and consistent discrimination. Average AUROC reached 0.81 (95% CI 0.79–0.83) at $LS \geq 135$, 0.89 (0.89–0.90) at $LS \geq 790$, and 0.88 (0.82–0.91) at $LS \geq 2000$. Sensitivity and specificity were well balanced (≈ 0.7 –0.8 and 0.82–0.85, respectively). CNN attention maps consistently highlighted the distal third of the small bowel—where Crohn's pathology typically peaks—while logistic regression and MLP importance analyses emphasized ulcer burden and distal involvement. The convergence between spatial attention and feature-level importance provides

explainability and supports the clinical plausibility of the approach. These results show that video-level LS classification can be achieved without direct manual annotation of the entire video, using only frame-wise probabilities as input.

Conclusions Frame-wise probabilistic outputs enabled video-level models to distinguish between various studies across multiple LS thresholds effectively. This framework also provided interpretable, threshold-specific feature profiles offering insights into relevant characteristics at different LS thresholds that are consistent with expected patterns. These results indicate promise for triage support; however, external, multi-centre validation, calibration, and prospective assessment within clinical workflows are necessary. This work was performed with a generous support of the Leona M. and Harvey B. Helmsley Foundation.

► **Table 1** Performance Metrics by Model and Threshold

Model	AUROC (95% CI)	Sensitivity (95% CI)	Specificity (95% CI)
LS ≥ 135			
Logistic Regression	0.832 (0.810–0.854)	0.701 (0.679–0.723)	0.895 (0.857–0.932)
MLP	0.793 (0.767–0.817)	0.705 (0.684–0.728)	0.745 (0.692–0.796)
CNN (1D + attention)	0.806 (0.806–0.806)	0.709 (0.709–0.709)	0.819 (0.819–0.819)
LS ≥ 790			
Logistic Regression	0.897 (0.880–0.915)	0.787 (0.750–0.825)	0.856 (0.838–0.873)
MLP	0.889 (0.871–0.906)	0.810 (0.776–0.846)	0.827 (0.808–0.846)
CNN (1D + attention)	0.888 (0.869–0.907)	0.726 (0.686–0.771)	0.876 (0.860–0.893)
LS ≥ 2000			
Logistic Regression	0.907 (0.866–0.956)	0.851 (0.774–0.929)	0.876 (0.861–0.891)
MLP	0.908 (0.872–0.947)	0.851 (0.774–0.931)	0.859 (0.843–0.876)
CNN (1D + attention)	0.818 (0.818–0.818)	0.809 (0.809–0.809)	0.798 (0.798–0.798)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gralnek IM, Defranchis R, Seidman E, Leighton JA, Legnani P, Lewis BS. Development of a capsule endoscopy scoring index for small bowel mucosal inflammatory change. Aliment Pharmacol Ther 2008; 27 (2): 146–154. doi:10.1111/j.1365-2036.2007.03556.x
- [2] Cortegoso Valdivia P, Deding U, Bjørsum-Meyer T, Baatrup G, Fernández-Urién I, Dray X, Boal-Carvalho P, Ellul P, Toth E, Rondonotti E et al. Inter/Intra-Observer Agreement in Video-Capsule Endoscopy: Are We Getting It

All Wrong? A Systematic Review and Meta-Analysis. *Diagnostics* 2022; 12 (10): 2400. doi:10.3390/diagnostics12102400

[3] Cortegoso Valdivia P, Deding U, Bjørsum-Meyer T, Baatrup G, Fernández-Urién I, Dray X, Boal-Carvalho P, Ellul P, Toth E, Rondonotti E et al. Inter-Observer Agreement in Video-Capsule Endoscopy: Are We Getting It All Wrong? A Systematic Review and Meta-Analysis. *Diagnostics*. 2022

OP087 Artificial Intelligence for characterization of colorectal polyps in the Middle East: A Multicenter RCT

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DOI 10.1055/s-0046-1820742

Aims In recent years, several studies have evaluated artificial intelligence (AI)-powered optical-diagnosis systems (CADx) in characterization. Accurate real-time characterization of colorectal lesions can substantially reduce pathology-related costs and procedure time. However, studies are lacking in the Middle East populations which differ in endoscopist training, disease prevalence and adherence to colorectal cancer (CRC) screening recommendations. Given the rising incidence of CRC in this region and limited implementation of organized screening programs, it is critical to evaluate whether AI-driven optical diagnosis can be effectively optimized for local clinical practice. This multicenter RCT is the first in the Middle East to assess the real-time performance of CADx in polyp characterization and its potential role in implementation of resect-and-discard strategies [1–3].

Methods A prospective RCT across seven healthcare centers in Egypt, Bahrain, Iran, Jordan, Saudi Arabia, and Kuwait. Expert endoscopists performed colonoscopies in patients aged 40–80 using AI-equipped colonoscopes (CAD EYE, Fujifilm). The primary endpoint was sensitivity for neoplastic polyps by CADx and visual inspection, compared with histopathology. Secondary end points were specificity and diagnostic accuracy.

Results Overall, 523 polyps in 441 patients were documents (n = 200 adenomas, n = 323 hyperplastic polyps). CADx demonstrated a sensitivity of 64.8%, specificity 91.1%, positive predictive value (PPV) of 87.7% and negative predictive value (NPV) of 72.7% for neoplastic polyps. Expert endoscopists had a sensitivity of 91.6%, specificity of 55.4%, PPV of 60% and NPV of 90%. The overall diagnostic accuracy was **78.0%** for CADx versus **70.7%** for endoscopists (p < 0.05).

Conclusions This is the first multicenter RCT in the Middle East to evaluate real-time AI-assisted optical diagnosis of colorectal polyps. CADx achieved higher specificity and diagnostic accuracy than expert visual assessment, suggesting its potential role in improving efficiency, reducing unnecessary pathology submissions, and enabling safe resect-and-discard practice in the region. Future research should focus on algorithmic tuning for regional lesion characteristics and cost-effectiveness modeling to inform large-scale adoption.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] *Int J Cancer*. 2024; 155: 54–60
- [2] *Transl Gastroenterol Hepatol*. 2023; 8: 42
- [3] *Lancet Gastroenterol Hepatol*. 2024; 9: 1010–1019

OP088 Real-Time Clinical Performance of an AI-Assisted Magnifying NBI Diagnostic System for Early Gastric Cancer: A Multicenter Prospective Study

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DOI 10.1055/s-0046-1820743

Aims Although several AI-based endoscopic diagnostic systems for early gastric cancer have been developed in East Asia, their clinical utility remains limited due to false-positive detections. On the other hand, magnifying endoscopy with narrow-band imaging (M-NBI) has already been established as a useful diagnostic modality. To improve endoscopic diagnostic accuracy, we developed an AI system using M-NBI (M-NBI AI) and conducted a multicenter prospective study to evaluate its real-time performance and incremental benefit to endoscopists.

Methods From July 2022 to October 2023, M-NBI was performed in patients with high risk of gastric cancer at four Japanese institutions. When gastric lesions needed to be distinguished as cancer or non-cancer, biopsy was performed. A total of 241 M-NBI videos (early gastric cancer: 126, non-cancerous lesion: 115) from these procedures were collected prospectively and randomly edited into a test format for answering by 32 endoscopists. Using the answer software, endoscopists submitted their diagnostic results of collected videos, classified as cancer or non-cancer. As the initial comparison test, diagnostic accuracy, sensitivity, specificity, PPV, and NPV were compared with those of M-NBI AI. Six months later, a second test of same videos was conducted to assess the additive benefit of AI support by allowing endoscopists to make diagnoses with reference to the AI results. The endoscopists were divided into expert and non-expert groups, and these comparisons with AI were performed for all endoscopists, experts, and non-experts.

Results Diagnostic performance (accuracy/sensitivity/specificity/PPV/NPV) was: **M-NBI AI**: 80.1% [74.5–84.9] / 93.7% [87.9–97.2] / 65.2% [55.8–73.9] / 74.7% [67.2–87.3] / 90.4% [81.9–95.7], **All endoscopists**: 68.9% [67.9–70.0] / 65.4% [63.9–66.8] / 72.9% [71.4–74.3] / 72.5% [71.0–74.0] / 65.7% [64.3–67.2], **Experts**: 73.7% [72.0–75.4] / 69.6% [67.1–72.0] / 78.3% [75.9–80.5] / 77.8% [75.4–80.1] / 70.2% [67.7–72.5], **Non-experts**: 66.4% [65.1–67.7] / 63.1% [61.2–65.0] / 70.0% [68.1–71.8] / 69.8% [67.9–71.6] / 63.4% [61.5–65.2]. With AI assistance, diagnostic performance improved as follows: **All endoscopists**: 77.7% / 77.0% / 78.6% / 79.8% / 75.7%, **Experts**: 80.0% / 81.7% / 78.1% / 80.3% / 79.5%, **Non-experts**: 75.9% / 73.0% / 79.0% / 79.2% / 72.8%. M-NBI AI showed significantly higher accuracy, sensitivity, and NPV than the average of all endoscopists, and higher sensitivity and NPV compared with experts. In addition, M-NBI AI support significantly improved diagnostic performance in most metrics, particularly among non-experts.

Conclusions M-NBI AI demonstrated superior diagnostic performance compared with endoscopists. When used as an assistive tool, it is particularly effective for non-expert endoscopists and may contribute to standardizing diagnostic quality and improving early gastric cancer detection in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Turning up the heat: EUS guided RFA in oncology

14/05/2026, 15:30–16:30

Aqua 1 + 2

OP089 EUS-Guided Radiofrequency Ablation for IPMNs with Worrisome Features: Promise or Illusion?

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DOI 10.1055/s-0046-1820744

Aims Branch-duct intraductal papillary mucinous neoplasms (BD-IPMNs) are precancerous cystic lesions. Surgery is advised for high-risk stigmata (HRS) or multiple worrisome features (WF) but entails substantial morbidity, and many resections reveal only low-grade dysplasia. Endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) is a minimally invasive alternative, yet long-term data are limited (► **Table 1**).

► **Table 1** WF/HRS at baseline and local control/complete response after EUS-RFA in BD-IPMN (N = 52)

	Mural nodule ≥ 5mm	22 (42 %)	21/22	2/22
HRS	Obstructive jaundice	0 (0 %)	0	0
	Main pancreatic duct ≥ 10mm	0 (0 %)	0	0
WF	Rapid growth (≥ 5 mm over 2 years)	24 (46 %)	24/24	5/24
	Mural nodule ≤ 5mm	10 (19 %)	10/10	0
	Cyst ≥ 30mm	12 (23 %)	12/12	0
	Pancreatitis due to the IPMN	13 (25 %)	12/13	0
	Thickened/enhancing cyst wall	10 (19 %)	10/10	1/10
	Main duct size 5-9mm	6 (11.5 %)	6/6	0
	Abrupt change in caliber of main pancreatic duct with distal pancreatic atrophy	2 (4 %)	2/2	1/2
	New onset diabetes at diagnosis	2 (4 %)	2/2	0
Number of HRS and WF per treated IPMN	0	1	1/1	1/1
	1	26	26/26	7/26
	2	12	11/12	1/12
	3	9	9/9	0/9
	4	3	3/3	0/3
	5	1	1/1	0/1

Methods We retrospectively analyzed a prospectively maintained cohort of consecutive patients who underwent EUS-RFA for BD-IPMNs with WF/HRS at a tertiary referral center (2015–2024). Eligible patients were inoperable or declined surgery. Outcomes included technical success, adverse events (AEs), local control (resolution of WF/HRS with no cancer arising from the treated lesion), radiologic response, and pancreas-wide events.

Results Fifty patients (62 procedures; 58 lesions) were treated. Mean follow-up was 4.1 ± 2.8 years after RFA (9 years from IPMN diagnosis). Technical success was 100 %. AEs occurred in 27 %, mostly mild abdominal pain; significant AEs occurred in 8 % (acute pancreatitis); there were no procedure-related deaths. Local control was achieved in 98 % of lesions; 17 % showed complete radiologic disappearance and 86 % decreased in size. No treated lesion progressed to cancer. Pancreas-wide disease control was maintained in 80 % of patients; four (8 %) developed pancreatic cancer remote from the treated cyst. Smaller cyst size and fewer WF were associated with better outcomes.

Conclusions EUS-RFA is feasible, safe, and provides durable local control of BD-IPMNs with WF/HRS in patients unsuitable for surgery or declining resection. These results support EUS-RFA as a promising therapeutic option in carefully selected patients. Larger prospective studies are needed to refine selection criteria and confirm long-term oncologic benefit.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP090 OSPREY Registry: First Interim Analysis of Patients with Unresectable Locally Advanced Pancreatic Cancer Treated with EUS-Guided Phosphorus-32 Microparticles plus Gemcitabine-Based Chemotherapy in Routine Clinical Practice

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DOI 10.1055/s-0046-1820745

Aims To present, on behalf of the OSPREY Registry Investigators, the first interim analysis of outcomes for patients with unresectable locally advanced pancreatic cancer (uLAPC) treated with EUS-guided Phosphorus-32 (³²P) microparticle implantation plus chemotherapy and enrolled in the OSPREY registry.

Methods OSPREY is a post-market, multi-centre, observational, prospective registry in which data is recorded from patients with uLAPC receiving gemcitabine-based chemotherapy who had EUS-guided implantation of ³²P microparticles (OncoSil Medical) device as part of their routine clinical care. Enrolment commenced April 2022 and is ongoing. Registry objectives include safety/tolerability (Adverse Device Effects [ADEs] possibly or probably related to ³²P device and/or implantation) and efficacy outcomes.

Results At 1 August 2025, 64 patients (median age 66.5 years; 50 % female) had enrolled in the registry from 19 centres in Austria (3 patients [4.7 %]), Italy (12 [18.8 %]), Greece (12 [18.8 %]) and Spain (37 [57.8 %]). 48 (75 %) patients had ³²P microparticles implanted during 1st-line chemotherapy, 25 (39.1 %) at ≤ 4 months from chemotherapy start and 22 (34.4 %) at 4–12 months of chemotherapy start; 14 (21.9 %) patients were implanted during 2nd-line chemotherapy, primarily (17.2 %) at ≤ 4 months of commencing 2nd-line chemotherapy. In total, 15.6 % of patients reported ADEs. All ADEs were considered mild; 9 (14.1 %) patients reported Grade 1 abdominal pain and 1 (1.6 %) reported Grade 2 asthenia/fatigue, also possibly related to chemotherapy. All ADEs were anticipated, transient, managed conservatively and resolved without clinical sequelae. There were no Grade > 3 or serious ADEs (SADEs), no acute complications, no pancreatitis and no patient required hospital admission. The Local Disease Control Rate at 12 weeks post-implant (alive; no tumour progression) was 91.4 % in 1st-line chemotherapy patients and 77.8 % at 2nd-line. To date, 7 patients had their tumours surgically resected with curative intent: 3 implanted ≤ 4 months from starting 1st-line chemotherapy, 3 implanted at 4–12 months from starting 1st-line chemotherapy, and 1 implanted ≤ 4 months from starting 2nd-line chemotherapy; 5/7 (71.4 %) patients had R0 resection margins and 2/7 (28.6 %) had R1 margins. In 50 patients with imaging follow-up, pro-

gressive disease (PD) was more frequently reported at distant sites (26.0%) vs. locally (14.0%) or synchronously (2.0%); 1 (2.0%) patient died without imaging and no PD was observed in 56.0% to date. Median Overall Survival was 20.6 months (95% CI 16.9–20.1) from diagnosis and 17.3 months (95% CI 15.7–23.7) from starting chemotherapy in patients implanted at ≤ 4 months from starting 1st-line chemotherapy, 22.0 months (95% CI 17.2–22.7) from diagnosis and 20.0 months (95% CI 16.0–22.2) from starting chemotherapy in patients implanted at 4–12 months from starting 1st-line chemotherapy, and 17.0 months (95% CI 11.3–20.0) from diagnosis and 10.5 months (95% CI 8.4–12.9) from starting 2nd-line chemotherapy in patients implanted ≤ 4 months from starting 2nd-line chemotherapy.

Conclusions EUS-guided implantation of ³²P microparticles added to chemotherapy for patients with uLAPC receiving routine clinical care was safe and well tolerated, and appears to provide local disease control, downstaging to surgical resection in a proportion of patients and encouraging overall survival. Enrolment in the registry is ongoing and follow-up continues.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP091 Endoscopic ultrasound guided radiofrequency ablation for treatment of pancreatic neuroendocrine tumors- disappointing results after 3 years experience?

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DOI 10.1055/s-0046-1820746

Aims Endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) is an emerging minimally invasive therapeutic technique that represents a promising alternative for selected patients with both functional (F-) and non-functional (NF-) pancreatic neuroendocrine tumors (PanNETs). The aim was to present the initial experience, focusing on safety and efficacy.

Methods A retrospective analysis of a prospective database was performed. We included all consecutive patients with PanNETs treated with EUS-RFA between August 2022 and July 2025. Baseline patient characteristics, procedural parameters, and therapeutic outcomes were collected from electronic medical records. We analysed data on technical aspects of the procedure- size of electrode, system settings, number of applications per session and number of sessions. Primary endpoint was the technical success, defined as successful insertion of the electrode into the target lesion. Secondary endpoint was the rate of complete response, defined as not detectable lesion on CT scan at 3 or 6 months follow-up.

Results A total of 13 EUS-RFA sessions were performed in 11 patients (mean age 68.64 years, 64% female). The mean lesion size was 16.52 mm. All lesions were **well-differentiated G1 PanNETs** (Ki-67 ≤ 2%). According to lesion type, 54,5% (N = 6) were nonfunctioning pancreatic neuroendocrine tumors (NF-PanNETs) and 45.5% (N = 5) were functioning (F-PanNETs, all insulinomas). Procedures were performed using a 10mm **19G EUSRA needle (Taewoong Medical, South Korea)**. Power settings were **50 W**, with **1–6 applications per session**. Technical success was achieved in 100% of patients. Complete radiologic response (defined as 100% absence of viable tissue) after 3 months postprocedure was observed in 27.27% (N = 3) of cases — two patients with F- and one patient with NF-PanNET. A partial response was observed in 36,4% (N = 4) of cases, while in two patients follow-up imaging studies are still not performed. Two patients were lost to follow-up and also two patients underwent a second ablation session 3 months after the first session, resulting in additional tumor reduction. Complete resolution of symptoms related to hormonal hypersecretion was documented in 100% of patients with insulinoma after EUS-RFA. Adverse events included one case (N = 1; 9.09%) of gastrointestinal bleeding from

the puncture site due to a duodenal ulcer, successfully managed endoscopically and **three cases (27.3%) of transient asymptomatic hyperamylasemia**. No pancreatitis or procedure-related mortality occurred. Median follow-up was **12 months (range 2–35 months)**. Lesions located in the pancreatic head tended to show better radiologic outcomes, whereas those in the uncinate process demonstrated a less pronounced response to ablation. Smaller lesions (< 1 cm) appeared to respond more effectively than larger ones.

Conclusions The procedure is feasible, safe and highly effective in treating insulinoma. The symptoms disappear in 100% of patients despite not achieving complete radiological response in some cases. No recurrent symptoms were observed after at least 6 months follow-up. In cases of NF NETs the effectiveness of the procedure remains unclear. The most appropriate settings of the system and number of sessions remain to be clarified. Unified follow-up protocol is also needed and clear definition of complete response needs to be established. Probably the delayed immunological effect of RFA needs also to be taken into account.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP092 Endoscopic Ultrasound-Guided Radiofrequency Ablation (EUS-RFA) for liver lesions unsuitable for percutaneous treatment: a case series

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DOI 10.1055/s-0046-1820747

Aims Percutaneous radiofrequency ablation (PT-RFA) is an established curative treatment for early-stage hepatocellular carcinoma (HCC) [1, 2]. In some patients the percutaneous route can be technically challenging, particularly for lesions located in the caudate or left hepatic lobe close to the stomach, or those adjacent to major vascular structures and the gallbladder. Endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) has recently emerged as a minimally invasive alternative option for solid hepatic lesions difficult or impossible to treat percutaneously. The evidence supporting its use mostly to treat hepatocellular carcinoma (HCC) remains limited to few case reports and one case series [3–7]. We report our experience in utilizing EUS-RFA for hepatic solid lesions over a 3-year period.

Methods Retrospective single center study performed in patients who underwent endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) for liver lesions at our institution between April 2021 to July 2024. Patients were selected during a multidisciplinary meeting involving hepatologists, surgeons, interventional radiologists, oncologists, and endoscopists. All the procedures were performed with EUSRA (Taewoong Medical, Gyeonggi-do, South Korea) 19-gauge needle, attached to a dedicated VIVA RFA generator (starMed, South Korea) and a cooling system. Before EUS-RFA, contrast enhancement was utilized to delineate the lesion. Multiple RFA passes were performed inside the lesion, with attention to fully ablate the margins. Need for further RFA passes was re-evaluated using contrast enhancement. The primary outcome was treatment efficacy, defined as radiological response at 1 month according to modified RECIST (mRECIST) criteria [8]. Alpha-fetoprotein (AFP) levels were also measured at the 1-month follow-up. Secondary outcomes included the assessment of tumour control at 3 and 6 months and recurrence during follow-up, technical success and safety.

Results Overall seven patients (6 HCC, 1 intrahepatic cholangiocarcinoma) were treated with a mean age of 70 ± SD; M:F 6:1. All patients with HCC were cirrhotic, with HCC classified as BCLC stage 0 or A [9]. Two patients had a Child-Pugh score (CPS) of B7, one of whom presented with mild ascites. The iCCA patient had no underlying liver disease and presented with extrahepatic spread. Technical success was achieved in all cases. All but one patient underwent sin-

gle session RFA. Among HCCs patients, all patients achieved complete response (CR) at 1 month evaluated with computed tomography. AFP levels decreased in all HCC patients at 1-month post-procedure, with the exception of one patient who presented an additional lesion in segment VII. At the 3-month radiological follow-up, all cases maintained response to treatment. The patient with the largest lesion (33x28 mm), who had previously declined surgical resection, had disease progression (PD) at 6 months CT-scan and underwent a second EUS-RFA session, but ultimately progressed. The iCCA patient achieved complete response of the treated lesion at 1 month, consistent with local control. At a mean follow-up of 24 months, PD occurred only in the patient who had partial response at 6 months follow-up; all other patients maintained durable local response. Two minor transient mucosal bleeding occurred and were successfully treated endoscopically, with no severe adverse events [10].

Conclusions Our findings suggest that EUS-RFA is technically highly feasible and safe, even in cirrhotic patients with borderline liver function for thermal ablation treatment. Complete response, for small HCCs, can be achieved in more than 80 % of cases in a single treatment and without recurrence at 2-year. Selected iCCA cases unsuitable for conventional ablation routes may also be considered for EUS-RFA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Reig M, Forner A, Rimola J, Ferrer-Fàbrega J, Burrel M, Garcia-Criado Á et al. BCLC strategy for prognosis prediction and treatment recommendation: The 2022 update. *J Hepatol.* marzo 2022; 76 (3): 681–93
- [2] Lencioni R, Llovet J. Modified RECIST (mRECIST) Assessment for Hepatocellular Carcinoma. *Semin Liver Dis.* febbraio 2010; 30 (1): 052–60
- [3] Harwani Y, Butala S, Shukla V, Patel A, Jani SD. Treatment of Hepatocellular Carcinoma Using Endoscopic Ultrasound-guided Radiofrequency Ablation: A Case Series. *DEN Open.* aprile 2026; 6 (1): e70171
- [4] De A, Kumar Y, Shastri A, Ganesh CP, Singh A, Rath S et al. Endoscopic Ultrasound Guided Radiofrequency Ablation for Caudate Lobe Hepatocellular Carcinoma: A New Paradigm in Endohepatology. *J Clin Exp Hepatol.* settembre 2024; 14 (5): 101438
- [5] Katrevula A, Singh AP, Giovannini M, Lakhtakia S, Duvvur NR. Contrast-enhanced harmonic EUS-guided radiofrequency ablation of hepatocellular carcinoma: a new horizon in endohepatology. *VideoGIE.* settembre 2023; 8 (9): 354–7
- [6] De Nucci G, Della Corte C, Reati R, Imperatore N, Arena I, Larghi A et al. Endoscopic ultrasound-guided radiofrequency ablation for hepatocellular carcinoma in cirrhosis: a case report test for efficacy and future perspectives. *Endosc Int Open.* novembre 2020; 08 (11): E1713–6
- [7] Attili F, Boškoski I, Bove V, Familiari P, Costamagna G. EUS-guided radiofrequency ablation of a hepatocellular carcinoma of the liver. *VideoGIE.* maggio 2018; 3 (5): 149–50
- [8] Singal AG, Llovet JM, Yarchoan M, Mehta N, Heimbach JK, Dawson LA et al. AASLD Practice Guidance on prevention, diagnosis, and treatment of hepatocellular carcinoma. *Hepatology.* dicembre. 2023; 78 (61):
- [9] Sangro B, Argemi J, Ronot M, Paradis V, Meyer T, Mazzaferro V et al. EASL Clinical Practice Guidelines on the management of hepatocellular carcinoma. *J Hepatol.* febbraio 2025; 82 (2): 315–74. 1922–65
- [10] Sangro B, Argemi J, Ronot M, Paradis V, Meyer T, Mazzaferro V et al. EASL Clinical Practice Guidelines on the management of hepatocellular carcinoma. *J Hepatol.* febbraio 2025; 82 (2): 315–74

OP093 Comparison of technical and safety outcomes for primary intraductal radiofrequency ablation (ID-RFA) used as an adjunctive method for the palliation of biliary obstruction in inoperable perihilar cholangiocarcinoma: results from a retrospective multicenter

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DOI 10.1055/s-0046-1820748

Aims Intraductal radiofrequency ablation (ID-RFA) is increasingly used as an adjunct to stenting in patients with unresectable perihilar cholangiocarcinoma (pCCA). Two dedicated catheters are available in routine practice, the bipolar ELRA probe and the monopolar Habib probe, but comparative data on technical performance and safety in pCCA are scarce. We aimed to compare technical success and adverse events rates of ID-RFA performed with these two probe types in inoperable pCCA.

Methods We performed a multicentric retrospective analysis of ID-RFA delivered through endoscopic retrograde cholangiopancreatography (ERCP) in patients with inoperable pCCA. Key inclusion criteria included a confirmed diagnosis of pCCA and endoscopic therapy in a palliative setting. Exclusion criteria included ID-RFA in previously placed metallic stents (defined as secondary RFA). Owing to differences in treatment protocols in each participating unit, some patients underwent multiple ID-RFA sessions. Accordingly, each ERCP with RFA was analyzed as a separate procedure. Demographic, tumor- and procedure-related variables, including Bismuth classification, number of territories treated, RFA settings and stent type were collected in a standardized database. The primary outcomes were technical success (successful delivery of RFA and planned stent placement across all targeted strictures) and procedure-related adverse events (AEs). Comparison of outcomes in the Habib and ELRA groups was performed using χ^2 /Fisher's exact tests for categorical variables and t tests for continuous variables. A multivariable logistic regression explored independent predictors of AEs.

Results Overall, 225 ID-RFA procedures were performed in 143 patients (106 Habib, 119 ELRA). Mean patient age was 67.3 years (SD 10.7) and mean bilirubin levels prior to the procedure was 7.01 mg/dL (SD 16.1). Disease stage differed between groups: Habib was used significantly more often in advanced hilar strictures (Bismuth $\geq$ III: 86.8 % vs 46.2 % for ELRA; $p < 0.001$). Technical success was 100 % (106/106) for Habib and 99.1 % (116/117) for ELRA ($p = 1.00$). Overall, AEs occurred after 47/225 procedures (20.9 %). The AE rate was higher with Habib than with ELRA (27.4 % [29/106] vs 15.1 % [18/119]; $p = 0.03$). Cholangitis was the most frequent AE (57 % of all AEs), followed by bleeding ($n = 5$), cholecystitis ($n = 3$) and pancreatitis ($n = 1$) including 7 severe adverse events, according to the AGREE classification. In a multivariable logistic regression adjusting for age, Bismuth grade, cholangitis severity, territories treated and individual endoscopy center, pre-procedure cholangitis and endoscopy center were the only significant independent predictors of adverse events. Each increase in Tokyo cholangitis grade more than doubled the risk of AEs (aOR 2.65, $p = 0.003$). After adjustment for these factors, probe type (Habib vs ELRA) was not significantly associated with AE risk (aOR 0.13, $p = 0.051$). Patient age, stricture grade and number of territories treated with ID-RFA were not significant predictors of AE.

Conclusions To our knowledge, this is the first multicenter retrospective cohort study comparing technical and safety outcomes of the ELRA and Habib probes. While use of both probe types was associated with very high technical success rates in terms of safety outcomes, the Habib probe was identified as a potential risk factor of procedure-related adverse events, however significant differences of outcomes between centers were noted, most likely because of differences in probe use related to the complexity of the endoscopic procedure. As a result, further prospective studies should focus on exploring the safety

profiles of each probe type and clarify the best way to deliver ID-RFA in this clinical setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP094 Sugar solution augmented radiofrequency ablation in swine pancreatic tissue: sugar booster effect on radiofrequency ablation assessed by histopathology, MRI and ultrasound

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DOI 10.1055/s-0046-1820749

Aims Ex vivo experiment showed that sugar added to an isotonic solution decreases conductivity in endothelial cells and rapidly increases heat when associated with radiofrequency ablation.

Endoscopic ultrasound sugar-augmented radiofrequency ablation (EUS-SARFA) in pancreatic perivascular space increased pancreatic necrosis and facilitated pancreatectomy in a swine model. Our aim is to analyze the sugar booster effect on radiofrequency ablation in a swine pancreatic model according to three different devices/systems with different combinations of setting for a same energy of 300 joules (Watts x seconds).

Methods Eighteen swine pancreatic glands were harvested en bloc. A prospective monocentric ex vivo study evaluated three different radiofrequency ablation (RFA) systems/devices (Taewoong medical South Korea, F Care Systems Belgium and Covidien France) and each were tested on six perfused pancreatic models. Using an ultrasound (US) miniprobe two parallel thermometric probes were positioned near the ablation site to record tissue temperature before, during and after pancreatic perivascular SARFA [1–4].

54 RFA procedures were performed—three per pancreas—delivering 300 Joules of energy using different combinations of power (Watts = W) and time (seconds = s).

In one of the 3 RFA systems/devices (Taewoong medical South Korea), the RFA generator also recorded maximum impedance (Ohms) for each setting.

In 12 pancreases (36/54 ablations), under US guidance, RFA was applied after injection of

1 mL of 50 % glucose solution into the pancreatic parenchyma (head, body, and tail sites). In the remaining six pancreases (18/54 ablations), RFA was performed using either 0.9 % saline injection (n = 9) or without any adjunct (alone) (n = 9). All pancreases were evaluated using histopathological analysis with three-dimensional measurements, US and 1.5 Tesla magnetic resonance imaging (MRI) to assess the extent of tissue ablation. MRI ablation volumes were segmented from T1 sequences using 3DSlicer software (open source, BSD licence).

Results Both histopathology and T1-weighted MRI consistently demonstrated that SARFA using 40W-7.5s and 75W-4s produced significantly larger ablation and necrotic volumes compared to RFA with saline or alone. Although the 10W-30s resulted in smaller overall ablation volume at MRI they had greater histopathological necrosis than RFA with saline and alone groups.

The splenic vessels (artery and vein) were intact after all ablations in the pancreatic tissue near them, maybe related to the controlled necrosis created by sugar-augmented RFA.

SARFA also achieved higher intrapancreatic temperatures (45.63 °C [23.3-59.5] in SARFA, 8.65 °C [6.9-10.4] in saline, and 37.23 °C [27.7-53.8] in RFA alone) which were inversely correlated to the impedance which reflects a better heat conductivity when compared with RFA alone (430.5 Ohms [350-622] in SARFA, 327.3 Ohms [128-450] in saline-RFA; and 679.3 Ohms [222-916] in RFA alone).

Conclusions SARFA applied to the pancreatic perivascular tissue in an ex vivo swine model showed controlled necrotic ablation when compared with saline-RFA and RFA alone. This was due to induced sugar better heat conductivity using specific settings for 300 joules of energy. These results should be confirmed by a second a preclinical phase. This technique could be promising for downstaging in pancreatic cancer surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sosa-Valencia L, Pecorella G, Averous G, Montanelli J, Wanert F, Swannstrom L. Direct image-guided retroperitoneal approach and treatment of the pancreas by using natural orifice transluminal endoscopic surgery after EUS sugar-assisted radiofrequency ablation (with video). *Gastrointest Endosc* 2022; 95 (3): 573–81
- [2] Montanelli J, Sosa-Valencia L, Badaoui A, Averous G, Swannstrom L, Mutter D, Pessaix P, Seeliger B. Endoscopic Ultrasound guided perivascular pancreatic Radiofrequency Ablation using a Hydroxyethyl Starch Solution prior to Pancreatectomy. *Endosc Int Open* 2023; 11: E1123–E1129
- [3] Badaoui A, Lara AH, Lanza D, Montanelli J, Breton E, Averous G et al. Effect of augmented radiofrequency ablation in ex vivo pancreatic tissue using endoscopic ultrasound needle with sugar solution as a booster. Towards an improved pancreatic cancer surgery. *Endoscopy*. 2024; 56 (S 02): eP510
- [4] Pulikkathara M, Mark C, Kumar N, Zaske AM, Serda RE. Sucrose modulation of radiofrequency-induced heating rates and cell death. *Converg Sci Phys Oncol*. 2017; 3 (3):

How to drain a walled off necrosis without drowning

14/05/2026, 15:30–16:30

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OP095 Comparison of outcomes of bi-flanged metal stent alone versus bi-flanged metal stent with co-axial plastic stent in endoscopic ultrasound-guided drainage of walled-off pancreatic necrosis: a prospective randomized controlled trial

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DOI 10.1055/s-0046-1820750

Aims To evaluate whether placement of a co-axial double-pigtail plastic stent (DPS) within a bi-flanged metal stent (BFMS) reduces adverse events during endoscopic ultrasound (EUS)-guided drainage of walled-off pancreatic necrosis (WON), compared with BFMS alone.

Methods This prospective single-centre randomized controlled trial was conducted from July 2021 to December 2022 at a tertiary endoscopy unit. Consecutive adults with symptomatic WON, confirmed on cross-sectional imaging according to revised Atlanta criteria, were enrolled. Patients were randomized 1:1 to BFMS alone or BFMS plus co-axial DPS. Interventions were performed under conscious sedation by experienced endoscopists using standardized technique. Patients were followed clinically and radiologically at 48–72 hours, 1 week, and 4 weeks. The primary endpoint was global adverse events at 4 weeks, defined as intraprocedural bleeding, stent clogging, stent migration, perforation, buried-stent syndrome, or death. Secondary endpoints included technical success, re-intervention rates (declogging, nasocystic irrigation, direct endoscopic necrosectomy, percutaneous drainage), and clinical success (symptom resolution with ≥ 50 % reduction in collection size). Statistical anal-

ysis used chi-square testing for categorical variables with significance at $p \leq 0.05$ (► Table 1).

► Table 1

Outcome	BFMS (n = 38)	BFMS + DPS (n = 38)	p-value
Global adverse events	36.8%	15.8%	0.04
Stent clogging	34.2%	15.8%	0.05
Stent migration	7.8%	0%	0.12
Reintervention required	39.5%	26.3%	0.44
Clinical success (4 weeks)	92.1%	94.7%	0.35

Results Seventy-six patients were randomized (BFMS n = 38; BFMS + DPS n = 38). Baseline demographics, etiology of pancreatitis, WON dimensions, and EUS-estimated debris percentage were comparable between groups. Technical success was achieved in all cases [1–7].

Global adverse events occurred significantly less frequently in the BFMS + DPS group compared with BFMS alone (15.8% vs 36.8%; $p = 0.04$; odds ratio 0.32). Stent clogging was also significantly reduced with adjunct DPS (15.8% vs 34.2%; $p = 0.05$). Stent migration occurred only in the BFMS group (7.8% vs 0%; $p = 0.12$). Intraprocedural bleeding was infrequent and similar between groups, with one major bleed requiring angioembolization in the BFMS arm and one minor self-limited bleed in the BFMS + DPS arm. No perforation or buried-stent events occurred. One death due to sepsis occurred in the BFMS arm and was not procedure-related.

Re-interventions were numerically lower in the BFMS + DPS group (26.3% vs 39.5%; $p = 0.44$). Mean number of re-interventions was lower with co-axial DPS (1.9 vs 2.6). Direct endoscopic necrosectomy was required equally in both groups (21.1% vs 21.1%; $p = 0.33$). Clinical success at 4 weeks was high and comparable (94.7% vs 92.1%; $p = 0.35$).

Conclusions In this randomized controlled trial, the placement of a co-axial DPS within BFMS during EUS-guided drainage of WON significantly reduced global adverse events and stent clogging without affecting technical or clinical success. These findings support the adoption of co-axial DPS placement as a simple strategy to enhance safety in endoscopic management of WON. Larger multicentre studies with longer follow-up are warranted to assess long-term outcomes, including disconnected pancreatic duct syndrome.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ali SE et al. LAMS alone vs LAMS + DPS: no significant difference in adverse events. *Endoscopy*. 2022
- [2] Puga M et al. Coaxial plastic stents decrease adverse events when used with LAMS. *Endoscopy International Open*. 2020
- [3] Lakhtakia S et al. Endoscopic step-up approach using dedicated bi-flanged metal stent reduces need for necrosectomy. *Gastrointest Endosc*. 2017
- [4] Bang JY et al. Plastic vs metal stents for drainage of walled-off necrosis: randomized trial. *Gastrointest Endosc*. 2019
- [5] Bang JY et al. Plastic vs metal stents for drainage of walled-off necrosis: randomized trial. *Gastrointest Endosc*. 2019;
- [6] Bakker OJ et al. Endoscopic transgastric vs surgical necrosectomy for infected necrotizing pancreatitis. *NEJM*. 2012
- [7] Varadarajulu S et al. Endoscopic vs surgical cystogastrostomy for pancreatic pseudocysts: randomized trial. *Gastroenterology*. 2013

OP096 Accelerated vs. Step Up Endoscopic Management of Walled-Off Necrosis: A Cost Analysis

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DOI 10.1055/s-0046-1820751

Aims Pancreatic walled-off necrosis (WON) has typically been managed using a step-up strategy, in which endoscopic necrosectomy (EN) is performed only if patients fail to improve after initial drainage. Recent randomized controlled trials (RCTs) have suggested that an accelerated approach with upfront EN at the index procedure and subsequent necrosectomy until resolution of the WON may improve clinical outcomes. This study aimed to evaluate the healthcare costs associated with accelerated versus step-up management of WON, and to identify which cost categories primarily drive any differences between strategies [1, 2].

Methods This cost analysis used data from two RCTs conducted at Copenhagen University Hospital Hvidovre between August 30, 2019 and April 19, 2024. Patients were managed according to either the step-up protocol or an accelerated protocol. Initial drainage in the step-up group used either double-pigtail stents (DPS) or lumen-apposing metal stents (LAMS); all accelerated-protocol patients received LAMS. Cost data were extracted from the hospital accounting system and categorized into hospitalization, procedures, devices, imaging, medication, and outpatient care. Multivariable analyses were adjusted for baseline characteristics and calendar time. Step-up patients were further stratified by stent type (step-up–LAMS, step-up–DPS). Results are presented as adjusted mean cost differences with 95% confidence intervals (CI) (► Table 1).

Results A total of 64 patients were included: 12 managed with the accelerated protocol and 52 with the step-up protocol. Baseline characteristics were comparable between groups. In the primary comparison, the accelerated group had a significantly lower adjusted mean total cost than the step-up group (€41,656 vs €73,999), corresponding to an adjusted mean difference of –€32,343 (95%CI –€54,838 to –€5,616; $p = 0.0122$). Category-level decomposition showed that hospitalization costs were the main contributors to the cost difference.

When stratifying the step-up cohort by stent type, the accelerated strategy remained significantly less costly than step-up–LAMS (–€35,404; 95%CI –€59,052 to –€5,948; $p = 0.0372$). In contrast, the cost difference between accelerated and step-up–DPS was smaller (–€22,700; 95%CI –€57,111 to €9,541) and insignificant. Device-related costs were highest in the accelerated group (€6,174), followed by step-up–LAMS (€4,753) and step-up–DPS (€3,127), though these differences did not reach statistical significance after correction for multiple comparisons. Device expenditures represented the only category in which the accelerated strategy exceeded the cost of step-up management.

Conclusions Accelerated endoscopic management of WON was associated with substantially lower overall treatment costs compared with the conventional step-up approach, primarily due to reduced hospitalization expenses. The findings emphasize that clinical improvements demonstrated with an accelerated management also translate into meaningful reductions in resource utilization.

► **Table 1** Detailed breakdown of costs in accelerated vs. step-up groups

Category	Accelerated (adjusted mean)	Step-up (adjusted mean)	Adjusted mean difference	95% CI	p-value
Overall cost	€41,656	€73,999	-€32,343	-€54,838 to -€5,616	0.0122
Hospitalization	€22,145	€46,912	-€24,767	-€38,427 to -€8,482	0.0224
Endoscopy time	€2,880	€3,572	-€693	-€2,221 to €1,410	1.00
Endoscopy devices	€6,157	€3,315	€2,842	€815 to €5,275	0.0882
Surgery	€0	€733	-€733	-€1,520 to -€207	1.00
Antibiotics	€4,887	€10,236	-€5,349	-€10,758 to €834	0.273
Parenteral nutrition	€574	€1,758	-€1,184	-€2,053 to -€184	0.0882
Radiology	€1,235	€2,875	-€1,640	-€2,556 to -€569	0.0231
Follow-up	€4,003	€4,642	-€640	-€5,057 to €4,385	1.00

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Karstensen JG et al. Gut. 2023; 72: 1167–1173
- [2] Olsen GA et al. Clin Gastroenterol Hepatol. 2025; 0:

OP097 Feasibility and Safety of Endoscopic Vacuum Treatment (EVT) of Walled-Off Necrosis in Acute Necrotizing Pancreatitis

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DOI 10.1055/s-0046-1820752

Aims Infected walled-off necrosis (WON) represents one of the most challenging complications of acute necrotizing pancreatitis (ANP). Endoscopic drainage of WON is usually done with a lumen-apposing metal stent (LAMS). Subsequent management following LAMS placement remains highly heterogeneous. Recent studies suggest that an accelerated approach, aiming for early removal of intracavitary debris and necrosis, may improve outcomes [1]. Endoscopic vacuum therapy (EVT) has become an established treatment approach for insufficiencies, leaks and cavities, but has not been evaluated for WON. In this study, we analyzed data from patients with WON and ANP who underwent EVT as an adjunctive treatment modality.

Methods Between 2022 and 2024, data were collected in a multicenter, retrospective case series from four tertiary care centers in Germany and Brazil. Patients with infected WON and ANP (Revised Atlanta Classification), treated with EVT, were included. The primary endpoint was clinical success defined as a conjunctive endpoint of sepsis control, complete resolution of WON and fistula closure. Secondary endpoint was intracavitary bleeding, defined as hemorrhage requiring endoscopic, radiological or surgical intervention. The decision to commence EVT was based on spontaneous perforation of WON into the gastrointestinal tract in five patients, treatment-refractory sepsis in five patients, extensive size of WON in four patients, and treatment-refractory WON in two patients.

Results Sixteen patients (10 male, 6 female, mean age 57,2 years) with infected WON and ANP were included. In total, 87 EsoSponge devices (79 intracavitary, 8 intraluminal), 38 individualized open-pore film drainage (OFD) devices (intracavitary), and 4 VacStent devices (intraluminal) were utilized. A median of 6,8 device exchanges or removal (range 1 – 26) were necessary. 12 patients underwent at least one session of direct endoscopic necrosectomy (DEN) with a total of 81 necrosectomy procedures performed.

Clinical success was achieved in 14 of 16 patients within a median time of 30,6 days. Two patients died on days 15 and 37 after EVT initiation due to ongoing, uncontrollable sepsis. One further patient died two months after successful treatment of WON due to pulmonary sepsis. In a total of 108 EVT device exchanges or removals and 81 DEN, intracavitary bleeding occurred in two patients. In one patient, bleeding after EsoSponge removal was successfully managed endoscopically using a standard hemoclip. In the second patient, bleeding following OFD removal was insufficiently controlled endoscopically and ultimately required interventional radiology. Although the per-patient bleeding rate was 12,5%, the bleeding rate relative to the number of EVT interventions (per-procedure bleeding rate) was only 1,9%, lower than previously anticipated. The per-procedure bleeding rate is at the same level as in the established management of leaks in the upper gastrointestinal tract at 1,8% [2].

Conclusions This study demonstrates the potential of EVT as an additional therapeutic step for managing WON. The small sample size of 16 patients and the retrospective analysis of a heterogeneous cohort treated with various multimodal approaches weaken the robustness of the findings. This feasibility study supports the need for larger, multicenter, prospective trials to confirm the benefits of EVT in this challenging patient population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Laukoetter MG, Menningen R, Neumann PA et al. Successful closure of defects in the upper gastrointestinal tract by endoscopic vacuum therapy (EVT): a prospective cohort study. Surg Endosc 2017; 31 (6): 2687–2696. doi:10.1007/s00464-016-5265-3 Epub 2016 Oct
- [2] Olsen GA, Schmidt PN, Hadi A et al. Accelerated vs Step-Up Endoscopic Treatment for Pancreatic Walled-Off Necrosis: A Randomized Controlled Trial (ACCELERATE). Clinical Gastroenterology and Hepatology accepted 2025. doi:10.1016/j.cgh.2025.08.007

OP098 Impact of Vancomycin-Resistant Enterococcus on Step-Up Therapy After EUS-Guided Drainage of Pancreatic Fluid Collections: A Multicenter Propensity-Matched Study

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DOI 10.1055/s-0046-1820753

Aims Vancomycin-resistant Enterococcus (VRE) is increasingly recognized in infected pancreatic fluid collections (PFCs), underscoring a rising burden of antimicrobial resistance. This study evaluated whether VRE infection independently increases the need for step-up therapy after endosonography (EUS)-guided drainage compared with vancomycin-susceptible Enterococcus (non-VRE) after adjustment for disease severity covariates.

Methods Data on EUS-guided drainage of PFCs performed between 2016 and 2024 across three endoscopy units at Charité Berlin, irrespective of etiology, were collected. The primary outcome was the need for step-up therapy, defined as endoscopic necrosectomy, percutaneous drainage, or laparoscopic/open surgery. Infection was diagnosed based on clinical presentation, microbiological culture, and Gram staining from PFC aspirates or blood, with other sources excluded. Antimicrobial susceptibility testing including vancomycin resistance followed EUCAST guidelines [1]. A propensity score was constructed using age, ASA score, PFC size, necrosis extent, and stent type as covariates. VRE cases were matched 1:3 to non-resistant cases using nearest-neighbour matching (caliper 0.2 standard deviations). Conditional logistic regression assessed the association between VRE and step-up therapy in the matched cohort.

Results Among 486 consecutive patients, 295 (60.7%) had confirmed infected PFCs. The final analysis included only Enterococcus-infected collections (n = 134; mean age 59 ± 13.7 years; 75.4% male), comprising 30 VRE (22.4%) and 104 non-VRE (77.6%) cases. Walled-off necrosis was present in 87 (64.9%), and double pigtail plastic stents were utilized in 112 (83.6%). Prior antibiotic exposure and pre-drainage organ failure did not differ between groups. Step-up therapy was required in 90 (67.2%) cases: 67 (50.0%) endoscopic necrosectomy, 32 (23.9%) percutaneous drainage, 11 (8.2%) multigate technique, 22 (16.4%) laparoscopic or open surgery. After propensity score matching (► **Table 1**), step-up therapy was needed significantly more often in VRE [27 (90.0%)] versus non-VRE [63 (60.6%)] patients (OR 5.86, 95% CI 2.46–13.93; p = 0.002). Overall mortality was higher in the VRE group (33.3% vs. 14.9%).

Conclusions VRE independently predicts the need for step-up therapy in infected PFCs. Microbial resistance should be integrated into risk stratification and management decisions in EUS-guided treatment protocols.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] The European Committee on Antimicrobial Susceptibility Testing Breakpoint tables for interpretation of MICs and zone diameters. Version 15.0 2025; Available from: <https://www.eucast.org>

OP099 Efficacy and safety of a self assembling peptide haemostatic gel in the treatment of bleeding in eus-guided drainage and direct endoscopic necrosectomy of pancreatic fluid collections

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DOI 10.1055/s-0046-1820754

Aims EUS-guided drainage and direct endoscopic necrosectomy (DEN) are primary treatment modalities for symptomatic pseudocysts and walled-off pancreatic necrosis (WOPN). Bleeding is a serious adverse event associated with drainage, also due to lack of effective endoscopic haemostatic techniques. Purastat demonstrated excellent results to manage gastrointestinal bleeding. Our aim was to evaluate the efficacy and safety of this haemostatic gel in managing bleeding secondary to EUS-guided drainage and DEN of pancreatic fluid collections (PFCs).

Methods In this multicenter, retrospective, observational study 27 patients underwent Purastat treatment because of active bleeding during or after PFCs EUS-guided drainage or WOPN DEN sessions between 2017 and 2024 [1, 2].

Results 38 bleeding episodes were recorded. The bleeding type was oozing in 36 cases and spurting in 2 cases. Purastat was successfully applied in 100% of patients and achieved successful haemostasis in 96.5% of cases (► **Table 1**).

Conclusions This novel haemostatic gel is a safe and effective to manage oozing bleedings related to PFCs EUS-guided drainage or DEN.

► **Table 1**

Variable	Before matching			After matching		
	VRE (n = 30)	Non-VRE (n = 104)	SMD	VRE (n = 25)	Non-VRE (n = 69)	SMD
Age (Years)	55.5 ± 12.3	60.1 ± 14	-0.35	56.9 ± 11.9	57.9 ± 11.9	-0.09
ASA ≥ 3 (%)	24 (80)	68 (65.4)	0.33	18 (75)	52 (76.5)	-0.03
PFC-size (mm)	111 ± 58.5	93.3 ± 42.5	0.35	99.9 ± 39.9	96.8 ± 34.5	0.08
Necrosis > 30% (%)	10 (33.3)	33 (31.7)	0.03	8 (33.3)	18 (26.5)	0.15
DPS (%)	25 (83.3)	87 (83.7)	-0.01	20 (83.3)	56 (82.4)	0.03
Previous AB (%)	30 (100)	98 (94.2)	0.34	24 (100)	64 (94.1)	0.35
Organ failure (%)	13 (43.3)	40 (38.5)	0.10	11 (45.8)	24 (35.3)	0.21
Mortality (%)	8 (26.7)	17 (16.8)	0.25	8 (33.3)	10 (14.9)	0.44
Step-up therapy (%)	27 (90)	63 (60.6)	0.68	23 (92)	42 (60.9)	0.73

► **Table 1** Demographic and clinical characteristics of the 27 patients treated with PuraStat to manage PFC-related bleeding

Patients [N]	27
Sex [N. (%)]	
M	15/27 (55.6%)
F	12/27 (44.4%)
Age (mean ± SD)	57.1 ± 14.6
Antithrombotic therapy [N. (%)]	
Antiplatelet	9/27 (33.3%)
Anticoagulant	4/27 (14.8%)
AP etiology [N. (%)]	
Biliary	16/27 (59,3%)
Alcohol	8/27 (29,6%)
Idiopathic	3/27 (11,1%)
AP: acute pancreatitis; S.D.: standard deviation	

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fugazza A., Sethi A., Trindade A.J., Troncone E., Devlin J., Khashab M.A., Vleggaar F.P., Bogte A., Tarantino I., Deprez P.H. et al. International Multi-center Comprehensive Analysis of Adverse Events Associated with Lumen-Apposing Metal Stent Placement for Pancreatic Fluid Collection Drainage. *Gastrointest. Endosc.* 2020; 91: 574–583
- [2] de Nucci G, Reati R, Arena I, Bezzio C, Devani M, Corte CD, Morganti D, Mandelli ED, Omazzi B, Redaelli D, Saibeni S, Dinelli M, Manes G. Efficacy of a novel self-assembling peptide hemostatic gel as rescue therapy for refractory acute gastrointestinal bleeding. *Endoscopy.* 2020; Sep 52 (9): 773–779

OP100 Re-Intervention in Endoscopic Ultrasound (EUS) – Guided Walled Off Necrosis (WON) drainage with Metal stents: Identifying High-Risk Morphologies

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DOI 10.1055/s-0046-1820755

Aims Endoscopic ultrasound (EUS)-guided drainage with metal stents is standard therapy for walled-off necrosis (WON). However, some patients require re-interventions such as stent unclogging, necrosectomy, or percutaneous drainage. This study aimed to identify predictors of re-intervention to facilitate risk stratification and optimize management.

Methods This study included consecutive patients who underwent EUS-guided WON drainage with metal stents between January 2023 and December 2024 at a tertiary referral center. Demographic, clinical, and radiological data were collected prospectively. Multivariate logistic regression identified independent predictors of re-intervention. Model performance was evaluated using ROC curve, calibration plot, and decision curve analysis. Model's diagnostic performance in evaluated in validation cohort.

Results Of 500 patients (83.2% male), 28.6% had alcohol-related and 10% had biliary pancreatitis. Re-intervention was required in 24% (n = 120), primarily for stent unclogging (85.8%), nasocystic tube placement (70%), and necrosectomy (50%). Independent predictors included WON size (OR 1.38; 95% CI, 1.25–1.52), paracolic extension (OR 9.96; 95% CI, 1.77–55.98), and solid debris content (OR 1.10; 95% CI, 1.08–1.13). The model demonstrated good discrimination (AUC = 0.85) and calibration (Hosmer–Lemeshow p 0.19). The overall

accuracy of model in validation cohort was 86.67% (95% CI: 73.21%–94.95%). Adverse events occurred in 6% of patients, including bleeding (n = 11), stent migration (n = 13), and sepsis-related death (n = 6).

<https://aigrescuewonalcalc.netlify.app/>

Conclusions Larger WON size, paracolic extension, and higher solid debris content are independent predictors of re-intervention after EUS-guided drainage. Early identification of these factors may allow for individualized step-up therapy and improved clinical outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Beyond the Human Eye: AI-Assisted EUS and ERCP

15/05/2026, 09:00–10:00

Aqua 3 + 4

OP101 Real-Life Clinical Validation of AI-Assisted Evaluation of Pancreatic Solid Lesions in Endoscopic Ultrasound: a Transcontinental Multicentric Study

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DOI 10.1055/s-0046-1820756

Aims Pancreatic solid lesions are increasingly identified in asymptomatic individuals, yet the most common diagnosis, pancreatic ductal adenocarcinoma (P-DAC), continues to carry a dismal prognosis because detection still occurs at advanced and unresectable stages. Endoscopic ultrasound (EUS) remains the gold standard for evaluating and sampling these lesions, but even with improved imaging and tissue acquisition techniques, the diagnostic accuracy of EUS guided fine needle biopsy remains below optimal standards, leading to missed opportunities for earlier intervention. Artificial intelligence (AI) tools have shown compelling potential in distinguishing and characterizing pancreatic lesions at the frame level and in small controlled series. What is urgently needed now is robust real world clinical validation to convert this technological promise into faster and more accurate diagnoses and ultimately improve patient outcomes. Pancreatic solid lesions are increasingly identified in asymptomatic individuals, yet the most common diagnosis, pancreatic ductal adenocarcinoma (P-DAC), continues to carry a dismal prognosis because detection still occurs at advanced and unresectable stages. Endoscopic ultrasound (EUS) remains the gold standard for evaluating and sampling these lesions, but even with improved imaging and tissue acquisition techniques, the diagnostic accuracy of EUS guided fine needle biopsy remains below optimal standards, leading to missed opportunities for earlier intervention. Artificial intelligence (AI) tools have shown compelling potential in distinguishing and characterizing

pancreatic lesions at the frame level and in small controlled series. What is urgently needed now is robust real world clinical validation to convert this technological promise into faster and more accurate diagnoses and ultimately improve patient outcomes.

Methods This multicenter prospective study aimed to clinically validate an AI model for EUS image analysis. The study included 376 EUS exams across 15 centers in the United States of America, Spain, Brazil, Australia, Uruguay and the United Kingdom, using different EUS devices. Three hundred patients had a histopathological diagnosis of P-DAC. For each exam, up to 25 clinically relevant frames were selected by the endoscopist and uploaded to a web-based platform for AI analysis. The model performed both detection and differentiation of pancreatic solid lesions: detection was assessed by comparing AI-generated bounding boxes with expert-defined annotations using intersection-over-union (IoU), while differentiation of P-DAC was benchmarked against the histopathological gold standard (EUS guided biopsy or surgical specimen). Model performance was evaluated through accuracy, sensitivity, specificity, and positive and negative predictive values (PPV and NPV).

Results At a frame level, the AI model was capable of accurately detecting pancreatic solid lesions, with a mean IoU of 0.54, accuracy of 77.0% and a PPV of 95.0%. Regarding the identification of P-DAC lesions, AI-analysis had an accuracy of 79.5%, with a sensitivity of 92.0% and positive predictive value of 83.9%. No significant differences in performance were observed across patient gender, age or device.

Conclusions This study represents the first global multicentric validation of an AI model applied in real life to the detection and differentiation of pancreatic solid lesions, with a central aim of identifying P-DAC at the earliest possible stage. By incorporating data from three continents and multiple EUS systems, it confirms that the model performs consistently and reliably across diverse clinical settings and patient populations. Crucially, this AI system is the first to demonstrate true real world impact in the most complex cases, precisely locating pancreatic lesions and strongly supporting the diagnosis of P-DAC when traditional assessment is most challenged. AI assisted EUS now emerges as a transformative tool, with the potential to identify smaller, earlier stage lesions, increase the proportion of patients eligible for curative surgery and shift the prognosis of P-DAC toward markedly better outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP102 Detection of lymph nodes and malignancy prediction applying artificial intelligence in Endoscopic Ultrasound: a multicentric study

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DOI 10.1055/s-0046-1820757

Aims Endoscopic ultrasound (EUS) plays a central role in lymph node (LN) characterization, essential for accurate tumor staging. Current assessment relies on morphologic criteria that rarely occur together, limiting diagnostic confidence. Although EUS-guided fine-needle aspiration/biopsy (FNA/B) supports diagnosis, false-negative rates for malignancy remain approximately 15%. Artificial intelligence (AI) may enhance diagnostic precision, yet evidence regarding LN characterization is lacking. This study aimed to evaluate the performance of a convolutional neural network (CNN) in detecting LNs and predicting malignancy from EUS images.

Methods The AI model integrated two components: a detection module generating bounding boxes around LNs, and a classification module predicting malignant versus benign features. Reference standards included positive FNA/B or surgical pathology; benign diagnoses required at least six months of clinical follow-up. Performance metrics included mean average precision at an intersection-over-union threshold of 50% (mAP50), sensitivity, precision, accuracy, and area under the precision-recall curve (AUPRC).

Results This multicentric cohort comprised 96,287 EUS images from 116 patients across 12 centers in Spain, the United States, Brazil, Colombia, Argentina, and Australia. The CNN achieved an mAP50 of 0.978 for LN detection, with sensitivity of 97.2%, precision of 97.0%, and overall accuracy of 98.0%. For malignant LN prediction, the AUPRC was 0.993.

Conclusions This is the first international study using data from multiple EUS devices to assess an AI system for both LN detection and malignancy prediction. The model demonstrated excellent performance, underscoring the promise of deep learning to support locoregional tumor staging and guide more personalized treatment strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP103 Artificial intelligence improves accuracy of pancreatic screening EUS by enhancing the detection of small solid lesions: a tandem randomized video study

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DOI 10.1055/s-0046-1820758

Aims To evaluate the add-on effect of a novel Artificial Intelligence (AI) software system (mAI Companion©, Medi-Globe GmbH, Germany) on the performance of endosonographers in detecting small solid pancreatic tumours (SPTs) during endoscopic ultrasound (EUS) examinations.

Methods A randomized, controlled tandem video study was conducted. Sixteen EUS videoclips were selected, each containing a standardized complete pancreatic examination of small SPTs (9-19mm) in different locations of the pancreas. Each clip included case-related contextual information, followed by a frozen frame at the end, with or without a SPT. Each video was assessed twice by every participant: once with AI assistance and once without. Randomization (1:1) determined whether the first or second evaluation included AI assistance. For each clip, participants were asked to assess the frozen frame and to mark

the perceived lesion localization on a paper grid. Their assessments were compared with the ground truth established by an expert endosonographer.

Results Thirty-two endosonographers with varying levels of experience in EUS participated. Stand-alone AI showed a diagnostic accuracy of 93.75 %. Without AI support, participants achieved an overall accuracy of 70.51 % (95 %CI 66.35 %-74.43 %). With AI assistance, performance significantly improved to 82.03 % (95 %CI 78.43 %-85.26 %). The accuracy gain with AI was statistically significant ($p < 0.001$).

Conclusions AI assistance significantly enhanced endosonographers performance in detecting small solid pancreatic tumours in structured EUS video clips. These findings support the potential role of AI as a “second observer” for challenging, difficult to detect pancreatic lesions.

Conflicts of Interest Consultancy service for MediGlobe GmbH, Germany

OP104 Machine-learning-based prediction of choledocholithiasis (AIG-CBDS) in ESGE-defined intermediate-likelihood patients: refining the diagnostic pathway

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DOI 10.1055/s-0046-1820759

Aims ESGE recommends EUS or MRCP for patients with an intermediate likelihood of choledocholithiasis [1, 2]. However, the intermediate-likelihood group remains clinically heterogeneous, resulting in unnecessary EUS/MRCP in some patients and delayed ERCP in others. Recently published machine-learning (ML) models for choledocholithiasis prediction have included high-likelihood determinants, such as direct ultrasound visualization of bile duct stones, which limiting applicability [3]. We aimed to develop and internally validate a machine-learning-based prediction model exclusively in ESGE-defined intermediate-likelihood patients, excluding all high-likelihood criteria, to refine risk stratification and optimize diagnostic decision-making (NCT06066372).

Methods This was a prospective ML modeling study conducted at AIG Hospitals, Hyderabad, India. Consecutive patients evaluated for suspected choledocholithiasis were screened, and patients fulfilling ESGE intermediate-likelihood criteria were included. The reference standard for outcome adjudication was ERCP-confirmed common bile duct (CBD) stones or, in conservatively managed patients, clinical and radiological follow-up confirming absence or presence of stones. Five supervised ML algorithms were trained and evaluated. Model training and validation used a training-test split with cross-validation. Discrimination was assessed using the area under the receiver-operating characteristic curve (AUC). Overall performance was summarized using accuracy, precision, recall, and F1-score. Calibration was assessed using the Brier score and calibration plots. Clinical utility was evaluated using decision-curve analysis (DCA) (► Table 1).

Results A total of 2414 ESGE-defined intermediate-likelihood patients were included (mean age 49.6 ± 15.0 years, 56.2 % male). Choledocholithiasis was confirmed in 52.0 % (1256) of patients (training cohort: 1931; validation cohort: 483). Among all models, the Gradient Boosting model (AIG-CBDS) demonstrated the best overall performance with ROC-AUC: 0.820 and accuracy: 0.776. Other models showed slightly lower discrimination (AUC range 0.794–0.812). The model showed good calibration with a Brier score of 0.137, and calibration plots demonstrated close agreement between predicted and observed probabilities across clinically relevant risk ranges. DCA confirmed a consistently higher net benefit of the model compared with “treat-all” and “treat-none” strategies across threshold probabilities from approximately 10 % to 80 %. SHAP-based explainability identified dilated CBD as the dominant predictor, followed by age, ALT, bilirubin, and ALP, while sex had minimal influence.

Conclusions By focusing on the true diagnostic gray zone of intermediate likelihood of choledocholithiasis, the AIG-CBDS probability model provides a refined, individualized approach to downstream triage. It has the potential to personalize the ESGE diagnostic pathway, minimizing unnecessary EUS/MRCP, preventing avoidable ERCP, and expediting definitive biliary intervention in patients at the highest intermediate risk. AIGS-CBDS probability model requires external validation with further studies before routine clinical implementation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jagtap N, Yashavanth HS, Tandan M. et al. Clinical utility of ESGE and ASGE guidelines for prediction of suspected choledocholithiasis in patients undergoing cholecystectomy. *Endoscopy* 2020; 52: 569–573
- [2] Steinway SN, Tang B, Telez J. et al. A machine learning-based choledocholithiasis prediction tool to improve ERCP decision making: a proof-of-concept study. *Endoscopy*. 2023
- [3] Manes G, Paspatis G, Aabakken L. et al. Endoscopic management of common bile duct stones: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* 2019; 51: 472–491

OP105 Real-Life Clinical Validation of AI-Assisted Evaluation of indeterminate biliary strictures in Digital-single operator cholangioscopy: a Transcontinental Multicentric Study

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► Table 1 Diagnostic performance of ML Models

Model	ROC AUC	Accuracy	Precision	Recall	F1 score
Gradient Boosting (AIG-CBDS)	0.8196	0.776	0.794	0.769	0.781
KNN	0.8116	0.776	0.802	0.757	0.779
Random Forrest	0.8110	0.764	0.777	0.765	0.771
SVM	0.8030	0.785	0.827	0.741	0.782
Logistic Regression	0.7936	0.781	0.822	0.737	0.777

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DOI 10.1055/s-0046-1820760

Aims Biliary strictures are a clinically significant challenge, with malignant strictures frequently diagnosed at advanced stages, when curative options are limited and prognosis is poor. Digital single-operator cholangioscopy has transformed the field by providing high-resolution, direct visualization of the bile duct for diagnostic and therapeutic assessment, yet its diagnostic performance remains below optimal standards. Artificial intelligence offers a powerful opportunity to change this trajectory, with early studies demonstrating strong potential for accurate detection and differentiation of biliary strictures in both frame-level analysis and small clinical series. What is urgently needed now is robust real-world clinical validation to confirm these benefits and move toward earlier and more confident diagnosis.

Methods The aim of this multicenter prospective study is to clinically validate a deep learning model for D-SOC image analysis. The study included 170 D-SOC exams from 163 patients across 12 centers in the United States, Brazil, Spain, Colombia, Australia, and Saudi Arabia. Fifty-three patients had malignant biliary strictures (BS), while the remaining cases were benign. For each exam, up to 25 clinically relevant frames were selected by the endoscopist and uploaded to a web-based platform for AI analysis. The model performed both detection and differentiation of BS: detection was assessed by comparing AI-generated bounding boxes with expert-defined annotations using intersection-over-union (IoU), while differentiation (benign vs malignant) was benchmarked against the histopathological gold standard (brush cytology, D-SOC biopsy, or surgical specimen). Model performance was evaluated through accuracy, sensitivity, specificity, and positive and negative predictive values (PPV and NPV).

Results At the exam level, the AI model identified malignant BS with an accuracy of 76.5%, a sensitivity of 81.1%, and a specificity of 74.4%. The model also demonstrated robust detection performance, achieving a mean intersection-over-union (IoU) of 70.3%. No significant differences in performance were observed across patient gender, age, or participating center. Importantly, the model showed a strong ability to rule out malignancy, with a negative predictive value (NPV) of 89.7%.

Conclusions This first multicentric validation study demonstrates the real-world performance of an AI-assisted approach for D SOC analysis across four

continents and multiple device types, confirming robust accuracy in the detection and differentiation of BS. The system performed consistently at both exam and frame levels, addressing a context in which visual assessment and biopsy sampling often provide limited diagnostic yield, and showing high reliability in excluding malignancy in patients with indeterminate BS. These findings support the integration of AI as an adjunctive tool in D SOC, enhancing diagnostic confidence and contributing to a more informed clinical evaluation of patients with indeterminate BS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP106 Interpretable predictive models for Pancreatic Cancer diagnosis from structured EUS Data: A Multicenter Evaluation

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DOI 10.1055/s-0046-1820761

Aims The expanding application of AI/ML in clinical diagnostics is hampered in gastrointestinal oncology by its reliance on complex raw *imaging data*, resulting in unexplainable (opaque) models.

This study is novel in its use of structured, human-readable EUS features to develop interpretable ML tools. The primary goal is to determine if these simpler models can match or exceed the performance of more complex approaches, and to assess the reliability (uncertainty handling) of their predictions for clinical diagnostic support.

Methods In this retrospective study, we enrolled 761 patients from three centers who underwent EUS for the characterization of a solid pancreatic lesion. We collected age, sex, and endosonographic features of the solid lesion in a database. These features were then used to train leading machine learning (ML) models to diagnose the presence of pancreatic ductal adenocarcinoma (PDAC). By dividing the database into a training set and an external test set, we were able to measure the models' main performance metrics (► **Table 1**).

Results Among the models tested, decision trees (DT), random forest (RF), and naive Bayes (NB) demonstrated strong performance, each achieving area under the ROC curve (AUC) ≥ 0.90 and an accuracy ≥ 0.88 . The most sensitive models (the most crucial metric for avoiding false negatives) were Support Vector Machine (SVM) and NB, with results ≥ 0.90 . The most specific models were DT, RF and NB, all achieving 0.85. Significant results were also obtained by DT, RF, SVM, and NB with an F1-score ≥ 0.92 . Additional analyses on calibration and selective prediction confirmed the reliability of interpretable models under clinical uncertainty (Brier, ECE and Global ECI metrics). Using these data and models, we developed a free and open-access online tool (<https://mleus.pythonanywhere.com/>) to predict the diagnosis of PDAC with varying degrees of confidence, based on endosonographic features, also giving the possibility to change the best performance of the model, choosing between sensitivity, specificity, balance or explainability. This tool, which is intended solely for testing and research purposes, could be improved in the future and validated for diagnostic support in clinical practice

Conclusions These results, support the integration of structured data ML pipelines in diagnostic workflows for PDAC, offering a feasible path towards AI implementable in clinical endoscopy, even in non-tertiary centers.

► Table 1

	Decision Tree	Random Forest	XGBoost	Logistic Regression	Support Vector Machine	k-Nearest Neighbours	Naïve-Bayes	Compensated Forest
Accuracy	0.88 ± 0.06	0.88 ± 0.06	0.81 ± 0.07	0.86 ± 0.06	0.89 ± 0.06	0.81 ± 0.07	0.89 ± 0.06	0.88 ± 0.06
Sensitivity	0.89 ± 0.06	0.89 ± 0.06	0.99 ± 0.02	0.87 ± 0.06	0.91 ± 0.05	0.86 ± 0.06	0.90 ± 0.06	0.91 ± 0.05
Specificity	0.85 ± 0.06	0.85 ± 0.06	0.19 ± 0.07	0.81 ± 0.07	0.81 ± 0.07	0.63 ± 0.09	0.85 ± 0.06	0.74 ± 0.08
AUC	0.93 ± 0.05	0.93 ± 0.05	0.86 ± 0.06	0.91 ± 0.05	0.84 ± 0.07	0.83 ± 0.07	0.92 ± 0.05	0.93 ± 0.05
F1	0.92 ± 0.05	0.92 ± 0.05	0.89 ± 0.06	0.91 ± 0.05	0.93 ± 0.05	0.87 ± 0.06	0.93 ± 0.05	0.92 ± 0.05
Balanced Accuracy	0.87 ± 0.06	0.87 ± 0.06	0.59 ± 0.09	0.84 ± 0.07	0.86 ± 0.06	0.74 ± 0.08	0.88 ± 0.06	0.83 ± 0.07
Brier	0.09 ± 0.05	0.11 ± 0.06	0.17 ± 0.07	0.12 ± 0.06	0.10 ± 0.05	0.12 ± 0.06	0.10 ± 0.05	0.10 ± 0.05
ECE	0.09 ± 0.05	0.14 ± 0.06	0.16 ± 0.07	0.17 ± 0.07	0.13 ± 0.06	0.10 ± 0.05	0.08 ± 0.05	0.11 ± 0.06
Global ECI	0.84 ± 0.07	0.76 ± 0.08	0.81 ± 0.07	0.76 ± 0.08	0.85 ± 0.06	0.89 ± 0.06	0.90 ± 0.05	0.83 ± 0.07

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Gastric Cancer screening and prevention

15/05/2026, 09:00–10:00

Aqua 1 + 2

OP107 Gastric precancerous lesions in two low risk populations: cross-country comparison

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DOI 10.1055/s-0046-1820762

Aims Gastric cancer (GC) is a leading cause of cancer-related mortality, with premalignant lesions (PGLs) like gastric intestinal metaplasia (GIM) and dysplasia acting as key precursors. While surveillance is recommended, risk factors and progression rates in low-incidence regions remain underexplored. This study evaluates progression risk of patients with PGL in the Netherlands and Spain, both low GC incidence countries.

Methods Patients were recruited from the Progression and Regression of Gastric Lesions study (PROREGAL MEC-2009-090) in the Netherlands consisting of eight hospitals and Hospital Clínic de Barcelona, Spain. Eligible participants were under surveillance for GIM or dysplasia and had at least one follow-up

endoscopy, with biopsies taken from standardized sites, between 2009 and 2025. Patient demographics, lifestyle factors, and clinical data were collected through standardized questionnaires and the electronic medical record. GIM stage was assessed using the OLGIM (Operative Link on Gastric Intestinal Metaplasia) staging system, and GIM progression was based on the increase in OLGIM. The primary outcome was annual neoplastic progression to high-grade dysplasia (HGD) or intramucosal cancer (IMC), with secondary outcomes including progression to any type of dysplasia and OLGIM progression rate. Surveillance was performed following the MAPS guideline. Statistical analyses included Chi-squared tests for categorical variables and t-tests for continuous variables between cohorts (► Table 1).

► Table 1 OLGIM and neoplastic progression outcomes in Dutch and Spanish cohorts

	The Netherlands (n = 321)	Spain (n = 90)
OLGIM progression (yes), n (%)	95 (29.6)	26 (28.9)
Neoplastic progression (yes), n (%)	12 (3.8)	8 (8.9)
▪ LGD, n (%)	3 (0.9)	7 (7.8)
▪ HGD, n (%)	6 (1.9)	0 (0.0)
▪ IMC, n (%)	3 (0.9)	1 (1.1)

Results A total of 414 patients were enrolled in this study, 312 from the Netherlands and 90 from Spain with a median follow-up time of 50 and 37 months. The median age at index of the Dutch cohort was 59 years (SD 13) vs 64 years (SD 11) in the Spanish cohort (p = 0.001). The Dutch cohort had a higher proportion of males (54.2% vs 34.4%, p = 0.001). Smoking (29.3% vs 15.6%, p = 0.007) and alcohol use (53.9% vs 11.1%, p < 0.001) were more prevalent in the Netherlands, as was a family history of gastric cancer (28.3% vs 8.9%, p < 0.001). While autoimmune gastritis (15.3% vs 36.7%, p < 0.001) and *Helicobacter pylori* positivity (6.9% vs 12.2%, p = 0.04) were higher in Spain. At baseline, Dutch patients had a significant lower OLGIM score (43.2% vs 67.3% with OLGIM < 2, p < 0.001). The annual OLGIM and any type of dysplasia progression rates were higher in Spain (62.5 vs 99.6 cases; 5.9 vs 26.8 cases per

1000 person-years, $p=0.003$), while the annual neoplastic progression rate (5.9 vs 3.8 cases per 1000 person-years, $p=0.580$) did not differ significantly.

Conclusions In two low-GC-incidence countries, significant differences in progression risk were found, which may highlight the need for more tailored approaches in surveillance and management, even within countries with similar GC incidence rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP108 Prevalence and endoscopic recognition of gastric precancerous conditions and *H. pylori* infection in routine diagnostic upper GI endoscopy at a tertiary-care university hospital

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DOI 10.1055/s-0046-1820763

Aims Gastric atrophy and intestinal metaplasia (IM) are key precancerous conditions for gastric adenocarcinoma, but their recognition in routine esophago-gastroduodenoscopy (EGD) is often suboptimal. We aimed to describe the prevalence and distribution of histologically confirmed gastric precancerous lesions and *Helicobacter pylori* infection in consecutive diagnostic EGDs at a tertiary-care university hospital, and to evaluate the diagnostic performance of routine endoscopic assessment compared with histology.

Methods We conducted a retrospective cohort study including all consecutive diagnostic EGD procedures with gastric biopsies in adult patients at a tertiary-care university hospital between 01 August 2022 and 31 March 2025. Emergency and primarily therapeutic procedures were excluded. Gastric biopsies were taken at the endoscopist's discretion in routine clinical practice. In total, 3,955 diagnostic EGDs in 3,907 patients were analyzed. In 3,418 procedures (86.4 %), biopsies were obtained from both antrum and corpus in line with the Sydney classification. Pathology reports from routine practice were reviewed for *H. pylori* infection, gastric atrophy and IM, including antral and corpus involvement where reported. All clinical and pathology data were de-identified before analysis. For each condition, the routine endoscopic impression (present vs absent) documented in the endoscopy report was compared with histology as reference standard, and prevalence, sensitivity, specificity, positive and negative predictive values (PPV, NPV) and overall accuracy were calculated. In a prespecified sensitivity analysis, diagnostic performance was re-evaluated in the subset of examinations with biopsies obtained according to the Sydney classification.

Results Histology showed *H. pylori* infection in 371 of 3,955 EGDs (9.4 %), IM in 775 (19.6 %) and atrophic gastritis in 165 (4.2 %). Endoscopic assessment of *H. pylori* yielded a sensitivity of 12.1 %, specificity 96.6 %, PPV 26.8 %, NPV 91.4 % and accuracy 88.6 %. For IM, sensitivity was 12.6 %, specificity 98.6 %, PPV 68.1 %, NPV 82.2 % and accuracy 81.7 %. For atrophic gastritis, sensitivity was 53.3 %, specificity 91.1 %, PPV 20.8 %, NPV 97.8 % and accuracy 89.6 %. Overall, 26.3 % of examinations had at least one of these precancerous conditions or *H. pylori* infection.

Diagnostic performance estimates were very similar when restricting the analysis to examinations with Sydney-pattern biopsies, indicating that the main findings were robust to biopsy strategy. Among patients with histological atrophy, corpus involvement was present in 91.5 %, whereas antral atrophy was reported in only 7.3 %. In contrast, among patients with IM, antral and corpus involvement were observed in 85.4 % and 25.9 %, respectively, consistent with the expected distal-predominant pattern and supporting the reliability of histological IM localization. The predominance of corpus-reported atrophy suggests that the histological ground truth for antral atrophy is uncertain and likely affected by diagnostic and reporting variability.

Conclusions In this tertiary-care cohort of 3,955 consecutive diagnostic EGDs, gastric IM and atrophic gastritis were present in 19.6 % and 4 % of examinations, respectively, and *H. pylori* infection in about 9 %. Overall, 26.3 % of examinations showed at least one of these conditions. Routine endoscopic assessment substantially underestimated *H. pylori* and IM, with very low sensitivity despite high specificity and NPV, and showed only moderate sensitivity for atrophy. The observed discrepancy between the distribution of IM and atrophy indicates both endoscopic under-recognition and limitations of histological assessment, particularly for antral atrophy. These findings reveal a relevant gap in the detection and documentation of gastric precancerous conditions and *H. pylori* in clinical practice and support efforts towards optimized biopsy strategies, structured endoscopic training, closer alignment with pathology reporting and supporting tools such as AI-assisted detection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP109 Atrophic gastritis in a UK Hospital Trust: recognition, biopsy practice, and surveillance. Are we following the guidelines?

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DOI 10.1055/s-0046-1820764

Aims Atrophic gastritis (AG) is a recognised precursor to gastric adenocarcinoma, with a recent meta-analysis demonstrating a significantly increased risk of gastric cancer in affected individuals [3]. Current guidance, including European Society of Gastrointestinal Endoscopy (ESGE) MAPS III (2025) [1] and British Society of Gastroenterology (BSG) guidelines (2019) [2], recommends systematic gastric mapping using the Sydney protocol and 3-yearly endoscopic surveillance for patients with extensive AG involving both antrum and corpus. This audit aimed to evaluate the accuracy of endoscopic recognition of AG, adherence to guideline-recommended biopsy sampling when AG was suspected, and whether eligible patients were appropriately enrolled into surveillance within routine NHS practice.

Methods A retrospective review was conducted at Royal Free London NHS Foundation Trust, of histology samples showing atrophic gastritis between April–October 2025 were reviewed. Data was obtained from a histology database, endoscopy reporting software and electronic patient records. Data included demographics, *H. pylori* status, endoscopic suspicion of AG, biopsy practice when AG was suspected, histology results, and surveillance planning. Data were summarised descriptively.

Results 5307 gastroscopies were performed between April – October 2025. 206 cases were identified with atrophic gastritis.

Median age of patients was 65 years and 57.3 % were female. *H. pylori* was tested in 202/206 (98.1 %) and 19 of 202 (9.4 %) patients were HP positive.

AG was present in 4/19 (26.3 %) of *H. pylori*-positive patients.

AG was confirmed on histology in 93/206 patients (45.1 %). AG was suspected endoscopically in 54/206 (26.2 %), of which 38/54 (70.4 %) were confirmed histologically.

Among 152 procedures where AG was not endoscopically suspected, histology detected AG in 55/152 (36.2 %)

Overall, 59.1 % (55/93) of all histologically confirmed AG cases were not identified at endoscopy.

When AG was suspected Sydney-protocol/ mapping biopsies were performed in 31/54 (57.4 %). Protocol biopsies detected AG in 61.7 %, vs 37.1 % with non-protocol sampling.

Extensive incisura/ corpus AG was seen in 54/93 (58.1 %). Surveillance was arranged for 31/54 (57.4 %) of these patients. 23/54 (42.6 %) eligible patients received no surveillance.

Conclusions This audit demonstrates that BSG and ESGE guidelines are not consistently followed with respect to gastric atrophy. Although AG was confirmed histologically in many patients, 59.1 % were not identified during the

procedure, as the visual features of AG are not always clear at endoscopy. Even when AG was suspected, only 57.4% received Sydney-protocol biopsies, resulting in incomplete gastric mapping and missed opportunities to determine surveillance eligibility. Furthermore, over two-fifths of patients with extensive AG were not offered guideline recommended surveillance.

The most effective and immediately implementable intervention is targeted education. Presenting our audit findings to the endoscopy team, supported by concise, well-designed posters outlining the ESGE MAPS III and BSG recommendations placed in endoscopy rooms for immediate reference, will improve adherence to biopsy protocols and support consistent, guideline based surveillance decisions. These simple, high-impact steps offer a practical means to improve the detection and management of gastric premalignant pathology within our service.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dinis-Ribeiro M, Libânio D, Uchima H et al. Management of epithelial pre-cancerous conditions and early neoplasia of the stomach (MAPS III): ESGE / EHMSG/ESP Guideline update 2025. *Endoscopy* 2025. doi:10.1055/a-2529-5025
- [2] Banks M, Graham D, Jansen M et al. British Society of Gastroenterology guidelines on the diagnosis and management of patients at risk of gastric adenocarcinoma. *Gut*. 2019; 68 (9): 1545–1575
- [3] Li J, Pan J, Xiao D, Shen N, Wang R, Miao H, Pu P, Zhang H, Yv X, Xing L. Chronic atrophic gastritis and risk of incident upper gastrointestinal cancers: a systematic review and meta-analysis. *J Transl Med* 2024; 22: 429. doi:10.1186/s12967-023-04736-w

OP110 Impact of Screening Compliance on Gastric Cancer Risk and Eligibility for Endoscopic Treatment: a Nationwide Population-based Cohort Study

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DOI 10.1055/s-0046-1820765

Aims Gastric cancer remains highly prevalent in East Asian populations, particularly in South Korea. Although national biennial endoscopic screening program has shown reduction in gastric cancer mortality, the association between screening compliance and both cancer risk and eligibility for endoscopic therapy has not been fully clarified. This study aimed to assess how compliance with gastric cancer screening influences cancer incidence and subsequent eligibility for minimally invasive endoscopic treatment.

Methods We conducted a nationwide population-based cohort study using the Korean National Health Insurance Service database. Individuals who underwent the national gastric cancer screening endoscopy in 2014 without any diagnosis of gastric cancer or adenoma were included and categorized according to their adherence to biennial screening until 2022: high compliance (HC; no missed screenings), moderate compliance (MC; one missed screening), and low compliance (LC; ≥ 2 missed screenings). Incidence of gastric cancer was analysed using a Cox proportional hazard model. Among those who were diagnosed with gastric cancer, the risks of non-eligibility for endoscopic treatment were analysed using logistic regression. Analyses were adjusted for relevant clinical and demographic confounders.

Results Among 2,700,237 individuals, 10,105 developed gastric cancer during a median follow-up of 8.4 years. The risks of gastric cancer increased significantly with lower compliance: MC group (adjusted hazard ratio [aHR] 3.27, 95% CI 3.04–3.52) and LC group (aHR 8.19, 95% CI 7.68–8.75) versus HC. Of the 9,846 individuals diagnosed with gastric cancer, non-eligibility for endoscopic treatment was reduced in both MC (adjusted odds ratio [aOR] 1.10, 95% CI 0.96–1.28) and LC (aOR 3.62, 95% CI 3.13–4.18) groups versus HC.

Conclusions In a high-risk gastric cancer population, poor screening compliance was associated with both an increased risk of gastric cancer and a higher non-eligibility for endoscopic treatment. In regions with a high incidence of

gastric cancer, adherence to endoscopic screening should be strongly encouraged to prevent cancer progression through the detection of premalignant lesions, and ultimately improve post-diagnosis quality of life.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP111 Supporting MAPS III: Reassessing Gastric Cancer Surveillance in High-Incidence Areas

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DOI 10.1055/s-0046-1820766

Aims Gastric cancer poses a significant health burden globally being the fourth leading cause of cancer death. [1] Its epidemiology varies significantly by region and even within the same country. Although prevention strategies have traditionally relied on risk-factor profiling, the latest ESGE/EHMSG/ESP (MAPS III) guideline update recommends incidence-based endoscopic screening where cost-effectiveness is demonstrated and resources are available, a recommendation largely based on evidences from Asian countries. [2] Starting from a Western high-risk region, the south-east of Lombardia [3], we aimed to assess whether OLGA/OLGIM-based surveillance together with epidemiologic risk profiling is sufficient to identify individuals at risk of presenting with dysplastic lesions (DL), early gastric cancer (EGC) or advanced intestinal-type adenocarcinoma (AADK).

Methods We conducted a single-center retrospective observational study including patients with DL managed endoscopically, EGC managed endoscopically or surgically and patients with surgically treated AADK at our Hospital in the time span of ten years, from 2015 to 2025. Demographics, risk factor-related informations, dysplastic/neoplastic lesions diagnosis and treatment-related data and background mucosal staging (OLGA/OLGIM) data were collected. All specimens underwent also to a second-look examination by an expert pathologist.

Results A total of 153 patients (45 DL, 42 EGC and 66 AADK) with a mean age of 75 years were included in the analysis. The sex distribution showed a slight male predominance (56.9%). Overall, 21.6% of patients were *Helicobacter pylori* positive at the time of the diagnosis and 17.6% reported a family history of gastric cancer. One of the more relevant findings comes from OLGA/OLGIM staging distribution: 46.6% of patients showed mild-to-moderate atrophy (OLGA I–II), 58.8% mild-to-moderate intestinal metaplasia (OLGIM I–II) and approximately the 13% of the study population had no atrophy and no intestinal metaplasia at all.

Furthermore, no statistically significant differences in OLGA/OLGIM distribution were observed between patients presenting with DL/EGC and the ones affected by AADK (Mann–Whitney U test, $Z = -0.570$, $p = 0.569$).

Conclusions Our findings support the MAPS III guidelines, demonstrating that even in Western countries traditional risk factors for gastric neoplasia are insufficient to identify at-risk individuals in high-incidence areas. Therefore, histology- and risk-factor-based surveillance should be complemented with incidence-based endoscopic screening.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Val Padana Cancer Registry, ATS (Health Protection Agency) Val Padana <https://www.ats-valpadana.it/documents/1654672/64558781/Stomaco.pdf/3a88e15f-a32e-9344-a748-fdfa71f138ea>
- [2] Areia M, Esposito G, Leclercq P et al. Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative – Update 2025. *Endoscopy* 2025; 57 (11): 1268–1297. doi:10.1055/a-2674-4912
- [3] Sundar R, Nakayama I, Markar SR et al. Gastric cancer. *Lancet*. 2025; 405 (10494): 2087–2102. doi:10.1016/S0140-6736(25)00052-2

OP112 Diagnostic yield and clinical utility of routine biopsies during endoscopic surveillance in patients with chronic atrophic gastritis

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DOI 10.1055/s-0046-1820767

Aims According to the Correa Cascade, patients with atrophic gastritis (AG) and intestinal metaplasia (IM) may develop gastric dysplasia and intestinal-type gastric adenocarcinoma.

High-quality endoscopic surveillance using virtual chromoendoscopy (VCE) is essential for the early detection of neoplastic lesions (NL). MAPSII guidelines suggested follow-up with biopsies for stages OLGA/OLGIMIII/IV and autoimmune AG, whilst the MAPSIII guidelines recommend against performing routine biopsies during surveillance upper gastrointestinal endoscopies (UGIEs) and support the performance of biopsies only in case of mucosal alterations [1, 2]. The aim of the study is to assess the diagnostic yield and clinical utility of performing routine biopsies during UGIEs in patients with AG/IM.

Methods Patients with OLGA/OLGIMIII/IV and/or autoimmune AG who underwent at least two high-quality UGIEs between 2012 and 2024 at a tertiary referral center were included. VCE-guided targeted biopsies were performed in case of suspicious IM or other alterations; otherwise, biopsies were performed according to the Sydney System protocol. Histological staging was performed according to the OLGA/OLGIM systems, and histopathological assessment was evaluated using the updated Sydney system.

Results Overall, 158 patients and 530 UGIEs (median follow-up 65 months) were included. Overall, 37 NL (23 type 1 gastric NETs, 2 gastric adenocarcinomas, 7 low-grade dysplasia (LGD), 5 adenomas with LGD) were detected, whereas random biopsies identified only 2 NL (1 gastric NET and 1 LGD) in 0.4 % of UGIEs and 1.3 % of patients ($p < 0.00001$). At the longest available follow-up, in 22 patients (13.9 %), biopsies showed regression of OLGA/OLGIM stages, allowing for discontinuation of follow-up.

Conclusions Random biopsies have no statistically significant performance or clinical utility, which supports the MAPS III recommendation against their efficacy during follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] doi:10.1055/a-0859-1883

[2] doi:10.1055/a-2529-5025

Advanced Imaging and Elastography: Expanding the Diagnostic Horizon

15/05/2026, 09:00–10:00

Sky 1

OP113 How Accurately Does EUS-Shear Wave Elastography Identify Early Chronic Pancreatitis? A Prospective Study

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DOI 10.1055/s-0046-1820768

Aims Early chronic pancreatitis (ECP) is a distinct clinical stage in the natural progression from recurrent acute pancreatitis to established chronic pancreatitis. Accurate diagnosis of ECP is clinically important, as it not only prevents unnecessary investigations for determining the etiology of pancreatitis but also

aids in predicting the patient's future clinical course and prognosis. However, diagnosing ECP remains challenging due to its nonspecific symptoms and the limited ability of conventional imaging to detect subtle fibrotic changes. Endoscopic ultrasound–shear wave elastography (EUS-SWE) provides an objective, quantitative assessment of tissue stiffness—reported as shear wave velocity (Vs) and kPa—and may help overcome these diagnostic limitations. This study aimed to evaluate the diagnostic accuracy of EUS-SWE for ECP by correlating elastography measurements with minor features of the Rosemont criteria.

Methods This prospective observational study was conducted at a tertiary-care hospital over one year (July 2024–June 2025). Patients with recurrent acute pancreatitis or suspected ECP based on prior imaging (ultrasound, CT, or MRCP) underwent EUS evaluation. Those demonstrating features suggestive of ECP—defined by Rosemont minor criteria (hyperechoic foci, strands, hyperechoic pancreatic duct walls, or ductal dilatation)—were enrolled into the study arm. Two control groups were included: (1) patients with established chronic pancreatitis, and (2) patients with a normal pancreas.

EUS was performed using a linear echoendoscope (GF-UCT190, Olympus Inc.), and all examinations were conducted by four expert endosonographers. Shear wave elastography was performed using the EU-ME3 EUS processor (Olympus Inc.). Ten independent measurements of shear wave velocity (Vs, m/s) and stiffness (kPa) were obtained from the pancreatic body within a 5–10 mm region of interest, avoiding calcifications, vessels, and ducts; only readings with a confidence index (CI) > 50 % were included. Data were analyzed descriptively, and group comparisons were performed using the Kruskal–Wallis test.

Results A total of 57 patients were enrolled. Nineteen patients with features suggestive of ECP formed the study arm, and each control arm (chronic pancreatitis and normal pancreas) also included 19 patients. SWE parameters were compared across the three groups. A statistically significant difference in shear wave velocity (Vs, m/s) was observed among the groups ($p < 0.001$). The mean Vs in the ECP group was 2.39 ± 0.48 m/s, which was significantly higher than in the normal pancreas group (1.94 ± 0.37 m/s) and significantly lower than in the chronic pancreatitis group (3.20 ± 0.26 m/s).

Similarly, stiffness (kPa) values differed significantly between groups ($\chi^2 = 36.442$, $p < 0.001$). Mean stiffness values were 11.65 ± 5.21 kPa in the normal group, 18.28 ± 7.10 kPa in the ECP group, and 31.17 ± 4.60 kPa in the chronic pancreatitis group.

The area under the ROC curve (AUROC) for Vs (m/s) in predicting ECP was 0.729. A Vs cut-off of 2.0 m/s identified ECP with 90 % sensitivity and 57 % specificity.

Conclusions EUS-SWE effectively distinguishes normal pancreas, early chronic pancreatitis, and established chronic pancreatitis, demonstrating a clear stepwise increase in pancreatic stiffness across disease stages. These findings indicate that EUS-SWE is a valuable, objective modality for diagnosing early chronic pancreatitis and for monitoring disease progression, with the potential to facilitate earlier and more targeted intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP114 Endoscopic Ultrasound Point Shear-Wave Elastography Intra-Observer Reproducibility: A 120-Patient Prospective Cohort Study

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DOI 10.1055/s-0046-1820769

Aims Echo-endoscopic point shear-wave elastography (EUS-pSWE) bypasses subcutaneous adiposity and may provide weight-agnostic liver-stiffness assessment; however, reproducibility data in real-world endoscopy practice remain limited. We aimed to quantify intra-observer reproducibility under routine EUS conditions, benchmark stiffness values against vibration-controlled transient elastography (VCTE), and evaluate clinical and technical modifiers of measurement precision.

Methods In this single-centre prospective cohort (April 2024–February 2025), 120 consecutive adults undergoing diagnostic EUS were enrolled. Each hepatic lobe underwent two sets of five EUS-pSWE acquisitions without scope repositioning. Intra-observer reproducibility was assessed using ICC(3,1), with ICC ≥ 0.80 considered acceptable. Same-day VCTE served as an external comparator. The influence of BMI, underlying liver-disease etiology, and operator experience on acquisition validity and reliability was explored.

Results Forty-six participants were obese (BMI ≥ 30 kg/m²). Overall EUS-pSWE acquisition validity was 66.7%, increasing to 87.9% in obese versus 55.2% in non-obese individuals ($p < 0.001$). Mean liver stiffness was 6.9 ± 3.1 kPa and correlated strongly with VCTE ($r = 0.73$, $p < 0.001$). Intra-observer reproducibility was excellent for both lobes: ICC 0.96 (95% CI 0.93–0.98) in the left and 0.94 (0.90–0.97) in the right, exceeding World Federation for Ultrasound in Medicine and Biology (WFUMB) quality thresholds across all BMI strata. Single-measurement reliability was fair in non-obese individuals (ICC2,1 = 0.72) but poor in obese participants (0.08), supporting the need for averaging multiple measurements in high-BMI patients.

Conclusions EUS-pSWE provides weight-independent, guideline-compliant reproducibility and demonstrates higher acquisition validity in obesity compared with non-obese patients. These findings support its use when transcutaneous elastography is limited by poor acoustic windows. Averaging multiple acquisitions is recommended in individuals with BMI ≥ 30 kg/m² to optimise reliability.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP115 Endoscopic ultrasound with Detective Flow Imaging (DFI) for predicting pancreatic neuroendocrine tumour grade: Single centre experience

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DOI 10.1055/s-0046-1820770

Aims Pancreatic neuroendocrine tumors (pNETs) are a heterogeneous group of tumors with different treatment options depending on pathological grading, clinical staging, and presence of symptoms related to hormonal secretion. Their classification is made on mitotic count and Ki-67 index.

The current standard for Grading assessment is analysing the material obtained from EUS-guided fine needle aspiration/biopsy (EUS-FNA/FNB).

However this technique is not free from adverse events and could be challenging for NETs localization.

The evidence of high grade of fibrosis and microvascular density decrease (MVD) on tumor pathological specimens has led many authors to search for undirected malignant features of pNET extrapolated from non-invasive techniques.

The introduction of ancillary techniques, such as second-generation contrast agents (CH-EUS), has improved study of pNET. Particularly, at CH-EUS examination contrast pattern well correlates with behaviour and grading of NETs. However, the use of contrast agents entails a prolongation of procedure time and additional costs.

An innovative ultrasound Doppler technique, Detective Flow Imaging EUS (DFI-EUS), involves no additional time or cost as it doesn't require the administration

of contrast agent. There is still no standardisation of this technique and few studies have validated its use.

The aim of this study is to evaluate the DFI role in defining NET vascularization and its correlation with CH-EUS. The second aim of the study is to assess DFI role in predicting histological grading.

Methods Single center retrospective analysis on consecutive patients with solid pancreatic lesions who underwent EUS at Therapeutic Digestive Endoscopy Unit of the Fondazione Policlinico Universitario Campus Bio-Medico in Rome.

After activation of DFI, each lesion was observed for at least 30 seconds. Lesions was classified into three grades, according to the degree of vascularisation at DFI: (grade 0 absence of microvascularization of the tumor; grade 1 minimal/isovascularization of the tumor; grade 2 markedly increased microvascularization).

All lesion with final histological diagnosis of NET were enrolled.

Grading and Ki-67 index of tumors were reported.

Data about lesion's features and procedure were collected.

Results From April 2024 to September 2025, 28 patients were enrolled (60.7% male; mean age 59 ± 12 years old). The majority of lesion (50%) were localized in the body of the pancreas and the mean lesion's size was 24.6 ± 17 mm. The final histological diagnosis classified 60.7% lesions as G1, 28.5% G2 and 10.7% G3.

At the CEH-EUS the 67.8% of lesion showed hyper-enhancement.

About the DFI evaluation the 17.8% of lesion was hypo-vascular, 21.4% Iso-vascular and 60.7% was hyper-vascular.

There was excellent correlation between DFI characterization of the lesion and the CH-EUS (ICC 0.9)

Among the NET G1, 64.7% were Hypervascular at DFI and 29.4% Isovacular. Among the G2, 62.5% were Hypervascular at DFI and 37.5% Hypovascular. The 66.7% of G3 lesion was Hypovascular.

There was inverse correlation between the NET grade and the DFI grade (Pearson coefficient -0.27; $p 0.1$).

Conclusions DFI-EUS can provide a fast evaluation of the micro-vascularization of pNET with excellent correlation with CH-EUS. Hyper-vascular pattern at DFI correlates with low Ki-67 index.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP116 Endoscopic Ultrasound and Clinicodemographic Features to Distinguish Pancreatic Ductal Adenocarcinoma From Autoimmune Pancreatitis

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DOI 10.1055/s-0046-1820771

Aims To systematically identify and characterize the clinicodemographic and endoscopic ultrasound (EUS) features that distinguish autoimmune pancreatitis (AIP) from pancreatic ductal adenocarcinoma (PDAC). The overarching goal is to enhance diagnostic precision, minimize unnecessary surgical interventions in AIP, and promote timely oncologic management in PDAC. Specifically, this study aims to determine demographic and clinical predictors associated with each diagnosis, delineate characteristic EUS patterns differentiating AIP from PDAC, and evaluate the diagnostic contribution of serologic markers such as IgG4 levels when integrated with imaging and clinical variables [1–17].

Methods We conducted a single-institution retrospective study of consecutive patients diagnosed with PDAC or AIP between January 2010 and December 2023. PDAC was confirmed by histopathology or cytology obtained by EUS-guided fine-needle aspiration/biopsy (EUS-FNA/B). AIP was diagnosed by histopathology, response to corticosteroids, IgG4 immunostaining, or evidence of extrapancreatic involvement consistent with IgG4-related disease. Continuous variables were compared using t-tests and categorical variables with Chi-

square tests. Univariate logistic regression was used to explore predictors of PDAC versus AIP. Statistical significance was defined as $p < 0.05$.

Results A total of 296 patients were included (272 PDAC, 24 AIP). Mean age was significantly higher in PDAC than AIP (70 vs 61 years, $p < 0.0001$). Male sex predominated in both groups (PDAC 56%, AIP 67%). Body habitus differed: a normal or low BMI (< 25) was more frequent in PDAC (9.6%) than AIP (4.2%, $p = 0.04$), whereas mean BMI did not differ significantly (24.4 vs 26.0, $p = 0.08$). Diffuse pancreatic enlargement with hypoechogenicity was markedly more common in AIP than PDAC (44% vs 3.6%, $p < 0.0001$). In contrast, focal pancreatic lesions predominated in PDAC (94% vs 25%, $p < 0.0001$), and main pancreatic duct dilation was also more frequent in PDAC (60% vs 11%, $p = 0.009$). Biliary dilation and lymphadenopathy were observed more often in PDAC, though these differences did not reach statistical significance. During EUS evaluation, liver metastases were identified in 16.9% of PDAC cases. Elevated serum IgG4 (> 140 mg/dL) was present in 54% of AIP patients (mean 246 mg/dL). Relapse occurred in 25% of AIP cases and responded to steroid-based regimens (with azathioprine maintenance in most; one patient required rituximab for sustained remission).

On univariate analysis, age > 73 years was strongly associated with PDAC (odds ratio [OR] 18.5; 95% CI 6.4–53.8; $p < 0.001$), as was the presence of a focal pancreatic lesion (OR 41.5; 95% CI 13.2–130.6; $p < 0.001$). Lesion size > 30 mm showed limited discriminatory value (OR 1.3; 95% CI 0.4–3.8; $p = 0.65$). Notably, the probability of PDAC remained high even among lesions < 30 mm, underscoring that size alone should not drive management decisions.

Conclusions Readily obtainable clinicodemographic and EUS features can meaningfully distinguish PDAC from AIP. Older age, focal parenchymal lesions, and main pancreatic duct dilation strongly favored PDAC, whereas diffuse gland enlargement with hypoechogenicity and elevated serum IgG4 supported AIP. Although larger lesion size correlated with malignancy in absolute terms, it added little discriminative power relative to lesion pattern and ductal features. A practical approach that integrates age, lesion distribution (focal vs diffuse), ductal morphology, and serologic markers improves diagnostic precision, helping to avoid unnecessary pancreatectomy in AIP while expediting oncologic care in PDAC. These data support incorporating a combined demographic-EUS-serologic framework into routine evaluation of pancreatic masses and highlight opportunities for future prospective studies using elastography and contrast-enhanced EUS to refine noninvasive differentiation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hirano K, Tada M, Sasahira N et al. Long-term prognosis of autoimmune pancreatitis with and without corticosteroid treatment. *Gut*. 2007; 56 (12): 1719–24. doi:10.1136/gut.2006.118570
- [2] Ohara H, Okazaki K, Tsubouchi H et al. Clinical diagnostic criteria of IgG4-related sclerosing cholangitis 2012. *J Hepatobiliary Pancreat Sci* 2012; 19 (5): 536–42. doi:10.1007/s00534-012-0546-5
- [3] Lee TY, Kim MH, Park do H et al. Clinical features of 49 cases of autoimmune pancreatitis. *Korean J Gastroenterol* 2007; 50 (5): 309–16 PMID: 18078565
- [4] Hsu C, Seetharaman M, Cintron G et al. Biliary stricture in autoimmune pancreatitis vs pancreatic cancer: distinguishing features on imaging. *Abdom Radiol (NY)*. 2020; 45 (2): 500–7. doi:10.1007/s00261-019-02293-1
- [5] Okabe Y, Ishimoto T, Tanaka H et al. A distinguishing feature of pancreatic carcinoma and autoimmune pancreatitis based on ductal morphology and enhancement pattern on multidetector CT. *Eur J Radiol* 2011; 77 (3): 490–5. doi:10.1016/j.ejrad.2009.09.008
- [6] Choi EK, Kim MH, Lee TY et al. The clinical usefulness of contrast-enhanced harmonic EUS in differential diagnosis of pancreatic mass. *Gastrointest Endosc* 2009; 69 (4): 729–37. doi:10.1016/j.gie.2008.05.034
- [7] Kim KP, Kim MH, Song MH et al. Autoimmune chronic pancreatitis. *Am J Gastroenterol* 2004; 99 (8): 1605–16. doi:10.1111/j.1572-0241.2004.30155.x
- [8] Ghazale A, Chari ST, Smyrk TC et al. Value of serum IgG4 in the diagnosis of autoimmune pancreatitis and in distinguishing it from pancreatic cancer. *Am J Gastroenterol* 2007; 102 (8): 1646–53. doi:10.1111/j.1572-0241.2007.01264.x

- [9] Sahani DV, Kalva SP, Farrell J et al. Autoimmune pancreatitis: imaging features. *Radiology*. 2004; 233 (2): 345–52. doi:10.1148/radiol.2332031533
- [10] Moon SH, Kim MH, Park DH et al. Is differentiation of focal-type autoimmune pancreatitis from pancreatic cancer possible? A prospective study. *Pancreas* 2009; 38 (4): 437–43. doi:10.1097/MPA.0b013e318191cf3d
- [11] Hart PA, Zen Y, Chari ST. Recent Advances in Autoimmune Pancreatitis. *Gastroenterology* 2015; 149 (1): 39–51. doi:10.1053/j.gastro.2015.03.033
- [12] Chari ST. Diagnosis of autoimmune pancreatitis using its five cardinal features: introducing the Mayo Clinic's HISORt criteria. *J Gastroenterol*. 2007; 42 (Suppl 18): 39–41. doi:10.1007/s00535-006-1973-3
- [13] Ito T, Takayanagi R, Mizuno N et al. The diagnostic utility of endoscopic ultrasonography in autoimmune pancreatitis. *Pancreas* 2011; 40 (7): 1100–5. doi:10.1097/MPA.0b013e318219bd9d
- [14] Shimosegawa T, Chari ST, Frulloni L et al. International consensus diagnostic criteria for autoimmune pancreatitis: guidelines of the International Association of Pancreatologists. *Pancreas* 2011; 40 (3): 352–8. doi:10.1097/MPA.0b013e3182142fd2
- [15] Okazaki K, Kawa S, Kamisawa T et al. Clinical diagnostic criteria of autoimmune pancreatitis: revised proposal. *J Gastroenterol* 2006; 41 (7): 626–31. doi:10.1007/s00535-006-1839-8
- [16] Kamisawa T, Zen Y, Pillai S, Stone JH. IgG4-related disease. *Lancet*. 2015; 385 (9976): 1460–71. doi:10.1016/S0140-6736(14)60720-0
- [17] Siegel RL, Miller KD, Fuchs HE, Jemal A. Cancer Statistics, 2023. *CA Cancer J Clin* 2023; 73 (1): 17–48. doi:10.3322/caac.21763

OP117 Advances in Endoscopic Ultrasonography-Based Diagnosis of pancreatic solid lesions-single center survey

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DOI 10.1055/s-0046-1820772

Aims Accurate differentiation with endoscopic ultrasound (EUS) between malignant and benign pancreatic lesions remains a clinical challenge, and non-invasive EUS-imaging techniques, assessing tissue stiffness and vascularity, may support diagnostic decision-making. [1, 2] This study aimed to evaluate the diagnostic relationship between two elastography techniques—Shear Wave Elastography (SWE/SWM) and Tissue Doppler Imaging Elastography (TDI-E, both qualitative and quantitative forms)—and Detective flow imaging (DFI), in comparison with histological gold-standard findings in patients with pancreatic cancer. [3] Additionally, the elastography and vascularity features of patients were compared with a cohort of healthy pancreatic controls.

Methods A total of 76 individuals were included: 59 patients (77.6%) with pancreatic lesions and 17 healthy controls (22.4%). Demographic data, lesion dimensions, DFI (0–2 scale), SWE values (SWM, m/s), qualitative TDI-E stiffness grades (1–4), and quantitative TDI-E values were collected. Histology was categorized as normal tissue, adenocarcinoma, other tumor, or non-neoplastic condition (chronic pancreatitis). Normality was assessed using the Kolmogorov–Smirnov test; group differences were analyzed using Mann–Whitney U tests; correlations were evaluated using Pearson coefficients. Only the lesion dimension followed a normal distribution. All analyses were conducted with two-tailed significance thresholds of $p < 0.05$.

Results Healthy controls had a mean age of 57.5 ± 19.1 years, whereas patients were older (65.9 ± 11.1 years). Most patient lesions originated from the pancreas (98.3%). Histology revealed adenocarcinoma in 79.3% of cases, other pancreatic tumors in 5.2%, and non-neoplastic changes in 12.1%. Significant differences emerged between patients and healthy controls across several imaging parameters. Patients exhibited substantially larger lesion dimensions ($U = 0.000$, $p < 0.001$) and markedly different vascularity, reflected by lower DFI scores ($U = 147.5$, $p < 0.001$). Elastography results demonstrated that cancerous lesions were significantly stiffer and less elastic: qualitative TDI-E stiffness grades were higher ($U = 220.5$, $p < 0.001$), while quantitative TDI-E values were lower ($U = 89.5$, $p < 0.001$). Quantitative and qualitative TDI-E meas-

ures showed internal consistency, with a strong inverse correlation ($r = -0.356$, $p = 0.006$). No significant differences were found between patients and controls in sex distribution, age, or SWE values.

Correlation analysis among pancreatic cancer patients demonstrated several notable associations. Higher vascularity (increased DFI) correlated with lower qualitative stiffness ($r = -0.324$, $p = 0.013$) and higher quantitative elasticity ($r = 0.319$, $p = 0.014$), suggesting that better vascularized lesions may retain softer or more heterogeneous tissue architecture. Quantitative elastography values were positively correlated with histology severity ($r = 0.352$, $p = 0.007$), indicating that elastography may reflect underlying malignant tissue transformation. Lesion dimension did not correlate with elastography or vascularity measures.

Conclusions This study demonstrates that elastography-derived tissue stiffness and Doppler-based vascularity parameters differ significantly between malignant pancreatic lesions and healthy pancreatic tissue. DFI, qualitative TDI-E, and quantitative TDI-E each show meaningful associations with histological severity, highlighting their potential value as non-invasive biomarkers for assessing malignancy. The findings support the integration of multimodal elastography with vascularity assessment to improve diagnostic accuracy in pancreatic cancer and to differentiate malignant lesions from normal pancreatic tissue. Further large-scale studies are warranted to validate these relationships and explore their role in clinical decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mulqui MV, Caillol F, Ratone JP, Hoibian S, Dahel Y, Meunier É, Archimbaud C, Giovannini M. Detective flow imaging versus contrast-enhanced EUS in solid pancreatic lesions. *Endosc Ultrasound*. 2024; 13 (4): 248–252. doi:10.1097/eus.0000000000000076 Epub 2024 Aug 23 PMID: 39318752 PMID: PMC11419480
- [2] Ohno E., Kawashima H., Ishikawa T., Iida T., Suzuki H., Uetsuki K., Yashika J., Yamada K., Yoshikawa M., Gibo N. et al. Diagnostic performance of endoscopic ultrasonography-guided elastography for solid pancreatic lesions: Shear-wave measurements versus strain elastography with histogram analysis. *Dig. Endosc*. 2021; 33: 629–638
- [3] Yamashita Y., Yamazaki H., Nakahata A., Emori T., Kawaji Y., Tamura T., Itonaga M., Ashida R., Kitano M. Advances in Endoscopic Ultrasonography-Based Diagnosis of Pancreatic Lesions: Narrative Review. *Cancers* 2025; 17: 172. doi:10.3390/cancers17020172

OP118 Redefining Vascular Patterns in Focal Lesions with EUS Detective Flow Imaging: A Multi-center Interobserver Agreement Study

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DOI 10.1055/s-0046-1820773

Aims Detective Flow Imaging (DFI) is an innovative endoscopic ultrasound (EUS) technique designed to detect microvessels with extremely slow blood flow enabling visualization of very small vascular structures without the need for contrast agents and motion-related artifacts. Only few studies have explored DFI role in lesions' characterization, particularly in the assessment of focal pancreatic lesions (FPLs). Only one study proposed a DFI-based classification of FPLs, including vascularity (hypervascular/hypovascular), vessel distribution (peritumoral/intratumoral), vascular morphology (spotted/linear). However, this classification has not yet been formally validated. This study aims to assess interobserver agreement in DFI-based vascular characterization among operators with different levels of expertise.

Methods This single-center retrospective study included consecutive images acquired during EUS examinations performed between June 2024 and October 2025 at the Digestive Diseases Unit, Sant'Andrea University Hospital, Rome. All procedures were performed using a Fujifilm linear-array echoendoscope in combination with a Fujifilm Arietta 850 ultrasound processor. DFI was systematically applied for the characterization of all lesions. Prior to the survey, examiners received the published DFI classification and example images to standardize interpretation. Each examiner independently reviewed 51 images and assessed four parameters: image quality, vascularity, vessel distribution, and vascular pattern. Interobserver agreement was calculated using Krippendorff's Alpha for nominal data, which accommodates missing ratings. Interpretation of Krippendorff's Alpha followed standard Landis and Koch thresholds: values <0.20 were considered slight, $0.21–0.40$ fair, $0.41–0.60$ moderate, $0.61–0.80$ substantial and >0.80 almost perfect agreement.

Results Images were evaluated by 21 EUS examiners from 15 European centers with different procedural volumes. Thirteen examiners (61.9%) performed more than 200 EUS procedures per year, 5 (23.8%) performed 100–200 per year and 3 (14.3%) performed fewer than 100 per year. DFI was available in 13 centers (61.9%) and 13 examiners (61.9%) routinely used CH-EUS. A total of 51 EUS–DFI images were assessed, including 30 pancreatic ductal adenocarcinoma (PDAC), 1 cholangiocarcinoma, 5 inflammatory lesions, 2 solid pseudopapillary tumors, 7 pancreatic neuroendocrine tumors (pNET) G1, 3 pNET G2, 2 renal metastases and 1 gastrointestinal stromal tumor (GIST). Global interobserver agreement was fair for image quality ($\alpha = 0.33$), substantial for vascularity ($\alpha = 0.64$), moderate for vessel distribution ($\alpha = 0.49$) and vascular pattern ($\alpha = 0.49$). PDAC were predominantly judged hypovascular in 89.5% of ratings ($\alpha = 0.53$), with a peritumoral vessel distribution in 63.2% ($\alpha = 0.43$) and spotted vascular pattern in 66.6% ($\alpha = 0.34$). Agreement was moderate for vascularity and vessel distribution and fair for vascular pattern. pNET G1 lesions were more frequently evaluated as hypervascular in 62.8% of assessments ($\alpha = 0.34$), with intratumoral distribution in 67.6% ($\alpha = 0.15$) and linear vascular morphology in 77.0% ($\alpha = 0.49$). In this group, agreement was moderate for vascular pattern, while remaining fair for vascularity and vessel distribution. Inflammatory lesions were mostly scored as hypovascular in 72.1% of evaluations ($\alpha = 0.47$), with intratumoral vessels in 54.7% ($\alpha = 0.40$) and a slight predominance of spotted morphology in 55.7% ($\alpha = 0.20$). Agreement was moderate for vascularity and fair for both vessel distribution and vascular pattern. Agreement estimates for the remaining lesion types were not considered reliable due to the very small number of cases [1–5].

Conclusions In a heterogeneous series of pancreatic and extrapancreatic lesions, DFI demonstrated moderate-to-substantial interobserver reproducibility across vascular parameters. Vascularity achieved the highest agreement in PDAC, which were consistently recognized as hypovascular, whereas vascular pattern showed the greatest reproducibility in pNET G1, where a linear intratumoral morphology was reliably identified. These findings suggest that DFI-derived features have variable diagnostic strength depending on lesion type, supporting the complementary role of DFI in vascular assessment during EUS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Miwa H et al. Differential Diagnosis of Solid Pancreatic Lesions Using Detective Flow Imaging Endoscopic Ultrasonography. *Diagnostics (Basel)* 2024; 14 (9): 882
- [2] Yamashita Y, Yoshikawa T, Yamazaki H, Kawaji Y, Tamura T, Hatamaru K, Itonaga M, Ashida R, Ida Y, Maekita T, Iguchi M, Kitano M. A Novel Endoscopic Ultrasonography Imaging Technique for Depicting Microcirculation in Pancreatobiliary Lesions without the Need for Contrast-Enhancement: A Prospective Exploratory Study. *Diagnostics (Basel)*. 2021; 11 (11): 2018. doi:10.3390/diagnostics11112018 PMID: 34829364 PMID: PMC8621279
- [3] Mulqui MV, Caillol F, Ratone JP, Hoibian S, Dahel Y, Meunier É, Archimbaud C, Giovannini M. Detective flow imaging versus contrast-enhanced EUS in solid pancreatic lesions. *Endosc Ultrasound*. 2024; 13 (4): 248–252. doi:10.1097/eus.000000000000076 Epub 2024 Aug 23 PMID: 39318752 PMID: PMC11419480
- [4] Yamashita Y, Yamazaki H, Nakahata A, Shimokawa T, Tamura T, Kawaji Y, Tamura T, Hatamaru K, Itonaga M, Ashida R, Kitano M. Endoscopic ultrasonography for microvascular imaging without contrast enhancement in the differential diagnosis of pancreatic lesions. *Dig Endosc*. 2025; Feb 37 (2): 192–198. doi:10.1111/den.14889 Epub 2024 Aug 11 PMID: 39129171
- [5] Domínguez-Novoa Y, Domínguez-Muñoz E, Martínez-Seara X, Larriño-Noia J, Iglesias-García J. Evaluation of pancreatic microvascularization in chronic pancreatitis by endoscopic ultrasound-guided detective flow imaging: a prospective, single-center, observational study. *Rev Esp Enferm Dig* 2025; 117 (7): 382–388. doi:10.17235/reed.2025.11054/2025 PMID: 40066660

ESD: Top Tips

15/05/2026, 09:00–10:00

Sky 2

OP119 Impact of Gravity on the Outcomes of Colo-Rectal Endoscopic Submucosal Dissection in the Era of Traction Strategies: Results from a Large Prospective Multicenter Cohort

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DOI 10.1055/s-0046-1820774

Aims Endoscopic submucosal dissection (ESD) with traction is increasingly used to facilitate En Bloc resection of large superficial colorectal tumors, but the impact of gravity on procedural outcomes in this context remains unclear. This study aimed to assess the influence of gravity orientation on traction-assisted colorectal ESD performance and safety [1–4].

Methods Within a large international, multicenter, prospective cohort (22 centers), we included all patients who underwent traction-assisted colorectal ESD between July 2023 and May 2025. Lesions were classified by gravity (favorable, intermediate, unfavorable) based on luminal fluid distribution. The primary endpoint was dissection speed; secondary endpoints included R0 and En Bloc resection, perforation, bleeding, and intra-procedural position changes. Multivariable regression models were adjusted for lesion size, fibrosis, location, and operator expertise (► **Table 1**).

► **Table 1** Outcomes after adjustment for confounding factors

Outcome	β coefficient / OR (90% CI)	p-value
Resection speed	β = −0.10 (−0.14 to −0.06) [#]	0.007 *
R0 resection	OR = 1.05 (0.75 to 1.50)	0.005†
En Bloc resection	OR = 0.87 (0.31 to 1.40)	0.004†
Perforation	OR = 1.11 (0.77 to 1.59)	0.209‡
Post-procedure bleeding	OR = 0.89 (0.57 to 1.35)	0.045‡
≥ 1 position changes	OR = 3.85 (2.98 to 5.00)	<0.001§

[#] Difference in log-speed, * One-sided non-inferiority test with a non-inferiority margin of 15% relative reduction, † One-sided non-inferiority test with a non-inferiority margin of 5% absolute reduction, ‡ One-sided test to rule out superiority, with a non-superiority margin of 2% absolute increase § Two-sided superiority test

Results Among 3,738 procedures, 1,555 met inclusion criteria. Groups were comparable in lesion and operator characteristics. Mean dissection speed was 36.4 mm²/min with unfavorable gravity versus 38.6 mm²/min with favorable/intermediate gravity. Adjusted analysis confirmed non-inferiority of dissection speed in the unfavorable group (β = −0.10; 95% CI −0.15 to −0.06; p = 0.007), with similar R0 (91.1% vs 91.1%) and En Bloc (97.9% vs 98.7%) resection rates. Perforation (8.0% vs 6.5%) and delayed bleeding (5.2% vs 5.7%) rates were comparable. Position changes were more frequent with unfavorable gravity (OR = 3.85; p < 0.001).

Subgroup analysis based on the use of the underwater strategy revealed an interesting pattern: when the underwater approach was applied, resection speed tended to be higher in the unfavorable-gravity group. In contrast, in the absence of the underwater technique, there was a trend toward a slightly slower resection speed in the favorable/intermediate-gravity group.

Conclusions In conclusion, when ESD is performed with traction assistance, the lesion's position relative to gravity does not significantly affect procedural efficacy or complication rates. These findings suggest that routine consideration of gravity orientation may be less critical in such settings, potentially contributing to procedural simplification. Moreover, to our knowledge, this is the first study to evaluate the influence of gravity on the performance of combined traction and underwater strategies. Our results support prioritizing this combined approach for lesions located in unfavorable-gravity positions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nagata M, Namiki M, Fujikawa T, Munakata H. Prospective randomized trial comparing conventional and underwater endoscopic submucosal dissection for superficial colorectal neoplasms. *Endoscopy* 2025; 57 (5): 484–491. doi:10.1055/a-2445-4970
- [2] Iacopini F, Saito Y, Bella A et al. Colorectal endoscopic submucosal dissection: predictors and neoplasm-related gradients of difficulty. *Endosc Int Open* 2017; 5 (9): E839–E846. doi:10.1055/s-0043-113566
- [3] Imai K, Hotta K, Yamaguchi Y et al. Preoperative indicators of failure of en bloc resection or perforation in colorectal endoscopic submucosal dissection: implications for lesion stratification by technical difficulties during stepwise training. *Gastrointest Endosc* 2016; 83 (5): 954–962. doi:10.1016/j.gie.2015.08.024
- [4] Lee BI. Debates on Colorectal Endoscopic Submucosal Dissection – Traction for Effective Dissection: Gravity Is Enough. *Clin Endosc* 2013; 46 (5): 467–471. doi:10.5946/ce.2013.46.5.467

OP120 Adaptive Versus Non-Adaptive Traction Strategies in Colorectal Endoscopic Submucosal Dissection: A Large Retrospective Comparative Study

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DOI 10.1055/s-0046-1820775

Aims Traction is increasingly becoming the reference strategy in colorectal endoscopic submucosal dissection (ESD) because of the gains it offers in terms of speed and safety [1]. The main limitation of most traction devices is that they are highly useful at the beginning of the procedure, but their effectiveness decreases as dissection progresses. The A-TRACT device [3–4] is the first adaptive multipolar traction system, as it allows traction intensity to be increased throughout the procedure. We conducted a large retrospective study comparing the A-TRACT device with other traction strategies in terms of efficacy and safety.

Methods All patients who underwent colorectal ESD with traction in a high-volume French tertiary center between December 2021 and November 2025 were included. Non-conventional procedures were excluded, including those involving appendiceal lesions, the ileocecal valve, or diverticula. Procedures were categorized into two groups: those using the A-TRACT device (A-ESD) and those performed with another traction strategy (T-ESD). The primary outcome was resection speed. Secondary outcomes included R0 resection rate, perforation, delayed bleeding, and the proportion of positional changes during the procedure. Multivariate analysis was performed, adjusting for operator expertise (beginners; experts; super-experts), degree of fibrosis (F0/F1; F2), and lesion location (rectum; sigmoid and left colon; colonic flexures; transverse colon; right colon and cecum; ileocecal valve).

Results A total of 1,202 patients were included, with 416 undergoing ESD using A-TRACT and 786 using another traction method, mostly dental bands and non-adaptive multipolar systems. Mean resection speed was 37.2 mm²/min in the A-ESD group versus 26.8 mm²/min in the T-ESD group. The R0 resection rate was 85.5% in the A-ESD group versus 84.0%. Perforation occurred in 4.8% of procedures in the A-ESD group versus 3.8%, and delayed bleeding occurred in 7.9% versus 10.9%. Positional changes during the procedure were required in 22.4% of A-ESD cases versus 25.4%. After adjustment for potential confounders, resection speed remained significantly higher in the A-ESD group (β 6.77 [4.09–9.46], $p < 0.001$). R0 resection rates were similar (β 0.82 [0.55–1.22], $p = 0.327$). Perforation (β 0.74 [0.40–1.37], $p = 0.331$) and delayed bleeding (β 0.67 [0.42–1.08], $p = 0.097$) tended to be lower in the A-ESD group, although not statistically significant.

Conclusions The A-TRACT traction-assisted ESD strategy demonstrates a significant increase in resection speed without a corresponding rise in complication rates compared with conventional traction devices. A prospective randomized study is warranted to confirm these findings.

Conflicts of Interest All authors are co-founders of the company ATRACT device & Co

References

- [1] Grimaldi J, Masgnaux LJ, Lafeuille P, de Cristofaro E, Rivory J, Ponchon T, Yzet C, Wallenhorst T, Alexandru L, Legros R, Rostain F, Jérémie J, Pioche M. Endoscopic submucosal dissection with adaptive traction strategy: first prospective multicenter study (with video). *Gastrointest Endosc*. 2024; Sep 100 (3): 517–523. doi:10.1016/j.gie.2024.02.032 Epub 2024 Mar 7 PMID: 38458261
- [2] Masgnaux LJ et al. "Endoscopic submucosal dissection assisted by adaptive traction: results of the first 54 procedures.". *Endoscopy* 56 (3): 2024; 205–211
- [3] Bordillon P, Pioche M, Wallenhorst T et al. Double-clip traction for colonic endoscopic submucosal dissection: a multicenter study of 599 consecutive cases (with video). *Gastrointestinal endoscopy* 2021; vol. 94 (no 2): p 333–343
- [4] Jacques J et al. "Endoscopic en bloc versus piecemeal resection of large nonpedunculated colonic adenomas: a randomized comparative trial.". *Annals of internal medicine* 177 (1): 2024; 29–38

OP121 Efficacy of endoscopic submucosal resection with ligation device for small rectal neuroendocrine tumor: a multicenter open-label randomized control trial (BANDIT trial)

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DOI 10.1055/s-0046-1820776

Aims Endoscopic resection is widely accepted as a local treatment for rectal neuroendocrine tumors (NETs) sized ≤ 10 mm. However, there is no consensus on the best method for the endoscopic resection of rectal NETs. As a simplified endoscopic procedure, endoscopic submucosal resection with a ligation device (ESMR-L) indicates a histologically complete resection rate comparable to that of endoscopic submucosal dissection (ESD). However, existing data are based

on retrospective studies, and no multicenter randomized controlled trials have directly compared these two techniques. Given the procedural simplicity of ESMR-L, we hypothesized that ESMR-L than ESD would be preferred for rectal NETs. Hence, this trial aimed to verify whether ESMR-L is non-inferior to ESD in terms of histologically complete resection rate [1].

Methods This was a prospective, open-label, multicenter, non-inferiority, randomized controlled trial of two parallel groups, conducted at 32 institutions in Japan.¹ Patients with a lesion endoscopically diagnosed as a rectal NET ≤ 10 mm were eligible for inclusion. Patients were randomized to undergo either ESD or ESMR-L. Adjustment factors were participating institutions and endoscopist expertise levels (expert or non-expert). Expert endoscopists were defined as those with experience in > 40 colorectal ESD procedures. The primary endpoint was the rate of en bloc resection with histologically tumor-free margins (R0 resection). Secondary endpoints included en bloc resection rate, procedure time, hospital stay, total devices and agents cost, and adverse events. Assuming R0 resection rates of 95.2% (ESD) and 95.3% (ESMR-L), with a non-inferiority margin of 8%, one-sided α of 0.05, power of 80%, and dropout rate of 15%, the required sample size was 266 patients.

Results Of 266 enrolled patients, 135 and 131 were allocated to the ESD and ESMR-L groups, respectively. After excluding non-neoplastic lesions, 130 and 127 patients were included in the main analysis. A total of 93 endoscopists participated in the study, including 60 experts and 33 non-experts. Baseline characteristics, including age, sex, performance status, antithrombotic use, and lesion location, were comparable between groups. The mean tumor diameter was 5.4 mm in both groups. R0 resection rates were 92.3% (ESD) and 96.9% (ESMR-L), with a risk difference of 4.5% (two-sided 90% CI, -0.1 to 9.7%), confirming non-inferiority of ESMR-L to ESD (Farrington–Manning test; $P < 0.001$). Subgroup analyses based on the randomization stratification factor (expert vs. non-expert endoscopists) consistently showed a tendency toward a higher R0 resection rate in the ESMR-L group (expert: 3.2% [-1.8 to 8.7%], non-expert: 8.0% [-4.0 to 20.7%]). En bloc resection was achieved in all cases. The mean procedure time, hospital stay, and total device cost were significantly lower in the ESMR-L group (28.0 vs. 5.2 min; 4.4 vs. 3.4 days; 51,102 JPY vs. 24,382 JPY; all $P < 0.001$). Postoperative bleeding occurred in 3 (2.2%) and 5 (3.8%) patients in the ESD and ESMR-L groups, respectively ($P = 0.496$), with no perforations observed.

Conclusions For rectal NETs ≤ 10 mm, ESMR-L demonstrated non-inferior R0 resection rates compared with ESD and offered advantages of shorter procedure time, reduced hospitalization, and lower cost. These findings support ESMR-L as a simpler and more cost-effective standard treatment option.

Conflicts of Interest Kenichiro Imai has the following COI: a grant from The Japanese Foundation for Research and Promotion of Endoscopy, and relationships with Olympus and Boston Scientific.

References

[1] Takada K, Imai K, Yamada T et al. Efficacy of endoscopic submucosal resection with a ligation device for small rectal neuroendocrine tumor: study protocol of a multicenter open-label randomized control trial (BANDIT trial). *BMC Gastroenterol* 2024; 24: 69

OP122 Central Vessel-Modified Muscle Retraction Sign: A Novel Real-Time Stratification of Deep Invasion Risk in Colorectal Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1820777

Aims The muscle retraction sign (MRS) indicates increased submucosal invasion risk during colorectal endoscopic submucosal dissection (ESD) but lacks specificity for risk stratification. We investigated whether central vessel pattern (CVP) within the lesion modifies MRS-associated invasion risk.

Methods 1,267 colorectal lesions from 1,175 consecutive patients who underwent colorectal ESD between July 2013 and December 2024 were retrospectively analyzed. Lesions were classified based on MRS and CVP presence into three groups: MRS-negative/CVP-negative (low-risk), MRS-positive/CVP-positive (intermediate risk), and MRS-positive/CVP-negative (high risk). Primary outcome was deep submucosal invasion (SM2-SM3). Statistical analysis included Fisher's exact test and the Chi-squared test for categorical variables and the Mann-Whitney U test for continuous variables. Multivariable logistic regression adjusted for lesion size, lateral spreading tumor (LST) classification, anatomical location, gender, age, and JNET classification.

Results MRS identified 9.2% (117/1,267) of lesions requiring enhanced assessment (OR 4.74 95% CI 2.94–7.64, $p < 0.001$). Among MRS-positive lesions, CVP presence dramatically reduced invasion risk by 87% (OR 0.13, 95% CI 0.05–0.32, $p < 0.001$). After multivariable adjustment, high-risk lesions showed 16-fold increased invasion (OR 16.23, 95% CI 7.89–33.41, $p < 0.001$) and dramatically reduced curative resection rates (47.1% vs 95.9%, OR 0.05, $p < 0.001$) compared to low-risk group. Intermediate risk lesion maintained favorable outcomes with 94.0% curative resection and 100% R0 resection rates.

Conclusions Central vessel pattern is the first identified protective modifier of MRS-associated invasion risk, enabling real-time three-tier risk stratification. This simple classification provides actionable clinical decision points during colorectal ESD procedure. Future prospective trials are required to assess generalizability of our findings.

Conflicts of Interest Fatih Aslan has received grants, honoraria from Olympus

OP123 Lyon ESD Dissection score (LEDs): A pre-procedure prediction model for operating time in colorectal endoscopic submucosal dissection

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DOI 10.1055/s-0046-1820778

Aims Colorectal endoscopic submucosal dissection (ESD) is an effective curative technique for superficial colorectal lesions but remains technically demanding, with highly variable procedure times. Predicting colorectal ESD duration is essential for scheduling, resource allocation, and training, yet currently available models are limited. This study aimed to develop and validate a pre-procedure predictive score for estimating colorectal ESD duration.

Methods We analyzed prospectively collected data from patients undergoing colorectal ESD at Edouard Herriot Hospital (Lyon, France). Baseline variables included demographic characteristics (age, sex, ASA score) and lesion-specific factors (location, predicted size, morphology, JNET pit pattern, and suspected fibrosis, defined as either inflammatory bowel disease or a previously attempted/recurrent lesion.). Operator dissection speed was categorized as fast (> 40 min/cm²), intermediate (20–40 min/cm²), or slow (< 20 min/cm²). The derivation cohort included 423 cases (Jan–Dec 2024), and an independent temporal validation cohort included 148 cases (Jan–May 2025). A generalized linear model with gamma distribution and log-link function identified independent pre-procedural predictors. Model performance was assessed using R², mean absolute error, and classification accuracy at predefined thresholds (60, 90, 120 minutes). A simplified point-based score (Lyon ESD Dissection Score, LEDs) and an online calculator were derived from model coefficients [1–4].

Results Median procedure time in the derivation cohort was 50 minutes (IQR 30–90). Independent predictors of ESD duration included operator dissection speed, lesion location (flexures, appendix, cecum, ileocecal valve), predicted

lesion size, and suspected fibrosis (all $p < 0.05$). A simplified point-based score (LEDs) was developed (► **Table 1**); each component contributed proportionally to the total score, which directly corresponded to the estimated procedure duration in minutes (<https://lyonesddurationscore.github.io/leds/>). The LEDs showed a strong correlation between predicted and observed duration ($R^2 = 0.52$), with classification accuracy of 76.1 %, 82.2 %, and 88.1 % at thresholds of 60, 90, and 120 minutes. Validation confirmed good performance ($R^2 = 0.48$), with 91.8 % accuracy for procedures ≥ 120 minutes.

► **Table 1** Lyon ESD Dissection score (LEDs)

	points
Constant	-26
Dissection speed of endoscopist	
Slow	+ 54
Moderate	+ 40
Fast	0
Lesion location	
Rectum	0
Sigmoid colon	+ 1
Left colon	+ 4
Splenic and hepatic flexures	+ 31
Transverse colon	+ 7
Right colon	+ 6
Ileocecal valve	+ 15
Caecum	+ 13
Appendix	+ 32
Predicted lesion size (max diameter), mm	Multiply by 1.3
Suspected fibrosis	
No	0
Yes	+ 12

Conclusions The LEDs is a simple, validated and clinically practical pre-procedure tool that reliably predicts colorectal ESD duration, particularly for longer procedures. It may facilitate scheduling, optimize resource allocation, and improve workflow in endoscopy units.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jacques J, Juglard C, Lambin T et al. The size, manoeuvrability, site, history score (SMSH) – a new tool for predicting the outcomes of colorectal endoscopic submucosal dissection. *Gastrointest Endosc.* 2022; AB149–AB150
- [2] Ohata K, Kobayashi N, Sakai E, Takeuchi Y, Chino A, Takamaru H et al. Long-term Outcomes After Endoscopic Submucosal Dissection for Large Colorectal Epithelial Neoplasms: A Prospective, Multicenter, Cohort Trial From Japan. *Gastroenterology [Internet]* 2022; 163 (5): 1423–1434.e2
- [3] Jacques J, Schaefer M, Wallenhorst T, Rösch T, Lépilliez V, Chaussade S et al. Endoscopic En Bloc Versus Piecemeal Resection of Large Nonpedunculated Colonic Adenomas A Randomized Comparative Trial. *Ann Intern Med* 2024; 177 (1): 29–38
- [4] Dang H, Dekkers N, Steyerberg EW, Baldaque-Silva F, Omae M, Haasnoot KJC et al. Predicting procedure duration of colorectal endoscopic submucosal dissection at Western endoscopy centers. *Endosc Int Open* 2023; 11 (8): E724–32

OP124 Colorectal ESD under sedation versus general anesthesia: analysis of the Spanish national multicenter registry

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DOI 10.1055/s-0046-1820779

Aims To compare the outcomes of colorectal endoscopic submucosal dissection (ESD) performed under general anesthesia versus sedation.

Methods Retrospective analysis of the Spanish multicenter ESD registry, including all colorectal ESD procedures from June 2016 to June 2025. Patients were classified into two groups: General anesthesia (GA), and Sedation (S). Clinical and endoscopic data including operator-reported maneuverability, en bloc, complete and R0 resection rates, and adverse events were evaluated. A propensity score matching (PSM) analysis (1:1) was conducted. Matching variables included age, sex, ASA status, endoscopic lesion size, and lesion location. The Average Treatment Effect on the Treated (ATE) was estimated using teffects psmatch and contrasted with classical matching via psmatch2 (Stata 14.2). Outcomes were analyzed pre- and post-matching (► **Table 1**).

Results A total of 2302 patients were included (S: 661; GA: 1641). Lesions treated under GA were significantly larger (median 40 mm vs 30 mm, $p < 0.001$), more frequently proximal, and occurred in patients with higher ASA classification. Procedure duration was comparable between groups (median 120 min in both). Differences were observed in complete resection rate: 96.5 % (GA) vs 93.9 % (S), $p = 0.005$; en-bloc resection: 91.7 % (GA) vs 85.5 % (S), $p < 0.001$; intraprocedural perforation: 15.3 % (GA) vs 10.4 % (S), $p = 0.002$.

PSM resulted in 211–230 matched pairs depending on the evaluated outcome. After PSM, anesthesia time was longer in the GA group (+ 41.3 min; $p < 0.001$) but the ESD duration showed no significant differences. Regarding en-bloc resection: GA showed a statistically significant advantage using classical matching (psmatch2, $p = 0.043$), but this difference was not confirmed by teffects psmatch ($p = 0.075$). Complete resection, maneuverability, and intraprocedural perforation did not differ significantly between groups. Intraprocedural bleeding was higher in the GA group (+ 23.6 %, $p < 0.001$).

Conclusions Colorectal ESD shows acceptable clinical outcomes under both sedation and general anesthesia. More studies are needed to clarify whether GA improves en bloc resection. Anesthesia modality should be selected according to patient profile, lesion complexity, and institutional resources.

► Table 1

ESD outcomes			
	Sedation (n = 661)	General Anesthesia (n = 1641)	P (<0.05)
Anesthesia duration (min; median (IQR))	150 (104-200)	175 (120-240)	0,000
Procedure duration (min; median (IQR))	120 (75-180)	120 (71-180)	0,840
Complete resection, n (%)	620 (93,9)	1579 (96,5)	0,005
En bloc resection, n (%)	530 (85,5)	1451 (91,7)	0,000
Intraprocedural complications, n (%)			
Bleeding	219 (33,1)	580 (35,4)	0,295
Perforation	69 (10,4)	250 (15,3)	0,002
Death	NA	NA	NA
Delayed complications, n (%)			
Bleeding	37 (5,8)	86 (5,5)	0,777
Perforation	16 (2,5)	31 (2)	0,439
Post polypectomy Syndrome	19 (2,9)	35 (2,1)	0,288
Surgery for complications	11 (6,4)	25 (4,8)	0,416
ICU for complications	4 (2,9)	7 (2,7)	1,000
Death	3 (0,5)	2 (0,1)	0,147
Hospitalization, days (median, IQR)	2 (1-3)	1 (1-2)	0,000

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Artificial intelligence: Closing the Quality Gap in Endoscopy Workflow

15/05/2026, 10:30–11:30

Aqua 1 + 2

OP125 Development and Prospective Validation of a Real-Time Artificial Intelligence System for Detection of Incomplete Photodocumentation During Esophagogastroduodenoscopy

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DOI 10.1055/s-0046-1820780

Aims Approximately 10% of gastric cancers are missed during esophagogastroduodenoscopy (EGD) [1], with exposure errors accounting for 23% of these missed lesions [2]. Previous studies have demonstrated that providing feedback on incomplete photodocumentation can improve early gastric cancer detection [3]. We developed and validated an artificial intelligence (AI) system capable of real-time detection of incomplete photodocumentation during EGD.

Methods This single-center prospective cohort study enrolled patients from April 2024 to July 2024 for AI model training, followed by prospective validation during October 2025 in one endoscopy room. Patients who did not opt-out and had complete video recordings of their EGD procedures were included. Exclusion criteria included incomplete examinations, limited visualization due to gastric residue, and history of esophageal, gastric, or duodenal surgery. The AI model utilized EfficientNetB0 architecture to classify 15 anatomical locations across the pharynx, esophagus, stomach, and duodenum. Annotations were performed by two experienced endoscopists. For the prospective validation, a separate AI model first filtered out low-quality images (e.g., blur, insufficient air insufflation). The anatomical location AI performed inference only on images deemed of adequate quality. For the gastric body (upper, middle, lower), predictions of adjacent segments (e.g., AI predicting 'upper body' when the label was 'middle body') were considered correct.

Results The training dataset comprised 22,026 images from 496 patients. Internal validation achieved an accuracy of 92.5% (95% CI: 89.8-94.7%). During prospective validation, 68 patients were enrolled (mean age $\pm$ SD: 70.9 $\pm$ 12.1 years; 37 females). Seventeen endoscopists performed the procedures, including eight board-certified endoscopists. A total of 3,623 still images were captured during these procedures. The quality-assessment AI identified 978 images (27.0%) as low-quality. The anatomical location AI performed predictions on the remaining 2,645 adequate-quality images, achieving an accuracy of 95.5% (95% CI: 95.2-96.7%).

Conclusions We successfully developed and prospectively validated an AI system for real-time detection of incomplete photodocumentation during EGD and demonstrated its high accuracy. This system has potential applications as a quality management tool and warrants further implementation in clinical practice.

Conflicts of Interest Masashi Misawa has received an ownership interest in Cybernet Systems Corp. and speaking honoraria from Olympus Corporation.

References

- [1] Ishibashi F et al. Endoscopy International Open. 2021
- [2] Shimada S et al. Gastrointestinal Endoscopy. 2023
- [3] Pimenta-Melo AR et al. European Journal of Gastroenterology & Hepatology. 2016

OP126 Development and validation of artificial intelligence model for the assessment of upper gastrointestinal endoscopy quality indicators based on analysis of endoscopy reports

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DOI 10.1055/s-0046-1820781

Aims Esophagogastroduodenoscopy (EGD) is a basic diagnostic tool indispensable in the diagnostic process of benign, pre-neoplastic and neoplastic diseases of upper gastrointestinal tract (UGI). Its diagnostic efficacy is strictly related with quality of the procedure. Currently, the miss rate of UGI neoplasms is estimated to exceed 10% [1]. Quality indicators of EGD are established, however quality control bases on manual verification. The aim of this study was to create and validate artificial intelligence (AI) language model in the assessment of EGD quality indicators.

Methods It was a multicenter retrospective study. The RoBERTa-large LLM (Large Language Model) was used to analyze data from endoscopy and histopathology reports (both written as free text) of 15,917 EGDs performed in three endoscopy centers between 01.2019 and 12.2022. The data set was divided into training and validation dataset (12,733 EGDs, with 5-fold stratified cross-validation method, i.e. in separate runs, four folds were used for training the model, and the remaining one fold was used as the validation dataset to ensure the model's performance was consistently reliable on unseen data) and test dataset (3,184 EGDs) to maintain 80:20 ratio. A robust training methodology including constrained hyperparameter optimization, validation, monitoring and early stopping was used. Statistical rigor was ensured through 5-fold cross-validation, multiple random seeds and proper test set isolation to allow appropriate working on highly imbalanced data. The assessed parameters were: Barrett's esophagus, gastric precancerous conditions, neoplastic lesions, endoscopists biopsy rate, composite detection rate (detection of at least one: cervical inlet patch, gastric polyps, post ulcer, duodenal bulb deformation), endoscope type, sedation. Performance was evaluated using accuracy, F1 score, precision, recall and AUC with 95% confidence intervals (► **Table 1**).

Results The model achieved mean test accuracy of 96.62% (SD 1.83%, range 94.03% – 99.31%) and mean test F1 score: 96.50% (SD 1.85%, range 94.14% – 99.18%) across all tasks with excellent generalization (mean CV-test gap: -0.16%) with mean 250.6 samples per second during inference (SD 85.2, range 179.3 – 364.9). The AUC for tasks ranged from 94.03% to 99.31%, F1 score from 94.14% to 99.18% and AUC from 0.8834 and 0.9863.

Conclusions Demonstrating very good to excellent performance across the analysis of endoscopy and histopathology reports, the created AI model enables the automatic auditing of clinical data. This capability allows for continuous monitoring of key quality indicators for EGD, such as the detection rate of neoplasia.

► **Table 1**

Task	Test Acc	Test F1	Precision	Recall	Test AUC	CV-Test Gap
Barrett's esophagus *	98.7%	98.7%	98.7%	98.7%	0.9863	+ 0.10%
Gastric precancerous conditions **	94.0%	94.1%	94.3%	94.0%	0.9609	-1.15%
Barrett's -related dysplasia	99.3%	99.0%	98.6%	99.3%	0.8713	-0.01%
Dysplasia	97.4%	97.3%	97.2%	97.4%	0.8834	-0.56%
Malignant neoplasia	99.2%	99.2%	99.2%	99.2%	0.9499	-0.15%
Upper GI neoplasia	97.7%	97.6%	97.6%	97.7%	0.9569	+ 0.51%
Biopsy performed	97.2%	97.2%	97.2%	97.2%	0.9814	-0.14%
Composite detection rate ***	94.2%	94.2%	94.3%	94.2%	0.9724	+ 0.02%
Endoscope model	95.4%	95.2%	95.3%	95.4%	N/A	+ 0.11%
Sedation	96.5%	96.5%	96.6%	96.5%	0.9846	-0.34%

*Diagnosed according to ESGE criteria, **atrophic gastritis and gastric intestinal metaplasia, ***detection of at least one: cervical inlet patch, gastric polyps, post ulcer, duodenal bulb deformation; acc – accuracy, AUC – area under curve

Conflicts of Interest Marcin Romańczyk – consultant: Olympus, Medtronic, Odin VisionTomasz Romańczyk – consultant: Medtronic

References

[1] Alexandre L, Tsilegeridis-Legeris T, Lam S. Clinical and Endoscopic Characteristics Associated With Post-Endoscopy Upper Gastrointestinal Cancers: A Systematic Review and Meta-analysis. *Gastroenterology* 2022; 162 (4): 1123–1135. doi:10.1053/j.gastro.2021.12.270

OP127 Standalone Performance Of Artificial Intelligence In Automated Measurement Of Colonoscopy Key Quality Indicators

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DOI 10.1055/s-0046-1820782

Aims Colonoscopy quality is strongly correlated to improved clinical outcomes for patients. The regular and accurate measurement of key performance indicators (KPI) such as withdrawal time, bowel cleanliness, and cecal intubation is pivotal in assuring a quality procedure and preventing pitfalls. However, implementation and reporting of KPIs is often suboptimal.

The recent availability of Artificial-Intelligence (AI) powered tools to automate KPI measurement and reporting may be able to address this variability and improve procedural quality.

Aim of this study was to test an AI-based tool developed to address these issues in a clinical setting.

Methods All procedures from two multicenter prospective studies enrolling adult patients undergoing colonoscopy for CRC primary screening, surveillance or FIT + were video recorded with high-quality settings. Experienced operators performed all colonoscopies.

For this analysis, colonoscopy videos were subsequently submitted to an FDA-cleared medical device with additional features specifically aimed at generating AI-based quality metrics.

Operating endoscopist evaluation of KPIs (procedure duration(PD), withdrawal time(WT), cleanliness using the Boston Bowel Preparation Scale, [BBPS] and caecum recognition and intubation) were recorded, and were used as Ground Truth.

Primary endpoints of the study were mean absolute percentage error (MAPE) when comparing AI predictions with ground-truth values. **Secondary endpoints** were mean absolute error (MAE), root mean square error (RMSE) and caecum recognition accuracy.

Results Overall, colonoscopy videos from **152 patients** (53.9 % female, mean age 66.59 years), were included in the study [1, 2].

Operating endoscopist KPIs were: mean PD 20:53 ± 8.06 minutes, mean WT 13:25 ± 6:49 minutes, BBPS score per class (optimal 81.0 %, adequate 16.4 %, inadequate 2.6 %). Caecum intubation was successful in 97.3 % of cases. AI-based KPIs were: mean PD 20:56 ± 8:09, mean WT 13:32 ± 6:58, BBPS score per class (optimal 86.2 %, adequate 11.8 %, inadequate 2 %).

When compared to ground truth, the AI performance showed a MAPE of 0.3 % and 8.1 % for **PD and WT**, respectively. MAE was 3.8 secs and 63.7 secs and RMSE was 9.5 secs and 128.4 secs for PD and WT, respectively. For **bowel cleanliness** AI showed Balanced accuracy 87.16 % and Spearman correlation 0.42 ($p < 0.001$). **Caecum detection** showed sensitivity 82.4 % [95 % CI 75.9 – 88.3] and specificity 95.4 % [95 % CI 91.8 – 98.6].

Conclusions We found an accurate and reliable performance of a fully AI-based system in automating measurement and reporting of validated colonoscopy KPIs. This tool may help in standardizing assessment of these indicators, eliminating the burdens and variability of manual reporting without disrupting clinical workflows.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaminski MF, Thomas-Gibson S, Bugajski M et al. Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2017; 49 (4): 378–397. doi:10.1055/s-0043-103411
- [2] Messmann H, Bisschops R, Antonelli G et al. Expected value of artificial intelligence in gastrointestinal endoscopy: European Society of Gastrointestinal

Endoscopy (ESGE) Position Statement. *Endoscopy* 2022; 54 (12): 1211–1231. doi:10.1055/a-1950-5694

OP128 Automated recognition of upper GI anatomical sites in EGD using a deep learning model trained on public and tertiary-care data

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DOI 10.1055/s-0046-1820783

Aims Systematic visualization of predefined anatomical sites is essential for quality assurance and training in esophagogastroduodenoscopy (EGD), but objective, automated assessment of examination completeness in Europe is lacking. We aimed to develop and preliminarily evaluate a deep learning algorithm that classifies still images from the upper gastrointestinal tract (UGIT) into 28 standardized anatomical categories, including 22 gastric segments according to the Systemic Stomach Screening (SSS) protocol by Kenshi Yao. Primary outcomes were macro F1-score and overall accuracy for this 28-class classification task.

Methods In this retrospective diagnostic machine learning study, we collected endoscopic still images from two sources: (1) the publicly available GastroHUN dataset (Colombia; Bravo et al., *Sci Data* 2025) and (2) an internal dataset from a European tertiary referral centre (Augsburg, Germany). All images were obtained during routine EGD using Olympus endoscopes and anonymized prior to analysis. A total of 1,553 patients were included: 385 from GastroHUN (5,202 images) and 1,114 from UKA (2,793 images), yielding 8,095 images. Each image was labelled at image level into one of 28 anatomical classes: oropharynx, esophagus, esophagogastric junction, duodenal bulb, second part of the duodenum, papilla and 22 gastric segments based on the SSS classification using a multi-annotator process. We trained a ConvNeXt-Tiny convolutional neural network for image-level classification using patient-wise 5-fold cross-validation to prevent information leakage between training and test sets. Performance was evaluated as mean macro F1-score and overall accuracy across folds. **Results** Across 5-fold patient-wise cross-validation, the model achieved a mean macro F1-score of 0.79 ± 0.01 and an overall accuracy of 0.79 ± 0.01 for 28-class anatomical site classification. The network differentiated major UGIT regions (esophagus, stomach, duodenum) and also assigned images to fine-grained gastric segments according to the SSS protocol. Qualitatively, performance was higher in broader anatomical regions and lower in some of the most detailed gastric segments (e.g., lower vs. upper corpus posterior wall), consistent with the increased difficulty of very fine-grained localization.

Conclusions This preliminary study demonstrates the feasibility of automated recognition of UGIT anatomical sites using a ConvNeXt-Tiny CNN trained on a combination of public and tertiary hospital data. The model achieved moderate performance across 28 predefined anatomical categories from the oropharynx to the second part of the duodenum, including 22 SSS gastric segments, indicating that fine-grained anatomical localization of the entire upper GI tract is achievable from still images alone. To our knowledge, this is among the first studies to leverage a public endoscopy dataset together with institutional data for upper GI anatomical site classification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP129 Expected values of artificial intelligence in colon capsule endoscopy: I-CARE group and AICE consortium Position Statement

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DOI 10.1055/s-0046-1820784

Aims The objective of this Position Statement is to outline the primary outcomes of artificial intelligence (AI) tasks within the context of established and emerging performance measures, projecting minimum and desirable values expected during the implementation of AI in colon capsule endoscopy (CCE) practice, focusing on the detection and characterization of colonic neoplasia. The assumption is that AI implementation can standardize quality metrics in CCE with an emphasis on clinical rather than technical validation.

Methods The AI-Supported Image Analysis in Large Bowel Camera Capsule Endoscopy (AICE) consortium and the CAPsule Endoscopy REsearch (i-CARE) group have established a Task Force (TF) of CCE experts, technical information experts, patients representatives and an ethicist to define the expected values of AI performance measures in CCE, particularly focusing on GI neoplasia, within the framework of previously defined proxy performance measures, primarily conventional colonoscopy. To align AI tasks with performance measures and define their expected values, the existing methodology [1] was adopted, including task definition, integration of AI tasks with performance measures, the reference standard, and finally the expected value assessment defined for each outcome based on the clinical relevance of the performance measure related to the AI task and the expected benefit/harm of AI implementation. A super agreement of > 80 % on a maximum of three Delphi voting rounds using a 5-point scale ranging from "strongly disagree" to "strongly agree" was required for consensus on each statement. This project is funded by the European Union. Views and opinions expressed are, however, those of the authors only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the European Commission can be held responsible for them.

Results The TF identified eight domains, namely pre-procedure, completeness of procedure, identification of pathology, management of pathology, complications, patient experience, post-procedure, and ethics. The TF defined 21 AI tasks (shown in the ► **Table 1**) with their performance measures, reference standards, and expected values. The Delphi method was employed to solicit votes on proposed statements regarding the acceptance of AI-assisted CCE in clinical practice. A super agreement was reached in the first round for 17 statements, while the remaining four were amended and approved in the second round.

► **Table 1**

Domain	Pre-procedure	Completeness of procedure	Identification of pathology	Management of pathology	Complications	Patient experience	Post-procedure	Ethics
AI Tasks	1. Prediction of failed CCE or need for subsequent examination 2. Adequate colon cleansing	3. Complete mucosa visualization 4. Identification of colon landmarks-segments 5. Correct assignment of pathology to colon segments 6. Polyp localization & CCE path reconstruction 7. Visualization of the small bowel	8. Reading time 9. Polyp matching 10. Polyp size measurement 11. Sensitivity & specificity for: CRC, and polyps 12. False positive rate 13. Non-malignant pathology detection	14. PIVI/ SODA criteria for not recommending colonoscopy 15. Prediction of submucosal invasion	16. CCE retention 17. Colonic perforation	18. AI recognition or recording of patients' experience before, during, and after CCE	19. AI-generated report 20. AI-provision of alarm and interface with the clinician and patient.	21. AI-related ethics issues

Conclusions A Task Force of clinical and AI technology experts, patients' representatives, decision-making experts, and ethicists described CCE AI tasks and their performance measures and defined statements for acceptance of AI-assisted CCE in clinical practice, focusing on the detection of colorectal neoplasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Messmann H et al. Expected value of artificial intelligence in gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2022; 54: 1211–31

OP130 Artificial Intelligence and Computational Tools in Gastrointestinal Endoscopy: Diagnostic Gains, Human-Factors Challenges, and Over-Reliance Risks

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DOI 10.1055/s-0046-1820785

Aims Computational tools, particularly artificial intelligence (AI), are reshaping gastrointestinal (GI) endoscopy by automating essential but time-consuming tasks such as adenoma detection rate (ADR) calculation, quality-metric standardization, image documentation, and procedural reporting. These technologies also enhance consistency across operators and support real-time lesion detection. However, emerging evidence raises concerns about potential over-reliance on AI systems and the risk of endoscopist “deskilling,” with implications for long-term safety, training, and clinical autonomy. This meta-analysis of existing systematic reviews and randomized controlled trials sought to quantify the diagnostic benefits of AI-assisted colonoscopy while synthesizing the available evidence on human-factors risks, including automation bias, vigilance decline, and skill degradation, as well as evaluating future directions such as the integration of large foundation models.

Methods We performed an umbrella review of randomized controlled trials (RCTs) and meta-analyses evaluating AI-assisted colonoscopy versus standard colonoscopy in adults undergoing colorectal cancer screening or surveillance. The PICO framework was defined as follows: Population—adults undergoing screening or surveillance colonoscopy; Intervention—AI-assisted colonoscopy using real-time computer-aided detection or other computational tools; Comparator—standard, non-AI-assisted colonoscopy; Outcomes—primary outcomes were adenoma detection rate (ADR) and adenoma miss rate (AMR), while secondary outcomes included polyp detection rate, procedure time, and human–AI interaction measures such as vigilance, operator dependence, and perceived deskilling. Additionally, a narrative synthesis was conducted for studies evaluating large “foundation models” and broader computational tools in GI endoscopy [1–4].

Results The strongest evidence to date comes from a meta-analysis of 28 randomized controlled trials involving 23,861 patients, which demonstrated that AI-assisted colonoscopy increases ADR by approximately 20 % and reduces adenoma miss rate by 45–55 % compared with standard colonoscopy. These benefits were achieved with minimal increases in procedure time. When observational and real-world effectiveness studies are included alongside RCTs, the total evidence base expands to nearly 30,000 patients, consistently confirming ADR improvements across diverse clinical settings while highlighting substantial inter-study heterogeneity. Beyond diagnostic performance, real-world and health-technology-assessment reports also underscore emerging human-factors risks. A recent multicentre study observed a decline in ADR during non-AI colonoscopies (from 28 % to 22 %) following widespread adoption of AI, suggesting potential operator over-reliance and skill degradation when AI support is unavailable. Surveys of practicing gastroenterologists echo these concerns, frequently identifying automation bias, operator dependence, and economic barriers as key perceived risks of AI implementation. In parallel, next-generation deep-learning “foundation models,” trained on millions of endoscopy images or video frames, show early promise in multitask performance—including landmark recognition, lesion detection, inflammation scoring, and automated report generation. However, these systems remain largely pre-clinical, with limited prospective validation and unclear human–AI interaction effects.

Conclusions AI-assisted colonoscopy consistently improves ADR and reduces missed lesions, reinforcing its value as a quality-enhancing adjunct in GI endoscopy. However, emerging evidence of automation bias, operator over-reliance, potential deskilling, and unequal access highlights the need for human-centered implementation, well-defined usage policies, structured training, and prospective evaluation of long-term cognitive and technical effects. Next-generation foundation models and related computational tools should be developed and deployed within frameworks that emphasize safety, equity, transparency, and preservation of essential endoscopic skills. This underscores the need for rigorous study of human–AI dynamics and for designing AI systems that enhance, rather than replace, endoscopist performance through genuinely collaborative interaction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Soleymanjahi S, Huebner J, Elmansy L et al. Artificial Intelligence-Assisted Colonoscopy for Polyp Detection : A Systematic Review and Meta-analysis. *Ann Intern Med* 2024; 177 (12): 1652–1663. doi:10.7326/ANNALS-24-00981
- [2] Makar J, Abdelmalak J, Con D, Hafeez B, Garg M. Use of artificial intelligence improves colonoscopy performance in adenoma detection: a systematic review and meta-analysis. *Gastrointest Endosc* 2025; 101 (1): 68–81.e8. doi:10.1016/j.gie.2024.08.033
- [3] Hookey L. "AI for the new GI": What role does artificial intelligence have in early colonoscopy training? *Gastrointest Endosc* 2024; 99 (1): 100–101. doi:10.1016/j.gie.2023.09.004
- [4] Budzyń K, Romańczyk M, Kitala D et al. Endoscopist deskilling risk after exposure to artificial intelligence in colonoscopy: a multicentre, observational study. *Lancet Gastroenterol Hepatol* 2025; 10 (10): 896–903. doi:10.1016/S2468-1253(25)00133-5

EUS guided gallbladder drainage: Evidence, techniques and outcome

15/05/2026, 10:30–11:30

Sky 2

OP131 Comparative efficacy and safety of Hot Axios vs. Hot Spaxus LAMS for EUS-guided gallbladder drainage in malignant distal obstruction: A multicenter retrospective propensity-matched study

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DOI 10.1055/s-0046-1820786

Aims The introduction of Lumen-Apposing Metal Stents (LAMS) has significantly influenced clinical practice in biliary drainage. Several studies have confirmed the efficacy and safety of LAMS for EUS-guided gallbladder drainage (EUS-GBD) as a valid option for distal malignant obstruction with a patent cystic duct. While various LAMS are currently available, no direct comparison has been conducted between the two most widely used devices: the Hot Axios (Boston Scientific, USA) and the Hot Spaxus (Taewoong Medical, South Korea). This study aims to perform the first direct comparison of efficacy and safety between Hot Axios and Hot Spaxus stents in EUS-GBD for malignant distal obstruction

Methods This is an international, multicenter, retrospective study conducted in 9 tertiary centers. Outcomes were compared using 1:1 propensity score matching. The primary outcomes were clinical success and safety. Technical success was defined as adequate LAMS placement confirmed by endoscopic and radiologic assessment. Clinical success was defined as a decrease in total bilirubin of at least 15% within 24 hours and decrease of >50% within 14 days after the procedure. Secondary outcomes included overall survival and Adverse Events (AEs). AEs were graded according to the AGREE classification, with Severe AEs (SAE) defined as >Grade II.

Results We enrolled 154 patients across the participating centers. After 1:1 propensity score matching, 82 patients were selected (41 per group). Baseline characteristics were well-balanced. The proportion of female patients was 51.2% (21/41) in the Hot Axios group and 53.7% (22/41) in the Hot Spaxus group. The mean age was 70.30 years (SD: 14.41) in the Hot Axios group and 70.39 years (SD: 11.30) in the Hot Spaxus group ($p=0.98$). Regarding technical details, EUS-GBD was performed via the gastric route in 78.1% (32/41) of the Hot Axios group and 73.2% (30/41) of the Hot Spaxus group. In the Hot Spaxus group, 21 stents were 10x20 mm, while the other 20 were 8x20 mm. In the Hot Axios group, 20 out of 41 stents measured 10x10 mm. Global adverse events (AEs) were recorded in 14 patients: 19.5% (8/41) in the Hot Axios group compared to 14.6% (6/41) in the Hot Spaxus group ($p=0.770$). According to the AGREE classification, two AEs were classified as severe (SAE). Specifically, bleeding occurred in 3 patients (7.3%) in the Hot Axios group compared to 0 in the Hot Spaxus group ($p=0.241$). No perforations were recorded. Stent occlusion due to food impaction occurred in 5 cases in the Hot Axios group compared to 6 in the other group ($p=0.981$); all were successfully treated endoscopically with the placement of a coaxial plastic stent. Clinical success was achieved in 85.4% of patients in the Hot Axios group and 88.4% in the Hot Spaxus group ($p=0.683$). Median total bilirubin levels before the endoscopist treatment were procedure were 10.6 mg/dL (IQR: 4.2–16.1) and 11.5 mg/dL (IQR 7.3–15.4) for the Hot Axios and Hot Spaxus groups, respectively. At 14 days, the median total bilirubin levels decreased to 2.90 mg/dL (IQR: 1.70–4.25) in the Hot Axios group and 2.55 mg/dL (IQR: 2.00–4.48) in the Hot Spaxus group ($p=0.97$).

Conclusions The Hot Spaxus stent demonstrates lower bleeding rate and similar efficacy to the Hot Axios stent for EUS-GBD in distal malignant obstruction jaundice treatment. Further prospective evidences with larger sample sizes are needed to confirm these initial findings.

Conflicts of Interest Author B. M. is consultant for Taewoong, Author A. F.: Consulting fees for Boston Scientific, Author C.H has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co, Author A.R has received fees for serving as a consultant from Fujifilm Co., Medtronic Co., and Olympus Corp.

OP132 Feasibility and Safety of Endoscopic Ultrasound-Guided Gallbladder Drainage for Niemeier Type II Acute Perforated Cholecystitis: A Multicenter Retrospective Pilot Study

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DOI 10.1055/s-0046-1820787

Aims Acute perforated cholecystitis (APC), classified by the Niemeier system into types I–III, often requires urgent intervention. Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) has emerged as a minimally invasive alternative for high-risk surgical candidates. This multicenter retrospective pilot study aimed to evaluate the feasibility and safety of EUS-GBD in patients with APC.

Methods Patients diagnosed with APC who underwent EUS-GBD between January 2017 and December 2024 at 5 tertiary referral centers were retrospectively analyzed. The primary outcome was technical success. Secondary outcomes included clinical success, adverse events, stent patency, and all-cause mortality at 30 and 90 days post-procedure [1–5].

Results A total of 23 patients were included. Perforations were classified as Niemeier type I in 1 patient (4.3%) and type II in 22 patients (95.7%). Technical and clinical success were achieved in all patients (100%). Adverse events occurred in 3 patients (13.0%), including biloma, stent migration, and stent occlusion with recurrent acute cholecystitis. The median stent patency duration was 311 days (interquartile ranges, 176–411), with the probability of stent patency approximately 87.0% at 2 months and sustained beyond 1.5 years. No deaths occurred within 30 days. All-cause 90-day mortality was observed in 1 patient (4.3%) due to pneumonia.

Conclusions EUS-GBD appears to be a feasible and safe treatment option for high-risk patients with APC, particularly in cases of localized (Niemeier type II) perforation. These preliminary findings warrant further validation in larger prospective studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Irani SS, Sharzei K, Siddiqui UD. AGA Clinical Practice Update on Role of EUS-Guided Gallbladder Drainage in Acute Cholecystitis: Commentary. Clin Gastroenterol Hepatol 2023; 21: 1141–1147. doi:10.1016/j.cgh.2022.12.039
- [2] Chon HK, Kim SH, Kim TH. Endoscopic Gallbladder Drainage Conversion versus Conservative Treatment Following Percutaneous Gallbladder Drainage in High-Risk Surgical Patients. Gut Liver 2024; 18: 348–357. doi:10.5009/gnl230019
- [3] Chon HK, Lee YC, Kim TH et al. Revolutionizing outcomes: endoscopic ultrasound-guided gallbladder drainage using innovative electrocautery enhanced-lumen apposing metal stents for high-risk surgical patients. Sci Rep 2024; 14: 12893. doi:10.1038/s41598-024-63608-5
- [4] Takada T. Tokyo Guidelines 2018: updated Tokyo Guidelines for the management of acute cholangitis/acute cholecystitis. J Hepatobiliary Pancreat Sci 2018; 25: 1–2. doi:10.1002/jhbp.526
- [5] Derici H, Kara C, Bozdag AD et al. Diagnosis and treatment of gallbladder perforation. World J Gastroenterol 2006; 12: 7832–7836. doi:10.3748/wjg.v12.i48.7832

OP133 EUS-guided internalization of percutaneous cholecystostomy (EPIC-GBD) versus standard management of percutaneous trans-hepatic gallbladder drainage (sPT-GBD) in high-risk surgical patients with acute cholecystitis: a propensity score matching study

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DOI 10.1055/s-0046-1820788

Aims Percutaneous trans-hepatic gallbladder drainage (PT-GBD) represents the gold standard approach in high-risk surgical patients suffering from acute cholecystitis (AC). However, PT-GBD long-term outcomes are burdened from high incidence of stent dysfunction and recurrent AC. Safety and long-term efficacy of endoscopic ultrasound gallbladder drainage (EUS-GBD) in AC patients have been demonstrated. EUS-guided internalization of percutaneous cholecystostomy (EPIC-GBD) has been proposed to improve long-term outcomes. We aimed to compare EPIC-GBD with LAMS to standard PT-GBD (sPT-GBD) management [1–4].

Methods All consecutive high-risk surgical patients with AC who underwent PT-GBD over a 2-year study period were retrieved from 25 Italian high-volume centers. Patients who became fit for surgery or diagnosed with malignant biliary obstruction were excluded. Patients considered suitable for cholecystostomy internalization on multidisciplinary team evaluation, underwent EPIC-GBD with LAMS. Technical and clinical success, adverse events (AE), and procedural details were recorded together with the incidence of recurrent AC, stent dysfunction, biliary reinterventions, readmission, biliary-related mortality, and overall mortality. Patients were followed for ≥ 12 months. Outcomes of EPIC-GBD were compared to sPT-GBD using propensity score matching (2:1 nearest-neighbor, 0.2-caliper) based on age, gender, ASA score, Charlson Comorbidity Index, and antithrombotic use. A sensitivity analysis using IPTW with stabilized, trimmed weights estimated adjusted risk ratios using weighted generalized linear models. **Results** 484 patients (49.6% male, median 83-year IQR [75–88]) were retrieved; of them, 124 underwent an attempt of EPIC-GBD. Basal comparison showed higher age (85 [79–89] vs. 82 [74–87]; $P=0.001$), lower ASA 4 (35.5% vs. 45.8%; $P=0.05$), and a higher Charlson Comorbidity Index (7 [6–9] vs. 7 [6–8]; $P=0.02$) in the EPIC-GBD group. A 10-mm LAMS was used in 73.4% and a 15/16 mm in 19.3% cases. Technical success was achieved in 117 (94.4%) patients; among technical failures, in 4 cases cystic duct was patent, in 3 (2.4%) a LAMS misdeployment was observed. No correlation with LAMS design or size was observed; all failures occurred when EPIC-GBD was performed > 14 days after PT-GBD ($P=0.01$). Clinical success was obtained in 116 (93.5%) patients. 17 (13.7%) AE were reported: 13 mild and 4 severe (3 AGREE IIIB and 1 AGREE IVA). After PSM (▶ **Table 1**), the comparison of long-term outcomes between the two groups showed lower biliary reinterventions (14.4% vs. 26.9%; RR 0.54; $P=0.013$), recurrent AC (6.7% vs. 26.9%; RR 0.25; $P<0.001$), biliary-related mortality (1.0% vs. 17.8%; RR 0.05; $P<0.001$), and overall mortality (22.1% vs. 40.9%; RR 0.54; $P=0.001$) in the EPIC-GBD group; similar readmission rate (24.0% vs. 34.6%; RR 0.69; $P=0.057$) were observed. EPIC-GBD was confirmed to significantly decrease recurrent AC and biliary-related mortality at IPTW analysis.

Conclusions EUS internalization of percutaneous cholecystostomy is a safe and effective approach able to improve long-term outcomes of selected high-risk surgical patients with AC. EPIC-GBD reduces the risk of recurrent AC and stent dysfunction as well as the need for biliary reintervention and biliary-related mortality compared to sPT-GBD.

Conflicts of Interest Andrea Lisotti received consultancy from Boston Scientific, Olympus, MediGlobe

References

- [1] Austin PC. Optimal caliper widths for propensity-score matching when estimating differences in means and differences in proportions in observational studies. *Pharm Stat.* 2011; 10 (2): 150–61. doi:10.1002/pst.433 PMID: 20925139 PMID: PMC3120982
- [2] Conversion of Percutaneous Cholecystostomy to Internal Transmural Gallbladder Drainage Using an Endoscopic Ultrasound-Guided, Lumen-Apposing Metal Stent Law R, et al *Clin Gastroenterol Hepatol.* 2016. doi:10.1016/j.cgh.2015.10.026

▶ **Table 1**

Outcome	EPIC-GBD (n = 104)	sPT-GBD (n = 208)	RR	95% CI	p-value
Reintervention	15 (14.4%)	56 (26.9%)	0.54	0.32–0.90	0.013
Recurrent AC	7 (6.7%)	56 (26.9%)	0.25	0.12–0.53	<0.001
Long-term AEs	2 (1.9%)	38 (18.3%)	0.11	0.03–0.43	<0.001
Readmission	25 (24.0%)	72 (34.6%)	0.69	0.47–1.03	0.057
Mortality	23 (22.1%)	85 (40.9%)	0.54	0.36–0.80	0.001
Biliary-related mortality	1 (1.0%)	37 (17.8%)	0.05	0.008–0.39	<0.001

[3] Clinical Efficacy and Safety of EUS-guided Gallbladder Drainage Replacement of Percutaneous Drainage: A Multicenter Retrospective Study Minaga et al. *Digestive Endosc.* 2019

[4] Teoh AYB et al. Endosonography-guided gallbladder drainage versus percutaneous cholecystostomy in very high-risk surgical patients with acute cholecystitis: an international randomised multicentre controlled superiority trial (DRAC 1). *Gut* 2020; 0: 1–7

OP134 Comparison of access routes in EUS-guided gallbladder drainage (EUS-GBD) for acute cholecystitis (AC): A multicentre retrospective observational study

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Aims EUS-GBD has become an effective and minimally invasive alternative for the management of AC in patients who are not candidates for surgery. In EUS-GBD, the choice of access route—duodenal or gastric—depends on anatomical considerations and the endoscopist's experience; however, no studies have directly compared outcomes between both approaches.

The objective was to compare both techniques—cholecystogastrostomy (CG) and cholecystoduodenostomy (CD)—by analysing technical success (TS), clinical success (CS), adverse events (AE), and biliary readmissions (BR) in patients with acute cholecystitis who were not candidates for surgery.

Methods This was a multicentre, observational, retrospective cohort study including patients with acute cholecystitis who underwent EUS-GBD with a lumen-apposing metal stent (LAMS) between January 2020 and October 2025. BR was defined as any hospital readmission due to biliary colic, recurrent cholecystitis, cholangitis, choledocholithiasis, or acute pancreatitis. The choice of access route—gastric or duodenal—was determined by the endoscopist.

Results A total of 166 patients were included (115 cholecystoduodenostomies vs 51 cholecystogastrostomies), with a median age of 88 (RIQ 84–92) y-o with female predominance (59%).

Both groups were comparable in age, Charlson index, clinical Tokyo-severity, and inflammatory parameters. No significant differences were found in TS (97% vs 96%) or CS (96% vs 90%) ($p > 0.05$).

The overall AEs rate was 15.5% (36 AEs), with AGREE IIIA predominance (15 events). Cholecystogastrostomies showed a higher incidence of AEs (25% vs 11%; $p = 0.020$). Early AEs (≤ 14 days) were also significantly more frequent with antral access ($p = 0.025$). The most common AEs were bleeding (20.69%) and LAMS obstruction (16.2%).

The only relevant technical differences between the groups were a higher use of coaxial pigtail in antral access (53% vs 24% in CD; $p < 0.0005$) and a different distribution of stent sizes. A 10 × 10-mm stent was more frequently used in the CG group (67.6%), whereas in the CD group the use of 15 × 10-mm and 10 × 10-mm stents was similar ($p = 0.008$).

Antral access showed a higher cumulative probability of readmission, in the survival analysis, (log-rank $p = 0.0117$) (fig 1). Multivariate cox analysis demonstrated a three-fold increased risk of readmission for antral access (HR 3.05; 95% CI 1.23–7.58; $p = 0.016$). Neither Axios size, nor pigtail placement, nor prior or same-session ERCP showed a significant influence on the risk of readmission (► **Table 1**).

► **Table 1**

	Cholecystoduodenostomies, n(%)	Cholecystogastrostomies, n(%)	p
Technical success (TS)	112 (97,39%)	49 (96,08%)	0,648
Clinical success (CS)	110 (95,65%)	46 (90,20%)	0,173
Adverse events (AEs)	13 (11,30%)	13 (25,49%)	0,020
Procedure-related AEs	9 (18%)	8 (29,63%)	0,240

Conclusions Although both access routes provide very high rates of technical and clinical success in EUS-GBD, antral access is associated with a higher risk of adverse events and a significant increase in biliary readmissions. Therefore, although both techniques are valid, bulbar access should be considered the preferred route when anatomy allows. When gastric access was mandatory due to anatomical reasons, endoscopic follow-up may be considered (gallbladder stone clearance and LAMS removal or exchange for double pigtailed) to reduce AEs and prevent recurrent biliary episodes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP135 Impact of prior percutaneous gallbladder drainage (PTGBD) on endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) in patients with acute cholecystitis

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DOI 10.1055/s-0046-1820790

Aims EUS-GBD is an effective and safe technique in non-surgical patients with acute cholecystitis (AC). In many cases, urgent percutaneous gallbladder drainage (PTGBD) is performed first, and the drain is later internalized via endoscopic ultrasound. Since it has been suggested that conversion from PTGBD may yield poorer outcomes, this study aimed to evaluate the efficacy and safety of EUS-GBD in patients with and without conversion of prior PTGBD.

Methods Retrospective study including all patients who underwent EUS-GBD for acute cholecystitis between 2016 and 2025 [1–4].

Results A total of 195 patients with AC were included (53% male); mean age 83 ± 10 years. In 65 cases (34%), prior PTGBD had been performed and subsequently converted. Overall technical success was 90.8% (177/195). There were no differences between the conversion and non-conversion groups regarding technical success, clinical success, and intraprocedural or early (< 7 days) adverse events (AEs): 86.2% vs 93.1%, $p = 0.1$; 98.2% vs 95.9%, $p = 0.6$; 4.6% vs 3.1%, $p = 0.6$; 6.2% vs 5.4%, $p = 0.8$, respectively. In 20 patients without prior PTGBD, gallbladder puncture with saline instillation for distension was required. Technical success was significantly lower in these patients (80%) compared with those with a naturally distended gallbladder (95.5%), $p = 0.01$.

Conclusions EUS-GBD performed as a conversion from prior PTGBD is not associated with worse outcomes, indicating that patients initially treated with urgent PTGBD can safely undergo endoscopic drainage and benefit from its lower complication and recurrence rates. However, patients requiring gallbladder distension via direct puncture show lower technical success.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] i-EUS Working Group Facciorusso A, Binda C, Crinò SF, Lisotti A, Spadaccini M, Amato A, Carrozza L, Catena F, Cobianchi L, Coluccio C, Forti E, Fuccio L, Ligresti D, Maida MF, Mauro A, Mazza S, Mirante VG, Rizzo GEM, Troncone E, Vanella G, Rakichevskij E, Anderloni A, Fabbri C, Tarantino I, Ansaloni L, Armellini E, Badas R, Barbera C, Berretti D, Boskoski I, Camellini L, Cennamo V, Cugia L, Del Vecchio Blanco G, De Nucci G, Di Mitri R, Di Pisa M, Ferrara F, Fugazza A, Moutinho-Ribeiro P, Macor D, Marciano E, Mutignani M, Perez Miranda M, Piras E, Pollino V, Redaelli AE, Scarcelli A, Spada C, Traina M, Tringali A, Venezia G, Fusaroli P The i-EUS consensus on EUS-guided gallbladder drainage: a 3-step modified Delphi approach. *Endosc Ultrasound* 2025; 14 (3): 106–119. doi:10.1097/EUS.000000000000128
- [2] Troncone E, Amendola R, Moscardelli A, De Cristofaro E, De Vico P, Paoluzzi OA, Monteleone G, Perez-Miranda M, Del Vecchio Blanco G. Endoscopic Gallbladder Drainage: A Comprehensive Review on Indications, Techniques, and Future Perspectives. *Medicina (Kaunas)* 2024; 60: 633. doi:10.3390/medicina60040633. PMID: 38674279 PMID: PMC11052411
- [3] Minaga K, Yamashita Y, Ogura T, Takenaka M, Shimokawa Y, Hisa T, Itonaga M, Kato H, Nishikiori H, Okuda A, Matsumoto H, Uenoyama Y, Watanabe T, Chiba Y, Higuchi K, Kudo M, Kitano M. Clinical efficacy and safety of endoscopic ultrasound-guided gallbladder drainage replacement of percutaneous drainage: A multicenter retrospective study. *Dig Endosc* 2019; 31: 180–187. doi:10.1111/den.13242 Epub 2018 Aug 27 PMID: 30039611
- [4] Law R, Grimm IS, Stavas JM, Baron TH. Conversion of Percutaneous Cholecystostomy to Internal Transmural Gallbladder Drainage Using an Endoscopic Ultrasound-Guided, Lumen-Apposing Metal Stent. *Clin Gastroenterol Hepatol* 2016; 14: 476–80. doi:10.1016/j.cgh.2015.10.026. Epub 2015 Oct 31 PMID: 26528802

OP136 Endoscopic ultrasound-guided gallbladder drainage with lumen-apposing metal stent vs laparoscopic cholecystectomy in frail elderly patients with acute cholecystitis: a retrospective cohort study

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DOI 10.1055/s-0046-1820791

Aims Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) with lumen-apposing metal stent (LAMS) is increasingly being performed as an alternative to laparoscopic cholecystectomy (LC) in frail elderly patients with high surgical risk and acute cholecystitis. We analyzed short-term safety and mortality of EUS-GBD vs LC in this setting.

Methods We performed a retrospective observational cohort study on consecutive patients aged ≥ 70 years with American Society of Anesthesiology (ASA) score III–IV, who were admitted to our Hospital with acute cholecystitis, and were treated with either EUS-GBD with LAMS or LC. Primary outcomes were 30-day mortality, 30-day adverse events (AE), 30-day readmissions, and length of stay (LOS) in hospital. Secondary outcome was cumulative mortality at 1 year. Group comparisons were performed using Fisher's exact test and Mann-Whitney U test for categorical and continuous variables, respectively.

Results Seventy-eight patients were included (EUS-GBD, $n = 28$; LC, $n = 50$). Patients in the EUS-GBD group were significantly older (mean 83.2 vs 78.7 years, $p = 0.007$), had more frequently an ASA IV score (39.3 % vs 10 %, $p = 0.004$), a Charlson Comorbidity Index (CCI) ≥ 5 (75 % vs 44 %, $p = 0.010$), and a Tokyo grade III cholecystitis (32.1 % vs 2 %, $p = 0.001$) compared to those in the LC group. Thirty-day mortality rates were 7.1 % (2/28) after EUS-GBD vs 2 % (1/50) after LC ($p = 0.291$). Thirty-day AE occurred in 7.1 % (2/28) of patients undergoing EUS-GBD vs 12 % (6/50) of those undergoing LC ($p = 0.704$). Thirty-day readmission rates were 7.1 % (2/28) after EUS-GBD vs 4 % (2/50) after LC ($p = 0.615$). Median LOS was 8 days [IQR 6–14] in the EUS-GBD group and 8 days [IQR 6–12] in the LC group ($p = 0.745$). Cumulative mortality at 1 year was 28.6 % (8/28) after EUS-GBD compared with 12 % (6/50) after LC ($p = 0.070$).

Conclusions EUS-GBD with LAMS was more frequently selected for older, frailer patients with higher surgical risk, as reflected by significantly higher ASA and CCI scores and more severe cholecystitis at baseline. Despite these unfavorable characteristics, short-term outcomes, including 30-day adverse events, readmissions, and hospital LOS, were comparable between EUS-GBD and LC. We observed a trend towards higher cumulative mortality at 1 year in the EUS-GBD group, which likely reflects underlying frailty rather than procedure-related complications. Our results suggest that EUS-GBD is a valuable option for high-risk patients with acute cholecystitis who are deemed unfit for LC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Scope Meets Scale: Optimizing Endoscopy in Obesity

15/05/2026, 10:30–11:30

Aqua 3 +4

OP137 Endoscopic Sleeve Gastroplasty Versus Oral Semaglutide for Obesity: A Real-World Comparative Study

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Aims Endoscopic sleeve gastroplasty (ESG) and glucagon-like peptide-1 receptor agonists are established therapies for obesity. However, comparative real-world data—especially with oral semaglutide—remain limited. We compared the short-term effectiveness and safety of ESG versus oral semaglutide 14 mg in obesity.

Methods We conducted a retrospective comparative cohort study between January 2024 and April 2025. Adults aged 18–65 years with BMI ≥ 30 kg/m² or ≥ 27 kg/m² with obesity-related comorbidity treated with either ESG or oral semaglutide 14 mg daily and having 6-month follow-up were included. Primary endpoint was percentage total body weight loss (%TBWL) at 6 months. Secondary outcomes included responder rates (≥ 5 %, ≥ 10 %, ≥ 15 % TBWL) and adverse events. Analyses included unadjusted t-tests, ANCOVA adjusted for age, sex, baseline BMI and diabetes, inverse probability of treatment weighting (IPTW), and 1:1 propensity-matched sensitivity analysis. Risk ratios for responder outcomes were estimated using modified Poisson regression.

Results A total of 150 patients were included (ESG $n = 50$; semaglutide $n = 100$). Baseline age, sex, BMI, and metabolic comorbidities were comparable between groups. At 6 months, mean %TBWL was significantly higher with ESG than semaglutide (12.72 ± 5.67 % vs 8.67 ± 3.84 %; mean difference 4.05 %; $p = 0.0001$). After covariate adjustment, ESG remained superior ($\beta = -4.04$ %; 95 % CI -6.08 to -1.99; $p = 0.0001$). IPTW analysis confirmed an adjusted mean difference of 4.20 % favoring ESG (95 % CI 2.12–6.28; $p < 0.001$) with excellent post-weighting balance. In 1:1 propensity-matched pairs, ESG maintained higher %TBWL (12.9 ± 5.4 % vs 9.8 ± 5.2 %; $p = 0.021$). Responder rates ≥ 10 % TBWL were achieved in 70 % with ESG versus 43 % with semaglutide (RR 0.62; 95 % CI 0.46–0.82; $p = 0.0009$), and ≥ 15 % TBWL in 36 % versus 7 % (RR 0.20; 95 % CI 0.09–0.44; $p = 0.0006$). Treatment effects were consistent across BMI classes and diabetes status. Adverse event rates were comparable and predominantly mild gastrointestinal symptoms, with no serious complications or mortality.

Conclusions In real-world practice, ESG provides significantly greater short-term weight loss and higher clinically meaningful responder rates than oral semaglutide 14 mg, with comparable safety. ESG should be considered a highly effective minimally invasive option for patients seeking obesity treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP138 The Fulness Study: Updated 12-Month Results of Endoscopic Vertical Gastroplasty and Gastric Mucosal Ablation in patients with obesity

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DOI 10.1055/s-0046-1820793

Aims Obesity has reached global pandemic proportions, affecting over one billion people and increasing the risk of metabolic, cardiovascular, and respiratory diseases. Many patients are not candidates for bariatric surgery or prefer less invasive options. Endoscopic therapies offer promising alternatives. The combination of endoscopic vertical gastroplasty (ESG) and gastric fundus mucosal ablation (GMA) using hybrid argon plasma coagulation may provide a safe and effective treatment that supports long-term weight reduction and metabolic improvement in patients with moderate obesity. The primary aim of this study was to assess the safety and efficacy of combining ESG with gastric fundus mucosal ablation using hybrid argon plasma coagulation. Secondary objectives included evaluating changes in body mass index, ghrelin levels, comorbidities, and patient-reported quality of life.

Methods This single-center pilot interventional study enrolled 21 patients with obesity (body mass index ≥ 30 kg/m²). All participants underwent endoscopic vertical gastroplasty followed by gastric fundus mucosal ablation and were assessed at 1, 6, and 12 months. Clinical, hormonal, histological, and quality-of-life evaluations were conducted. The primary outcome was the percentage of total body weight loss, and body mass index at 6 and 12 months was recorded. Nineteen patients completed the 12-month follow-up.

Results Among the 19 patients who completed the follow-up, mean total body weight loss was 17.32% $\pm$ 7.16 at 6 months and 18.22% $\pm$ 8.37 at 12 months, demonstrating sustained weight reduction over the one-year period. No patient required re-intervention, and endoscopic evaluation confirmed complete mucosal healing in all patients by 6 months.

Mean body mass index decreased from 35.12 $\pm$ 3.63 kg/m² at baseline to 29.87 $\pm$ 3.55 kg/m² at 6 months and 28.13 $\pm$ 3.78 kg/m² at 12 months, reflecting clinically significant improvements. Preliminary histological and hormonal analyses are ongoing; early observations suggest that gastric fundus mucosal ablation may modulate ghrelin secretion, potentially contributing to appetite regulation and long-term weight maintenance. Overall, the combined endoscopic approach appears effective, safe, and well tolerated in patients with moderate obesity who are not candidates for surgical interventions.

Conclusions The Fulness Study demonstrates that combining endoscopic vertical gastroplasty with gastric fundus mucosal ablation is a feasible, safe, and clinically effective strategy for weight reduction in moderate obesity. These findings support further studies with larger cohorts and extended follow-up to confirm long-term efficacy and metabolic benefits.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP139 Predictors of Follow-Up Discontinuation After Endoscopic Gastroplasty: A Secondary Analysis of a Randomized Trial

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Aims Loss to follow-up (LTFU) remains a substantial barrier to optimizing outcomes after endoscopic gastroplasty (EG) for obesity. This study aimed to

identify clinical determinants of attrition and to develop predictive models able to detect patients at high risk of early discontinuation.

Methods We performed a secondary analysis of a randomized pragmatic trial including 183 patients who underwent EG. Demographic, anthropometric, clinical, radiologic and psychological variables collected over 18 months were evaluated. Three logistic regression models were developed to estimate LTFU risk, with performance assessed by area under the receiver operating curve (AUC) and classification metrics. Sensitivity analyses included weighted logistic regression and Synthetic Minority Over-sampling Technique (SMOTE).

Results A total of 154 patients (84%) discontinued follow-up before 18 months. Dropouts were younger and had higher baseline weight compared with those retained. A simple model including age, sex and baseline weight showed modest discrimination (AUC 0.62). Models incorporating longitudinal weight trajectories and selected clinical and psychological variables improved accuracy (AUC 0.82 and 0.90). Slow or minimal weight loss was strongly associated with LTFU across all models, while psychological components did not demonstrate consistent associations after adjustment.

Conclusions This model reliably identifies patients at risk of LTFU after EG, highlighting baseline weight and weight-loss trajectory as key predictors. Integrating this tool into clinical practice may facilitate risk-adapted follow-up strategies, enabling intensified support for vulnerable patients and improving long-term outcomes in bariatric endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP140 Hidden Risks in the Young Obese: One Quarter of Bariatric Surgery Candidates Harbor Premalignant Gastric Conditions

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DOI 10.1055/s-0046-1820795

Aims Gastric cancer progresses through premalignant stages, including atrophic gastritis (AG) and intestinal metaplasia (IM). Although the relationship between obesity and these lesions remains under investigation, candidates for bariatric surgery—despite being predominantly young adults—routinely undergo preoperative esophagogastroduodenoscopy (EGD) with biopsies. This study aimed to determine the prevalence of premalignant gastric conditions in this population and to evaluate the clinical relevance of routine endoscopic assessment.

Methods We conducted a retrospective observational study including consecutive patients referred for preoperative bariatric surgery assessment from January to November 2025. All subjects underwent EGD with biopsies following the Sydney System. Demographic, clinical and histological variables were collected. The primary outcome was the prevalence of AG and IM. Associations between potential risk factors and premalignant conditions were evaluated.

Results A total of 119 patients were included (mean age 44.9 years; mean body mass index 40.7 kg/m²). *Helicobacter pylori* infection was present in 56.3% of subjects. AG and IM were identified in 25.2% of cases. Patients with AG and IM were significantly older than those without these lesions ($p = 0.002$). No significant differences were observed regarding gender, body mass index, *H. pylori* infection, smoking habits or family history of gastric cancer. No dysplasia, gastric adenomas, early gastric cancers or advanced gastric cancers were detected.

Conclusions Premalignant gastric conditions were detected in one quarter of obese individuals undergoing preoperative bariatric assessment, with age being the only statistically significant associated factor. The high prevalence observed in this predominantly young population suggests that obesity may represent a relevant risk factor for premalignant gastric lesions. These findings support the routine use of preoperative endoscopy with systematic biopsies in bariatric candidates, both to guide surgical planning and to enable early detec-

tion of premalignant changes. Beyond bariatric surgery, the results highlight the potential value of targeted gastric surveillance in obese populations, with implications for early diagnosis and cancer prevention strategies in the general population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP141 Lumen-apposing metal stents (LAMS) versus endoscopic dilation for naïve anastomotic strictures after gastric bypass: a 10-year large single-center cohort study

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DOI 10.1055/s-0046-1820796

Aims Anastomotic strictures (AS) after gastric bypass (GB) are a challenging complication traditionally managed with endoscopic dilation (ED). Lumen-apposing metal stents (LAMS) have emerged as an alternative, although comparative evidence remains limited. This study evaluated the efficacy and safety of LAMS for naïve post-GB AS and compared outcomes with ED.

Methods Single-center retrospective cohort study including all consecutive patients who developed naïve AS after Roux-en-Y or Omega GB and were treated with LAMS (16 × 30 mm) or ED (pneumatic/bougie) from January 2015 to August 2025. Technical success (TS) was defined as completion of the procedure. Clinical success (CS) was defined as improvement of ≥ 1 level in the Mel–low–Pinkas Dysphagia Score. Recurrence was defined as dysphagia score 3–4 and/or inability to maintain a satisfactory luminal caliber within 4 weeks after achieving CS. Adverse events (AEs) were classified using AGREE. Recurrence-free survival (RFS) was assessed with Kaplan–Meier analysis.

Results A total of 146 patients were included (121 LAMS; 25 ED). Baseline characteristics were similar. In the LAMS group, TS and CS were 100 % and 95.9 %, respectively; recurrence was 5.2 % after a median 36-month follow-up. LAMS required one procedure in nearly all cases and achieved rapid symptom resolution with minimal hospitalization. AEs occurred in 7.4 %, mostly late and related to stent migration. Compared with ED, TS and CS were similar (100 % vs 100 %; 95.9 % vs 96.0 %). However, recurrence was significantly lower with LAMS (5.2 % vs 37.5 %; $P < 0.0001$), and RFS was markedly superior (log-rank $P = 0.0003$). AEs were significantly more frequent with ED (36.0 % vs 7.4 %; $P = 0.0244$), with more intraprocedural and early events. ED required more procedures and longer hospitalization.

Conclusions LAMS demonstrated superior long-term efficacy and safety over ED, supporting its use as a preferred first-line treatment for naïve post-GB AS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP142V Modified G-POEM for Non-Helical Post-Sleeve Stenosis with Proximal Gastric Outpouching

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DOI 10.1055/s-0046-1820797

Abstract Text Nonhelical gastric sleeve stenosis (NHGSS) with proximal outpouching is an uncommon adverse event. Endoscopic experience in this setting remains limited, with only two case reports describing a modified gastric peroral endoscopic myotomy (G-POEM) approach. We present a 65-year-old woman with severe post-sleeve food intolerance. Endoscopy presented a gastric outpouching above the sleeve lumen, separated by a muscular septum, with barium swallow showing contrast retention in the outpouch. A modified G-POEM was performed, including mucosotomy proximal to the septum, submucosal tunneling, septum exposure, and full-thickness myotomy extended 2 cm into the gastric body to achieve sleeve remodelling. The patient was discharged after two days and tolerated solid food at three weeks with high satisfaction. Modified G-POEM appears to be a promising therapeutic option for NHGSS [1–4].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ad90ac03-6d48-40eb-9da2-19931b536019/Uploads/19978_mG-POEMforNHGSS.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gopakumar H, Puli SR. Modified peroral endoscopic myotomy for non-helical-type gastric sleeve stenosis after laparoscopic sleeve gastrectomy. *Gastrointest Endosc* 2024; 99 (2): 287–288
- [2] Rahman SH, Kedia P. Modified gastric-peroral endoscopic myotomy with sleeve release in a case of severe gastric sleeve stenosis. *VideoGIE* 2023; 9 (1): 8–11
- [3] Zhang LY et al. Gastric per-oral endoscopic myotomy (G-POEM) for the treatment of gastric sleeve stenosis: a feasibility and safety study. *Endoscopy* 2022; 54 (4): 376–381
- [4] Farha J. et al. Gastric Per-Oral Endoscopic Myotomy (G-POEM) for the Treatment of Gastric Stenosis Post-Laparoscopic Sleeve Gastrectomy (LSG). *Obes Surg* 2019; 29 (7): 2350–2354

Optical Diagnosis Meets AI – Driving Excellence in Key Performance Indicators

15/05/2026, 10:30–11:30

Sky 1

OP143 Upskilling of Optical Diagnosis Performance over Time with Computer Assisted Diagnosis Use: Results from a Large Prospective Cohort

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DOI 10.1055/s-0046-1820798

Aims Artificial Intelligence (AI)-based Computer Assisted Diagnosis (CADx) enables histology prediction of colorectal polyps during colonoscopy. CADx may improve endoscopist optical diagnosis performance by providing real-time

diagnostic feedback to the endoscopist. However, whether use of CADx as a decisional support tool may impact endoscopists' diagnostic abilities over time leading to possible deskilling or upskilling remains uncertain [1, 2]. Few studies have documented CADx-assisted optical diagnosis performance longitudinally. This study aimed to assess the evolution of diagnostic performance over time in cases with and without CADx use.

Methods We conducted a secondary analysis of a large prospective cohort (IRB Nr. 22.013) of patients undergoing screening, surveillance, and diagnostic colonoscopies at the *Montreal University Hospital Center* between January 2021 and July 2025, with CADx being consistently available as of June 2022. Within this cohort, polyp characterization, including endoscopist optical diagnosis and CADx use, was systematically documented for all polyps visualized in enrolled patients during the procedure. All polyps with documented optical diagnosis, either CADx-assisted or unassisted, and available histopathology were included in the analysis. The primary outcome was the monthly evolution of the overall accuracy of CADx-assisted versus CADx-unassisted optical diagnoses, using polyp histopathology diagnosis as the reference standard, for all polyp types. We hypothesised that over time the accuracy of CADx-assisted optical diagnoses would increase at a higher rate than that of CADx-unassisted optical diagnoses given the possibility for endoscopist upskilling; to learn by integrating CADx diagnostic feedback. Secondary outcomes included the monthly evolution of adenoma sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) across both groups. All outcomes were estimated through logistic regressions using generalised estimating equations to account for intra-endoscopist and intra-patient correlations.

Results A total of 1321 patients (mean age 65.9, 46.2% female) with 2855 polyps (mean size 7.25mm, 64.4% adenomas, 19.9% hyperplastic, 6.3% sessile serrated lesions, 9.4% other), of which 1257 (44%) CADx-assisted cases and 1598 (56%) CADx-unassisted cases, were included in our analysis. Proportions of histology types and polyp sizes were similar across CADx-assisted and unassisted cases. 30 endoscopists, of which 17 trainees, participated in this study, all of whom made at least one CADx-unassisted diagnosis, while 18 (60%) made at least one CADx-assisted diagnosis, 10 of which performed $\geq 75\%$ of their colonoscopies with CADx. For CADx-assisted cases, the odds of making a correct diagnosis significantly increased by 3.4% each month (OR: 1.034, 95% CI: [1.020-1.049], $p < 0.001$), whilst for unassisted cases, accuracy did not significantly increase over time (1.1% each month, OR: 1.011, 95% CI: [0.997-1.025], $p = 0.118$). Similarly, the odds of correctly identifying a non-adenoma as such (diagnostic specificity) increased by 2.3% each month for CADx-assisted diagnoses (OR: 1.023, 95% CI: [1.001-1.046], $p = 0.036$) but did not increase for unassisted diagnoses. All diagnostics metrics trended higher over time for CADx-assisted optical diagnosis, although monthly increases in sensitivity and PPV were not statistically significant.

Conclusions This cohort represents, to our knowledge, the first longitudinal evaluation of endoscopist optical diagnosis performance evolution, with and without CADx use, in an implementation setting. Over a study period of four years, optical diagnosis performance increased at a higher rate over time in CADx-assisted cases compared to unassisted cases, supporting that CADx use may enable endoscopist upskilling. These findings highlight the need for further evaluation of human-computer interactions, notably what happens to endoscopist diagnostic performance if CADx support is withdrawn after extended use. [3-4]

Conflicts of Interest Daniel von Renteln is supported by a "Fonds de Recherche du Québec Santé" career development award. He has also received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. Roupen Djinbachian has received speaker fees from Fujifilm. The remaining authors declare that they have no conflict of interest.

References

- [1] Troya J, Fitting D, Brand M et al. The influence of computer-aided polyp detection systems on reaction time for polyp detection and eye gaze. *Endoscopy*. 2022; 54 (10): 1009-1014
- [2] Budzýn K, Romańczyk M, Kitala D et al. Endoscopist deskilling after exposure to artificial intelligence in colonoscopy: a multicenter, observational study. *The Lancet Gastro Hep* 2025; 10 (10): 896-903
- [3] Budzýn K, Romańczyk M, Kitala D et al. Endoscopist deskilling after exposure to artificial intelligence in colonoscopy: a multicenter, observational study. *The Lancet Gastro Hep* 2025; 10 (10): 896-903
- [4] Troya J, Fitting D, Brand M et al. The influence of computer-aided polyp detection systems on reaction time for polyp detection and eye gaze. *Endoscopy*. 2022; 54 (10): 1009-1014

OP144 Training and Early Adoption of Optical Diagnosis for Diminutive Polyps in the English Bowel Cancer Screening Programme

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DOI 10.1055/s-0046-1820799

Aims Optical diagnosis (OD) with a resect-and-discard strategy for diminutive polyps enables real-time endoscopic characterisation, photo-documentation, and immediate resection without histopathology. This approach supports more sustainable, efficient, and cost-effective practice while maintaining diagnostic quality. In 2023, the NHS Bowel Cancer Screening Programme (NHSBCSP) formally approved OD for implementation, with national roll-out commencing in 2024. This study provides an early evaluation of the first 18 months of implementation, examining training uptake, accreditation outcomes, establishment of local quality-assurance structures, and early estimates of time and cost savings.

Methods All 520 screening colonoscopists were invited to complete a two-stage national OD accreditation pathway.

Part 1 consisted of a national training day covering classification systems, high-confidence criteria, and photo-documentation standards. Participants completed pre- and post-course assessments involving optical diagnosis of 120 polyp images. Accreditation required $\geq 85\%$ accuracy for high-confidence calls and $\geq 50\%$ of all calls made with high confidence.

Part 2 involved supervised OD assessment at each colonoscopist's base hospital, requiring 20 consecutive high-confidence in-vivo OD cases. Assessment included evaluation of photo-documentation using the 3C score (clean, complete, correctly focussed) and accuracy against histology. A pass required $\geq 90\%$ adequate photo quality and $\geq 85\%$ diagnostic accuracy.

Successful candidates became fully accredited to perform OD with resect-and-discard in screening practice. Re-accreditation is required every two years via an online assessment of 120 images. Each screening centre was asked to appoint an Optical Diagnosis Champion responsible for ongoing performance monitoring, quality assurance, and supporting colleagues through the accreditation process.

Results Between March 2024 and October 2025, six national training days were delivered. A total of 501 attendees (501/520, 96%) have completed Part 1, and 451 of 501 (90%) passed the post-course assessment. By October 2025, 276 of 501 (55%) had completed both stages and were fully accredited. Optical Diagnosis Champions were appointed at 62 of 64 screening centres (97%), providing near-universal local leadership.

As of 31 October 2025, 32,919 diminutive polyps had been resected and discarded without histopathology, generating an estimated cost saving of £1,218,003, based on a £37 cost per specimen. This corresponds to an estimated 10,973 hours of histopathology reporting time saved (assuming 20

minutes per polyp). Additional gains are anticipated as more colonoscopists achieve accreditation.

A further national training day is planned for February 2026, after which Part 1 training will transition to an eLearning format to support flexible access and enable completion of national roll-out.

Conclusions The first 18 months of implementation show high engagement with OD training across the NHSBCSP, with approximately half of trained colonoscopists already accredited and delivering OD in practice. Early outcomes demonstrate substantial cost and workforce efficiencies. With strong local QA infrastructure established through Optical Diagnosis Champions and continued expansion of training access, full national implementation is expected by 2027, offering a scalable model for integrating OD within population-based screening.

Conflicts of Interest BPS has done consultancy and speaker work for Olympus. There are no other relevant current conflicts of interest to declare.

OP145 Computer-assisted versus unassisted optical diagnosis of colorectal polyps: results from a large pragmatic implementation study

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DOI 10.1055/s-0046-1820800

Aims Endoscopist optical diagnosis (OD) in real-time during colonoscopy could replace histopathological examination for diminutive (≤ 5 mm) colorectal polyps. Computer-Aided Diagnosis (CADx) may help improve and standardize OD. However, data evaluating CADx-assisted OD primarily originates from controlled experimental study designs, limiting its external validity. This study aimed to evaluate diagnostic performance of CADx-assisted OD versus CADx-unassisted OD for diminutive polyps encountered in routine clinical practice by a diverse cohort of endoscopists at a tertiary care center [1–3].

Methods We conducted a large prospective, IRB-approved, pragmatic implementation study (NCT06822816) at the Montreal University Hospital Center between January 2021 and July 2025. Consecutive patients ≥ 40 years old undergoing elective colonoscopies with ≥ 1 diminutive polyp identified were included. Polyp characteristics, including endoscopist optical diagnosis, were consistently documented during each procedure by a research assistant. All diminutive polyps with available optical diagnosis and histopathology diagnosis were included in this analysis. Procedures were performed with or without CADx assistance depending on CADx availability in the endoscopy suite and endoscopist choice. A diverse cohort of endoscopists, including trainees, with varying degrees of optical diagnosis and CADx experience participated. Our primary outcome was the sensitivity for adenoma diagnosis of CADx-assisted OD versus CADx-unassisted OD, using polyp histopathology diagnosis as ground truth. Secondary outcomes were the accuracy, and adenoma specificity, positive predictive value (PPV) and negative predictive value (NPV) of each method. Implications for the resect-and-discard and diagnose-and-leave strategies were also evaluated.

Results A total of 1827 diminutive polyps, 860 with CADx diagnosis (of which 709 with CADx-assisted OD) and 979 without CADx use (unassisted OD), found in 966 patients (mean age 66 years, 46.8% female) were included. The polyp cohort consisted of 1120 (61.3%) adenomas, 421 (23.0%) hyperplastic polyps, 57 (3.1%) sessile serrated lesions, and 212 (12.3%) polyps with other histologies. 30 endoscopists, including 17 trainees, participated in the study. Adeno-

ma sensitivity of CADx-assisted OD (85.6%, 95%CI:[81.9-88.7]) did not differ compared to unassisted OD (83.8%, 95%CI:[80.7-86.5], $p = 0.416$). However, adenoma sensitivity of the CADx output itself was significantly lower (76.1% [72.2-79.6]), $p = 0.001$). Adenoma specificity of CADx-assisted and unassisted OD was also similar, (62.4%(57.1-67.4) vs 58.9%(53.9-63.7); $p = 0.319$). ▶ **Table 1**. The rate of high confidence diagnoses was similar with or without CADx assistance, 84.9% (602/709) and 81.1% (794/979), respectively, and had similar diagnostic performance. In a simulated diagnose-and-leave strategy, among diminutive rectosigmoid polyps diagnosed with high confidence, there was no statistically significant difference in the NPV for adenomas between unassisted and CADx-assisted predictions (94.4% [87.1-97.6] vs 94.4% [86.0-97.9], $p = 0.987$)

▶ **Table 1** Diagnostic performance metrics (%(95% CI), p-value)

	CADx-Unas-sisted	CADx-Assisted	CADx Output
Accuracy	66.1 % (63.1-68.9)	63.7 % (60.2-66.9) 0.271	61.4 % (58.1-64.5) 0.029
Specificity	58.9 % (53.9-63.7)	62.4 % (57.1-67.4) 0.319	64.6 % (59.6-69.3) 0.096
PPV	77.6 % (74.4-80.5)	74.6 % (71.1-77.8) 0.180	74.6 % (71.1-77.8) 0.172
NPV	67.6 % (62.8-72)	66.4 % (62-70.6) 0.671	64.8 % (60.3-69.1) 0.330

Conclusions In this implementation study reflecting routine clinical practice with CADx availability, CADx-assisted OD did not significantly outperform unassisted OD for diminutive colorectal polyps. Both CADx-assisted and unassisted high-confidence diagnoses for rectosigmoid polyps met the $\geq 90\%$ NPV benchmark for implementation of diagnose-and-leave strategies.

Conflicts of Interest Daniel von Renteln has received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. Douglas Rex has received consultant fees from Boston Scientific, Olympus Corporation, Braintree Laboratories, Sebel Pharmaceuticals, Laborie, Medtronic, has received research support from Boston Scientific, Sebel Pharmaceuticals, Medtronic, Olympus Corporation, Erbe, and has ownership interest in Satisfai Health. Roupen Djinbachian has received speaker fees from Fujifilm. The remaining authors declare that they have no conflict of interest.

References

- [1] Hassan C, Misawa M, Rizkala T, Mori Y, Sultan S, Facciorusso A et al. Computer-Aided Diagnosis for Leaving Colorectal Polyps In Situ : A Systematic Review and Meta-analysis. *Ann Intern Med* 2024; 177 (7): 919–28
- [2] Abu Dayyeh BK, Thosani N, Konda V, Wallace MB, Rex DK, Chauhan SS et al. ASGE Technology Committee systematic review and meta-analysis assessing the ASGE PIVI thresholds for adopting real-time endoscopic assessment of the histology of diminutive colorectal polyps. *Gastrointest Endosc* 2015; 81: 502.e1–e16
- [3] Hassan C, Rizkala T, Mori Y, Spadaccini M, Misawa M, Antonelli G et al. Computer-aided diagnosis for the resect-and-discard strategy for colorectal polyps: a systematic review and meta-analysis. *Lancet Gastroenterol Hepatol* 2024; 9 (11): 1010–9

OP146 Optical Polyp Diagnosis in Inflammatory Bowel Disease: A Pilot Study of AI-Assisted and Conventional Approaches

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DOI 10.1055/s-0046-1820801

Aims Artificial intelligence (AI)-supported optical diagnosis (OD) underpins “resect-and-discard” and “diagnose-and-leave” strategies in non-IBD screening cohorts, but its performance in IBD cohorts is poorly defined. We evaluated computer-aided assisted diagnosis (CADx) and non-assisted OD of diminutive and small polyps in patients with inflammatory bowel disease (IBD).

Methods We conducted a prospective, pragmatic implementation study with a secondary analysis of adult IBD patients undergoing colonoscopy at a tertiary center. Only diminutive and small polyps were included. Endoscopists freely chose OD modality in real time; each polyp could generate CADx-unassisted OD, CADx-unassisted image-enhanced endoscopy (IEE) OD, standalone CADx prediction, and/or CADx-assisted OD. Histopathology served as the reference standard.

Results Of 280 screened patients, 138 with 256 polyps (345 ODs) were analyzed (mean age 54.7 years; balanced Crohn's colitis and ulcerative colitis). Most polyps were diminutive (80.9%) and polypoid (89.3%). Across all polyp types, accuracy was 59.4% (95% CI 52.9–65.5) for CADx-unassisted OD and 60.3% (53.6–66.7) for CADx-unassisted IEE OD. Standalone CADx achieved 36.8% (18.6–59.8) accuracy, while CADx-assisted OD reached 52.6% (31.0–73.3), with wide confidence intervals due to few evaluable cases. For adenomas, CADx-unassisted and CADx-unassisted IEE OD showed comparable sensitivity (83.0% and 86.8%) and specificity (78.1% and 78.0%), with negative predictive values ≥ 90%. Performance for hyperplastic and inflammatory polyps was similarly modest and only marginally improved by IEE.

Conclusions In IBD surveillance, OD performance, even with IEE and off-the-shelf CADx, falls short of performance obtained in non-IBD cohorts and compared to guideline thresholds. Chronic architectural and vascular distortion in IBD patients likely makes OD more challenging underscoring the need for IBD-specific training of CADx systems.

Conflicts of Interest Daniel von Renteln has also received research funding from ERBE Elektromedizin GmbH, Ventage, Fujifilm, Cosmo IMD, Olympus, Magentiq Eye, Dova Health and Boston Scientific, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Fujifilm, Ventage, Olympus, Magentiq Eye, and Dova Health. The remaining authors declare that they have no conflict of interest.

OP147 Predictive accuracy of optical evaluation for high-risk serrated lesions and the impact of a brief educational intervention

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DOI 10.1055/s-0046-1820802

Aims Real-time characterisation of advanced lesions during colonoscopy informs the therapeutic approach. Sessile serrated lesions with dysplasia are a subgroup of advanced lesions that are difficult to recognise and accurately characterise. The ability of expert endoscopists to recognise these lesions is unknown; moreover, the impact of a simple training module on subsequent

performance is of interest. This study aimed to assess the baseline accuracy of experts and trainees in recognising SSL-D and to evaluate whether a brief educational module could improve their diagnostic performance.

Methods Seventy high-quality images were selected from a database of large sessile and flat polyps. Histopathology was used as the gold standard. The images were presented in randomised order to expert endoscopists and trainees. The focus was on identifying areas of demarcation amongst homogenous lesions. Participants were then asked to predict the underlying histology. Subsequently, an educational module was delivered, and participants were asked to repeat the test using the same images in a different randomised order.

Results Thirty-seven participants were included: 16 trainees and 21 experts. Baseline predictive accuracy for SSL-D was only 24.0% across the group; 18.3% for trainees and 28.2% for experts. This improved significantly, regardless of experience level, after the educational module to 69.7% ($p < 0.001$) for the whole cohort; 67.5% for trainees and 71.4% for experts. Before training, SSL-D was incorrectly identified as TA or TVA in 40%. Post-training, this reduced significantly to 7.6% ($p < 0.001$) for all participants. For experts, this decreased to 7.0% ($p < 0.001$) and trainees to 8.3% ($p < 0.001$).

Conclusions SSL-D lesions are underdiagnosed by both expert and trainee endoscopists. The simple principle of identifying a demarcated area within an otherwise homogenous lesion can significantly improve the predictive accuracy and performance of experts and trainees.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP148 Live versus video assessment for detection of submucosal invasive cancer in large non-pedunculated colorectal polyps: a multicentre prospective study

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DOI 10.1055/s-0046-1820803

Aims Accurate identification of submucosal invasive cancer (SMIC) in large non-pedunculated colorectal polyps (LNPCPs) is critical for selecting appropriate treatment—endoscopic resection for benign lesions versus surgery for deeply invasive cancer. Video assessment may facilitate expert review and multidisciplinary triage without repeat examinations, but whether diagnostic performance differs from live assessment remains unclear. This multicentre prospective study compared live versus video assessment for SMIC detection by expert and optically trained endoscopists.

Methods Consecutive LNPCPs referred for endoscopic resection at four tertiary centres were assessed in real time by expert endoscopists or optically trained interventional fellows. Before resection, the performing endoscopist recorded their SMIC assessment, and a high-definition video was obtained. Subsequently, assessors not involved in the original procedure independently reviewed videos via a web-based platform and classified lesions for SMIC.

The primary outcome was SMIC detection accuracy comparing live versus video assessment. Secondary outcomes were sensitivity and specificity stratified by expertise. Metrics were summarised with exact binomial 95% confidence intervals (CI), and live–video differences compared using χ^2 tests. Multivariate modelling analyses respected the hierarchical data structure, retaining one live assessment per lesion and clustering video assessments by lesion and rater.

► Table 1

Comparison	Metric	Live (95 % CI)	Video (95 % CI)	P-Value
All assessors	Sensitivity	79.2 % (65.0–89.5)	70.1 % (61.3–77.9)	> 0.05
	Specificity	87.4 % (81.9–91.7)	82.7 % (79.2–85.9)	> 0.05
	Accuracy	85.8 % (80.8–89.9)	80.2 % (76.9–83.2)	> 0.05
Experts	Sensitivity	88.9 % (70.8–97.6)	74.4 % (58.8–86.5)	> 0.05
	Specificity	88.1 % (80.5–93.5)	78.3 % (72.3–83.6)	0.047
	Accuracy	88.2 % (81.6–93.1)	77.7 % (72.1–82.6)	0.016
Fellows	Sensitivity	66.7 % (43.0–85.4)	67.9 % (56.8–77.6)	> 0.05
	Specificity	86.5 % (77.6–92.8)	86.0 % (81.5–89.8)	> 0.05
	Accuracy	82.7 % (74.3–89.3)	82.0 % (77.7–85.7)	> 0.05

Results Overall, 246 LNCPs underwent live assessment by 9 assessors (136 expert, 110 fellow), generating 637 video assessments (260 expert, 377 fellow). SMIC was present in 49 lesions (19.9 %), high-grade dysplasia in 71 (28.9 %), and low-grade dysplasia in 118 (48.0 %).

For all assessors combined, sensitivity for SMIC was 79.2 % (95 %CI 65.0–89.5) live versus 70.1 % (95 %CI 61.3–77.9) video ($P > 0.05$); specificity was 87.4 % (95 %CI 81.9–91.7) versus 82.7 % (95 %CI 79.2–85.9) ($P > 0.05$); accuracy was 85.8 % (95 %CI 80.8–89.9) versus 80.2 % (95 %CI 76.9–83.2) ($P > 0.05$) (► Table 1).

Among experts, sensitivity was 88.9 % (95 %CI 70.8–97.6) live versus 74.4 % (95 %CI 58.8–86.5) video ($P > 0.05$); specificity 88.1 % (95 %CI 80.5–93.5) versus 78.3 % (95 %CI 72.3–83.6) ($P = 0.047$); accuracy 88.2 % (95 %CI 81.6–93.1) versus 77.7 % (95 %CI 72.1–82.6) ($P = 0.016$).

Among fellows, no significant differences were observed: sensitivity 66.7 % (95 %CI 43.0–85.4) versus 67.9 % (95 %CI 56.8–77.6) ($P > 0.05$); specificity 86.5 % (95 %CI 77.6–92.8) versus 86.0 % (95 %CI 81.5–89.8) ($P > 0.05$); accuracy 82.7 % (95 %CI 74.3–89.3) versus 82.0 % (95 %CI 77.7–85.7) ($P > 0.05$).

Conclusions Expert endoscopists ruled out SMIC more accurately during live assessment than video review, driven by approximately 10 % higher specificity—likely reflecting real-time control of visualisation and targeted interrogation. For centres employing selective ESD strategies, live expert assessment remains the most reliable approach for excluding invasive cancer and ensuring patients receive appropriate treatment. Video assessment offers a practical alternative for expert triage when live assessment is unavailable and enables multidisciplinary and training case discussion.

Conflicts of Interest DJT: consulting fees and research support from Olympus Medical and research support from FujiFilm and Pentax Medical. The remaining authors have no competing interests to disclose.

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DOI 10.1055/s-0046-1820804

Aims Although several cohort studies [1–3] have reported that EUS-guided hepaticogastromy with antegrade placement (EUS-HGAS) prolongs time to recurrent biliary obstruction (TRBO) compared with EUS-HGS alone, prospective evidence remains unavailable. We conducted a multicenter prospective study to evaluate the outcomes of EUS-HGAS for unresectable malignant biliary obstruction (MBO) and further compared the results with historical data of EUS-HGS.

Methods This present study involved 24 referral centers in Japan. Patients scheduled to undergo EUS-HGAS for unresectable malignant biliary obstruction (MBO) after failed endoscopic retrograde cholangiopancreatography (ERCP)

The ultimate shortcut: EUS guided transgastric biliary interventions

15/05/2026, 12:00–13:00

Aqua 1 + 2

OP149 Prospective multicenter study of EUS-guided hepaticogastromy with antegrade stent placement in patients with unresectable malignant biliary obstruction

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between October 2022 and February 2025 were prospectively enrolled. In this procedure, an uncovered metal stent (MS) was used as the antegrade stent, and either a plastic stent or a covered MS was placed at the EUS-guided access route. Clinical assessments and blood tests were performed on postoperative days 1, 3, 30, 90, and 180, and additional imaging studies, such as CT scans, were obtained when clinically indicated. For comparison, historical data on EUS-HGS using a covered MS for unresectable MBO after failed ERCP were collected from the participating institutions for the period between April 2018 and March 2022. A matched cohort with balanced baseline characteristics was created using 1:2 propensity score matching to compare the EUS-HGAS and EUS-HGS groups. The primary endpoint was TRBO, while secondary endpoints included technical success, clinical success, adverse events (AEs), recurrent biliary obstruction (RBO), procedure time, length of hospital stay, and overall survival.

Results A total of 49 patients were prospectively enrolled in the EUS-HGAS group. Baseline characteristics were as follows: 57% male, median age 76 years, ECOG performance status 0 in 24%, pancreatic cancer as the primary malignancy in 55%, distal biliary obstruction in 86%, surgically altered anatomy in 35%, duodenal obstruction in 59%, preprocedural cholangitis in 18%, and ascites in 16%. The technical and clinical success rates were 73% (36/49) and 92% (33/36), respectively. Early and late adverse event (AE) rates were 12% (6/49; three cases of acute pancreatitis and three of bile peritonitis) and 2% (1/49; acute cholecystitis), respectively. The RBO rate was 6% (2/36). The median procedure time was 40 minutes (interquartile range [IQR], 26–50), and the median length of hospital stay was 13 days (IQR, 8–18).

In the EUS-HGS group, 414 patients were identified. In the prematched cohort, significant differences were observed between the two groups in primary cancer site, site of biliary obstruction, surgically altered anatomy, preprocedural cholangitis, and the presence of ascites. After matching, no significant differences in baseline characteristics were observed between the two groups. Ultimately, 44 patients in the EUS-HGAS group and 88 in the EUS-HGS group were included in the matched cohort.

The technical success rate was significantly lower in the EUS-HGAS group (70% vs. 95%, $P < 0.001$). Conversely, the RBO rate was significantly lower in the EUS-HGAS group (3% vs. 21%, $P = 0.022$). TRBO was significantly longer in the EUS-HGAS group (median not reached vs. 230 days; $P < 0.001$), whereas overall survival did not differ between the groups (196 days vs. 97 days; $P = 0.481$). No significant differences were observed in clinical success, AEs, procedure time, or length of hospital stay.

Conclusions Although EUS-HGAS had a lower technical success rate compared with EUS-HGS, it demonstrated a longer TRBO. In contrast, no differences were observed in AEs or overall survival between the two groups. The prolonged TRBO associated with EUS-HGAS may provide clinical benefits for patients with a longer life expectancy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martins OC et al. Evaluating the use of EUS-guided hepaticogastrostomy combined with antegrade stenting for malignant biliary obstruction and comparing to EUS-guided hepaticogastrostomy alone for patients who failed ERCP: a pairwise and single-arm meta-analysis. *Surg Endosc* 2025; 39 (6): 3786–3796
- [2] Itonaga M et al. Endoscopic ultrasound-guided hepaticogastrostomy vs. antegrade metal stent placement keeping an access route in patients with malignant biliary obstruction. *Int J Clin Oncol* 2024; 29 (10): 1500–1508
- [3] Ishiwatari H et al. EUS-guided hepaticogastrostomy versus EUS-guided hepaticogastrostomy with antegrade stent placement in patients with unresectable malignant distal biliary obstruction: a propensity score-matched case-control study. *Gastrointest Endosc* 2024; 100 (1): 66–75

OP150 Clinical Outcomes of EUS-Guided Hepaticogastrostomy Plus Antegrade Stenting: Impact of Stent Type Used for HGS

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Aims Endoscopic ultrasound-guided biliary drainage (EUS-BD) has been developed as an alternative when endoscopic retrograde cholangiopancreatography fails in patients with malignant biliary obstruction. Several EUS-BD approaches exist; however, in patients with surgically altered anatomy or duodenal obstruction, EUS-guided hepaticogastrostomy (EUS-HGS) is often the only feasible option. EUS-HGS combined with antegrade stenting (EUS-HGAS) has been reported to improve stent patency and reduce the risk of peritonitis in patients requiring biliary drainage. However, the influence of stent type used for the HGS—either plastic stents (PS) or metal stents (MS)—on clinical outcomes has not been fully evaluated. This study aimed to compare clinical outcomes of EUS-HGS and EUS-HGAS according to the type of stent used for HGS.

Methods This single-center retrospective study included patients with malignant biliary obstruction who underwent EUS-HGS or EUS-HGAS between 2016 and 2025. Patients with Bismuth type II or higher hilar obstruction were excluded. The outcomes assessed were adverse event (AE) rates, stent patency, and overall survival (OS). Patients were categorized into four groups based on the stent type used for HGS: HGS-MS, HGS-PS, HGAS-MS, and HGAS-PS. Metal stents were used for antegrade stenting in all EUS-HGAS procedures. Variables that differed among groups—surgically altered anatomy, prior transpapillary stenting, and metastasis—were included in a multivariable Cox proportional hazards model to identify factors associated with stent patency.

Results During the study period, 306 patients underwent EUS-HGS or EUS-HGAS, and 242 met the inclusion criteria after excluding 64 patients with hilar obstruction (132 HGS-MS, 31 HGS-PS, 52 HGAS-MS, and 27 HGAS-PS). Baseline characteristics differed significantly between groups regarding surgically altered anatomy, previous transpapillary stenting, and the presence of metastasis. Overall AE rates were similar among groups (19%, 13%, 14%, and 19%; $p = 0.79$), as were severe AE rates ($\geq$ grade III: 7%, 6%, 4%, and 7%; $p = 0.07$). Median stent patency differed significantly, with durations of 338 days (HGS-MS), 159 days (HGS-PS), and not reached in both HGAS groups ($p < 0.05$). Overall survival also varied significantly among groups (123, 497, 201, and 142 days; $p < 0.05$). In multivariable analysis, using the HGS-MS group as the reference, the hazard ratios (HRs) for stent dysfunction were 0.29 (95%CI: 0.11–0.72; $p < 0.01$) for HGAS-MS, 0.37 (95%CI: 0.11–1.26; $p = 0.11$) for HGAS-PS, and 3.31 (95%CI: 1.47–7.46; $p < 0.01$) for HGS-PS.

Conclusions EUS-HGAS using an MS for HGS placement significantly prolonged stent patency compared with EUS-HGS. The benefit of EUS-HGAS was diminished when a plastic stent was used for HGS. Among all groups, HGS-PS showed the shortest stent patency. These findings highlight the importance of selecting an appropriate stent type for HGS when performing EUS-guided biliary drainage [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ishiwatari H et al. EUS-guided hepaticogastrostomy versus EUS-guided hepaticogastrostomy with antegrade stent placement in patients with unresectable malignant distal biliary obstruction: a propensity score-matched case-control study. *Gastrointest Endosc*. 2024; 100 (1): 66–75

OP151 Learning curve of Junior Endoscopists in EUS-Guided Hepaticogastrostomy with a dedicated stent: a prospective analysis

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DOI 10.1055/s-0046-1820806

Aims Learning curve of EUS-guided Hepaticogastrostomy (EUS-HGS) has been explored through retrospective studies involving few elite senior endoscopists, with procedural time as the main surrogate outcome. This study aims to evaluate the learning curve of a junior endoscopist (JE) covering also clinically relevant patient outcomes.

Methods From a prospective single-center registry of EUS-HGS (PROTECT, ClinicalTrials.gov NCT04813055) using a dedicated, partially covered stent (Giobor, Taewoong), the learning curve of one JE, with advanced experience in pancreatobiliary endoscopy (PBE), was analyzed to identify changing points ("knots") applying linear and spline regression and cumulative sum control chart (CUSUM) on several continuous and dichotomic variables.

Results 71 EUS-HGS performed by one JE between April-2021 and October-2025 were included (median age 67 [60-74], males 62%, pancreatic cancer 49%, metastatic 79%). Technical (97.2%) and Clinical (71%) success and Procedure-related Adverse Events (27.9%) remained stable throughout the learning curve.

Adaptive regression showed a significant knot of procedural time (min), fluoroscopy time (sec) and radiation dose (Gy) after 9 procedures. CUSUM showed a significant improvement in the same outcomes after 31, 22 and 27 procedures respectively. Mean procedural time constantly decreased from 83 minutes in the first 9 cases to 39 minutes in the last twenty ($p = .0005$), as well as radiation doses from 1674 to 146 Gys ($p < .0001$). 89% of the first 9 procedures were supervised by a senior endoscopist compared to 9.5% of the last twenty ($p = .0002$).

Conclusions From a prospective registry, the learning curve of a JE in EUS-HGS showed a significant improvement after ≈ 10 cases, with stabilization after approximately 25 cases, while efficacy and safety remained constant. With adequate baseline PBE expertise and structured training in high-volume institutions, operators can achieve and maintain high safety and efficacy from the outset, with a relatively rapid learning curve thereafter.

Conflicts of Interest G. Vanella has received lecture and consultancy fees from Boston Scientific.

OP152 Long-term outcomes of EUS-guided hepaticogastrostomy with a novel partially covered metal stent featuring an anchoring flange in malignant biliary obstruction

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DOI 10.1055/s-0046-1820807

Aims Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) has emerged as a reliable option for biliary drainage after failed ERCP. A partially covered self-expandable metal stent (PCSEMS) with an anchoring flange may further improve its technical stability and clinical outcomes. We evaluated the

long-term outcomes of EUS-HGS using the dedicated stent in an expanded patient cohort.

Methods Consecutive patients who underwent EUS-HGS with a long PCSEMS with an anchoring flange were enrolled. The stent was designed with a 1.5-cm uncovered intrahepatic portion and a fold-back distal flange measuring 2.0 cm in diameter. The primary outcome was technical and clinical success, and secondary outcomes were adverse events (AEs), recurrent biliary obstruction (RBO), and time to RBO.

Results A total of 41 patients with unresectable malignant biliary obstruction underwent EUS-HGS. Technical and clinical success rates were 100% (41/41) and 92.7% (38/41), respectively. AEs occurred in 4.9% of patients (2/41, both cholangitis), with no severe AEs observed during follow-up. RBO developed in 31.7% (13/41), with a median time to RBO of 6.5 months. Causes of RBO included aggravated malignant stricture ($n = 4$), food impaction ($n = 4$), sludge formation ($n = 3$), and tissue hyperplasia at the uncovered portion ($n = 2$). All cases of RBO were successfully managed with re-intervention via the established EUS-HGS route.

Conclusions EUS-HGS using the novel partially covered metal stent with an anchoring flange is effective and safe, ensuring durable long-term outcomes with stable re-intervention and without severe AEs such as stent migration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP153 Textbook outcomes of EUS-guided Hepaticogastrostomy according to indication and presenting anatomy: a prospective cohort study

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DOI 10.1055/s-0046-1820808

Aims Endoscopic Ultrasound-Guided Hepaticogastrostomy (EUS-HGS) has emerged as a valuable complement to retrograde biliary drainage. However current evidence is focused on technical success and constrained by small sample sizes, retrospective design, heterogeneous techniques and indications.

Methods Single center prospective study conducted between April-2021 and October-2025. All consecutive patients undergoing EUS-HGS with a dedicated partially covered metal stent (Giobor, Taewoong) for a malignant indication were enrolled in a prospective registry of Therapeutic EUS (PROTECT; ClinicalTrials.gov NCT04813055) with prospective scheduled bimonthly assessment of outcomes. 30-days Net Clinical Benefit (NCB30) was defined as Clinical Success (CS) without recurrent biliary obstruction (RBO) or 30-days mortality, while Textbook Outcome (TBO30) was defined as NCB30 plus no 30-days procedure-related adverse events (AEs).

Results 83 patients were included (median age 67 [60-74], female 61.4%, pancreatic adenocarcinoma 50.6%, cholangiocarcinoma 20.5%, metastatic diseases 78.3%, ascites 41%).

Indication for EUS-HGS were: 1) distal malignant biliary obstruction (MBO) with duodenal invasion (43.4%); 2) drainage completion of hilar MBO (39.8%); 3) surgically-altered anatomy (16.9%).

Technical success and CS rate were 95.2% and 70.9% respectively. AEs were registered in 43.4% of patients (mild/moderate 19.5%, severe/fatal 25.6%) and were deemed procedure-related in 28.4%. 30-days mortality was 21.8% (cancer-related in 83%). After a median follow-up of 63 [32-113] days, RBO was registered in 6.8%.

NCB30 and TBO30 were 54.2% and 45.8% respectively. Best Supportive Care (BSC) was advised in 60.9% of patients.

CS was significantly lower when the stenosis was hilar versus distal/anastomotic ($p = 0.001$). Accordingly, the NCB30 was significantly lower when EUS-HGS drained only one segment versus the left hemiliver versus the whole liver (36.4% versus 45.5% versus 73.5%, $p = 0.02$). Since the AEs were also higher in patients undergoing partial versus complete liver drainage ($p = 0.001$), the TBO30 was accordingly different, being 9.1% versus 39.4% and 67.6% respectively ($p = 0.002$) as well as advice for BSC ($p = 0.0008$).

Conclusions Despite excellent technical success, only $\approx 50\%$ of patients experience a net clinical benefit or a textbook outcome after EUS-HGS, whilst the rest receive a recommendation for BSC. Outcomes are deeply influenced by the level of the stenosis and actual liver drainage, claiming for personalized imaging-guided patients' selection.

Conflicts of Interest G. Varella has received lecture and consultancy fees from Boston Scientific.

OP154 Endoscopic retrograde cholangiopancreatography with and without Endoscopic ultrasound guided hepaticogastrostomy for bilateral biliary decompression in malignant hilar biliary obstruction: a preliminary results

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DOI 10.1055/s-0046-1820809

Aims Bilateral Endoscopic retrograde cholangiopancreatography (ERCP) stenting in advanced malignant hilar biliary obstruction (MHBO) is challenging and technically difficult, particularly in Bismuth type III and IV. The combination of Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) and ERCP for advanced MHBO could provide a chance of higher technical success, longer stent patency, and less events of stent clogging. The aim of this study is to evaluate efficacy and safety of combined EUS-HGS and ERCP compared to ERCP for bilateral biliary decompression in advanced MHBO.

Methods A prospective randomized controlled study conducted on patients with advanced MHBO. A sample size of 72 patient achieved 90% power. Enrolled patients were randomized to ERCP or combined EUS-HGS and ERCP. Technical success was defined as bilateral transpapillary metallic stenting in ERCP group or unilateral transpapillary metallic stenting in right side and EUS-guided transgastric stenting in the left side in the combined group. Clinical success was defined as reduction of total serum bilirubin levels to less than half of the pre-treatment level within 2 weeks. Patients were hospitalized and observed for early complications in the first 2 days. Laboratory investigation were repeated in regular out patients visits at 2, 4, 12 and 24 weeks or until death.

Results From May 2024 to August 2025, a total of 31 patients were enrolled. There were 25 males and 6 females with median age of 64 years. Technical success rates were 86.3% (19/22) in ERCP group with 3 patients crossed-over to the other group due to failure to opacify the left biliary system compared to 100% (12/12) in combined EUS-HGS/ERCP group with no statistically significant difference ($P = 0.116$). Clinical success rates were higher in combined EUS-HGS/ERCP group 83.3% (10/12) compared to 52.6% (10/19) in ERCP group with no statistically significant difference ($P = 0.08$). There was statistically significant difference in the median procedure time between ERCP group (22 mins) and combined EUS-HGS/ERCP group (43.5 mins) ($P = 0.004$). The rate of overall adverse events was not statistically significant between both groups (ERCP 15.8%, combined EUS-HGS/ERCP 16.5%; $P = 0.387$). In ERCP group, 3 patients had cholangitis that improved with adequate antibiotics. In combined EUS-HGS/ERCP, one patient had cholangitis, and one patient had melena that improved with conservative management. For late adverse events, stent patency was similar, and none required reintervention in both groups.

Conclusions Combined EUS-HGS/ERCP seems to have better technical and clinical success rates for bilateral biliary decompression of advanced MHBO

compared to ERCP alone with significantly higher median procedure time and comparable overall adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Treating Barrett's Esophagus: Are we any good?

15/05/2026, 12:00–13:00

Sky 2

OP155 Cryoballoon Ablation for Barrett's Esophagus Using A Refined Approach: Clinical Outcomes From A Prospective UK Multicentre Study

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DOI 10.1055/s-0046-1820810

Aims Guidelines recommend endoscopic eradication therapy (EET) for Barrett's esophagus (BE) with early neoplasia. [1] Visible lesions are resected, followed by ablation of residual flat BE, or primary ablation when no lesion is visible. Cryoballoon Focal Ablation (CbFA; C2 Merit Medical) is a well-tolerated and effective treatment for ETT for Barrett's esophagus (BE) with early neoplasia. [2] Prior experience has largely been limited to BE segments of $\leq$ C2M5, with few long-term durability data, and earlier studies using a 10-second (s) dose per ablation. [3] We report outcomes from a prospective UK multicentre registry using a refined approach of 8s per ablation with adjunct mucosal protective medication and including patients with a longer BE segments.

Methods Consecutive patients from three UK tertiary centres were prospectively enrolled. Inclusion criteria were BE $\leq$ C5M5 with an indication for ablation therapy, such as BE with early neoplasia (BE-D: low-grade dysplasia (LGD), high-grade dysplasia (HGD), intramucosal adenocarcinoma) without a visible lesion or residual BE following endoscopic resection of early neoplasia. CbFA was repeated at 3-monthly intervals until eradication or a maximum of five sessions, using a focal catheter with an 8s dose per application. In between each treatment, patients received high-dose proton pump inhibitor twice daily and 14 days of sucralfate (2 g, three times daily). Adjunct argon plasma coagulation (APC) was permitted after two CbFA sessions for residual islands < 5 mm. Post treatment surveillance and biopsies followed ESGE guidance.² Primary end-points were histologically confirmed eradication of intestinal metaplasia (CE-IM), and dysplasia (CE-D) at the end of treatment. Secondary outcomes included number of ablation sessions, adverse events, device malfunction, and stricture rate.

Results From January 2020 to November 2025, 67 patients were recruited (80.6% male; mean age 71), and underwent 138 CbFA sessions. Median pre-ablation BE length was C0M2 (maximum C5M5). Worst baseline histology was LGD in 41.8%, HGD in 31.3%, early cancer in 19.4%, and intestinal metaplasia in 7.5% (including RFA-refractory). Most patients (92.5%) were ablation treatment-naïve; 7.5% had RFA-refractory BE. Among treatment-naïve patients, 43 underwent prior endoscopic resection (39 EMR, 4 ESD).

In those patients completing CbFA treatment to date ($n = 22$), CE-D was achieved in 100% and CE-IM 90.9%, after a median of two CbFA sessions, with 31.8% receiving adjunct APC. No device malfunctions or intraprocedural adverse events occurred. Strictures developed in 9% and resolved with balloon dilatation. Durability data were available for 10 patients (mean follow-up 31.3 months, range 14.2–53.2), with CE-D 100% and CE-IM 90.0%.

Conclusions Interim real-world registry results, including medium-term durability, align with the larger Euro-Coldplay study,¹ supporting CbFA as a safe and effective EET option for BE-D in segments up to $\leq$ C5M5, with a lower stricture rate using our refinement approach. Ongoing enrolment will further define long-term efficacy and safety in routine UK practice.

Conflicts of Interest RK has received medical consultancy fees from Odin Vision

References

- [1] Frederiks CN, Overwater A, Beyna T, Neuhaus H, Bisschops R, Pouw RE, Bergman JJGHM, Barret M, Maselli R, Sehgal V, Haidry RJ, Weusten BLAM. Endoscopic eradication therapy with multifocal cryoballoon ablation for Barrett esophagus-related neoplasia: a prospective European multicenter study. *Endoscopy*. 2025. doi:10.1055/a-2710-6551 Epub ahead of print PMID: 41005363
- [2] Weusten BLAM, Bisschops R, Dinis-Ribeiro M, di Pietro M, Pech O, Spaander MCW, Baldaque-Silva F, Barret M, Coron E, Fernández-Esparrach G, Fitzgerald RC, Jansen M, Jovani M, Marques-de-Sa I, Rattan A, Tan WK, Verheij EPD, Zellenrath PA, Triantafyllou K, Pouw RE. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2023; Dec 55 (12): 1124–1146. doi:10.1055/a-2176-2440 Epub 2023 Oct 9 PMID: 37813356
- [3] Canto MI, Trindade AJ, Chak A, Dumot JA, Iyer PG, Khara HS, Diehl DL, Corbett FS, Shin EJ, McKinley M, Waxman I, Infantolino A, Tofani CJ, Chang KJ, Lightdale CJ, Goldblum JR, Valtaggio L, Montgomery EA, Abrams JA, Shaheen NJ. Durability of Cryoballoon Ablation for Eradication of Neoplastic Barrett's Esophagus: A Multicenter Prospective Cohort Study. *Gastrointest Endosc* 2025; S0016-5107(25): 02200-X. doi:10.1016/j.gie.2025.11.030 Epub ahead of print PMID: 41275893

OP156 Predictors of neoplastic recurrence after successful endoscopic eradication therapy of Barrett's neoplasia based on long-term follow-up results from the Dutch Barrett's registry

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DOI 10.1055/s-0046-1820811

Aims The optimal follow-up (FU) after successful endoscopic eradication therapy (EET) for Barrett's esophagus (BE) with dysplasia or early cancer is uncertain. We previously developed an externally validated prediction model for recurrence using data from the Dutch Barrett Expert Center (BEC) registry, a nationwide database capturing all patients treated with EET for BE neoplasia in the Netherlands [1, 2]. Since our earlier publication, continued prospective data collection has yielded an expanded cohort with longer FU. In the present study, we aimed to reassess risk factors for recurrent dysplasia/cancer and to identify predictors specifically associated with progression to advanced cancer.

Methods We included all BE patients with successful EET from the BEC registry [1]. Primary objectives were to identify independent predictors of recurrent HGD/cancer, and predictors of recurrent advanced cancer. Advanced cancer was defined as cancer exceeding the criteria for curative endoscopic therapy. Data were analyzed using Cox proportional hazards regression, with variables first assessed in

univariate analysis and subsequently entered into a multivariable model using backward elimination. We selected patient and treatment characteristics that would be known at completion of EET and that were plausible predictors of recurrence. Selected variables were age, gender, BE-length, baseline pathology, poor healing after RFA with treatment delay, persisting esophagitis at the end of the treatment phase, number of endoscopic resection (ER) treatment sessions, new visible lesion(s) (VL) that occurred during ablation. Additionally, we evaluated whether endoscopic FU performed in a non-BEC versus in a BEC, was associated with an increased risk of advanced cancer recurrence.

Results In total, 1269 patients (1038 male, median age 66 yrs, median BE of C2M4) were included with baseline LGD in 27% and HGD/EAC in 73%. During a median endoscopic FU of 65 months (IQR 42-93), 53/1269 (4%, annual risk 0.8%) developed recurrent HGD or cancer. Of these, 15/53 patients (annual risk 0.2%) had progressed to advanced cancer.

In univariate analysis, we found a significant association with risk for progression to HGD or cancer for the following variables: increasing baseline BE length (HR 1.1 [95% CI 1.0-1.2]), new VL during the ablation phase (HR 5.8 [95% CI 3.1-10.8]), increasing number of ER treatment sessions (HR 1.8 [95% CI 1.4-2.4]). The following were independently associated with recurrent HGD or cancer: new a VL during the ablation phase (HR 3.8 [95% CI 1.8-7.8]), present in 5% vs 25%), a higher number of ER treatment sessions (HR 1.4 [95% CI 1.0-1.9]), median 1 (IQR 1-1) vs 1 (IQR 1-2)), and increasing baseline BE length (HR 1.1 [95% CI 1.0-1.2], median M4 vs M6).

In univariate analysis, we found a significant association with risk for progression to advanced cancer for the following variables: increasing baseline BE length (HR 1.2 [95% CI 1.0-1.3]); persisting esophagitis at the end of the treatment phase (HR 3.2 [95% CI 1.0-10.0]), new VL during the ablation phase (HR 4.5 [95% CI 1.3-15.8]), increasing number of ER treatment sessions (HR 1.8 [95% CI 1.1-3.1]), FU endoscopies performed in a non-expert hospital (HR 0.6 [95% CI 0.2-1.9]).

The following characteristics were independently associated with recurrence of advanced cancer: an increasing number of ER treatment sessions (HR 1.7 [95% CI 1.0-2.9], median 1 (IQR 1-1) vs 1 (IQR 1-2)) and longer BE length at baseline (HR 1.2 [95% CI 1.0-1.3], median M4 vs M7).

We found that FU endoscopies performed in non-BECs versus in BECs, were not associated with an increased risk of progression to advanced cancer. Notably, baseline histology did not independently predict either outcome.

Conclusions In this large, nationwide cohort, recurrent HGD or cancer after successful EET was uncommon, and progression to advanced cancer was rare. Despite the addition of new patients and extended FU, the predictors of recurrent HGD or cancer were consistent with those identified in our previous model. Although numbers were limited and external validation is still required, both increasing baseline BE length and multiple ER treatment sessions were independent risk factors for progression to advanced cancer. These findings further refine the evidence base for individualized, risk-adapted post-EET FU strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dutch Barrett Expert Centers van Munster S., Nieuwenhuis E., Weusten B.L.A.M., Alvarez Herrero L., Bogte A., Alkhalaf A., Schenk B.E., Schoon E.J., Curvers W., Koch A.D., van de Ven S.E.M., de Jonge P.J.F., Tang T.J., Nagengast W.B., Peters F.T.M., Westerhof J., Houben M.H.M.G., Bergman J.J., Pouw R.E. 2022; Long-term outcomes after endoscopic treatment for Barrett's neoplasia with radiofrequency ablation ± endoscopic resection: results from the national Dutch database in a 10-year period. *Gut* 71 (2): 265–276. doi:10.1136/gutjnl-2020-32261
- [2] Dutch Barrett Expert Centers van Munster S., Nieuwenhuis E., Weusten B.L.A.M., Alvarez Herrero L., Bogte A., Alkhalaf A., Schenk B.E., Schoon E.J., Curvers W., Koch A.D., van de Ven S.E.M., de Jonge P.J.F., Tang T.J., Nagengast W.B., Peters F.T.M., Westerhof J., Houben M.H.M.G., Bergman J.J., Pouw R.E. 2022; Long-term outcomes after endoscopic treatment for Barrett's neoplasia with radiofrequency ablation ± endoscopic resection: results from the national Dutch database in a 10-year period. *Gut* 71 (2): 265–276. doi:10.1136/gutjnl-2020-32261

OP157 Cost-Effectiveness of Endoscopic Submucosal Dissection Versus Endoscopic Mucosal Resection for Barrett's Esophagus-Associated Neoplasia

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DOI 10.1055/s-0046-1820812

Aims Endoscopic submucosal dissection (ESD) is increasingly used for Barrett's esophagus-associated neoplasia due to superior en bloc and R0 resection rates compared with endoscopic mucosal resection (EMR). However, its cost-effectiveness in the United States remains uncertain due to a lack of standardized reimbursement codes for ESD. We evaluated the cost-effectiveness of ESD versus EMR using pooled clinical outcomes and contemporary U.S. Medicare payment data.

Methods A decision-analytic model was developed from a U.S. Medicare perspective over a two-year horizon. Clinical probabilities were extracted from two meta-analyses (Fujiiyoshi 2024, Radadiya 2024). Key pooled inputs included R0 resection (ESD 78 % vs EMR 67 %), recurrence (ESD 2 % vs EMR 6 %), perforation (1 % vs 0.1 %), delayed bleeding (10 % vs 8 %), and esophagectomy rates (ESD 8 % vs EMR 5 %). Costs were derived from 2024 Medicare national average payments and standardized inpatient cost benchmarks. QALYs incorporated decrements for recurrence, complications, strictures, and esophagectomy. Outcomes included total cost, QALYs, ICER, and net monetary benefit (NMB) at a \$100,000/QALY threshold. One-way sensitivity analysis was performed.

Results ESD costs \$9,761.92 per patient versus \$5,826.76 for EMR. QALYs were slightly lower with ESD (1.87180 vs 1.87638). ESD remained **dominant**, more costly, and less effective with an incremental cost of \$3,935 and incremental QALY of -0.00458. Incremental NMB favored EMR by \$4,393. Sensitivity analysis identified the ESD index procedure cost and ESD esophagectomy probability as the most influential parameters; however, ESD did not become cost-effective under any plausible range.

Conclusions Despite superior en bloc and R0 resection, ESD is not cost-effective compared with EMR for Barrett's-associated neoplasia under current U.S. Medicare reimbursement. Our limitations include a shorter follow-up period of 2 years and the absence of comprehensive prospective studies reporting the use of adjunctive therapies post-EMR, like cryoablation, radiofrequency ablation, or repeat EMR, which could increase the costs associated with the procedure and reduce its cost-effectiveness. Furthermore, higher esophagectomy rates post-ESD might be associated with advanced lesions to start with compared to EMR. ESD may become cost-effective with standardized reimbursement codes and lower esophagectomy in future large prospective studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP158 Outcomes of Selective Laparoscopic Lymph Node Sampling After Complete Endoscopic Resection of High-Risk Early Esophageal Cancer

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DOI 10.1055/s-0046-1820813

Aims Curative endoscopic resection for T1 oesophageal cancer is increasingly accepted, yet in high-risk cases with possible lymph node metastases (LNM), nodal status and the need for further therapy remain unclear. We report outcomes of selective laparoscopic lymph node sampling (LLS) after endoscopic resection to improve risk stratification.

Methods High-risk T1 carcinomas treated with this combined approach (2012–2024) were retrospectively analyzed. The primary outcome was tumour-free survival; secondary outcomes were lymph node (LN) yield and LLS-related adverse events (AEs).

Results Fifty-five patients (mean age 68.2years; 41 men) underwent LLS (48 adenocarcinomas, 7 squamous). Mean LN yield was 27.4 nodes (excluding one failed procedure). Eight patients had positive LNs, with no clear histologic differences compared with LN-negative patients. Seven of the eight LN-positive patients, plus two with local recurrence only, proceeded to surgery. Surgical mortality was 22.2 % (2/9); all survivors remained tumour-free. Among 45 LN-negative, non-operated patients (mean follow-up 45.6 months), two non-curable recurrences (4.5 %) occurred after 2–3 years. Seven patients developed other neoplasias, and one died of unrelated causes. Overall, with endoscopic resection plus LLS, 50/54 patients (92.6 %) remained tumour-free at a mean follow-up of 44.6 months. Major LLS-related AEs occurred in two patients; delayed gastric emptying in 16.7 % (3/9 severe).

Conclusions Resection specimen histology poorly predicts LNM in early oesophageal cancer. Selective LLS after endoscopic resection is feasible, supporting organ preservation in most high-risk patients. Only LN-positive cases appear to require surgery—or alternative treatment—while LN-negative patients show low late-recurrence rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP159 Safety of esophageal endoscopic submucosal dissection of Barrett's esophageal neoplasia: an analysis of factors associated with stricture formation

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DOI 10.1055/s-0046-1820814

Aims Endoscopic submucosal dissection (ESD) for Barrett's esophageal neoplasia (BEN) remains limited due to its technical complexity and concerns regarding adverse events, particularly the risk of stricture formation. This study aims to evaluate the safety of BEN-ESD and identify risk factors for adverse events, with a focus on post-ESD stricture and the effects of different preventive strategies.

Methods This multicenter retrospective study included all consecutive BEN-ESDs from eight tertiary centers. Demographic, endoscopic, procedural, and histologic characteristics- including lesions' size and circumferential involvement (LCI), prior treatment, and stricture-prevention methods were collected. Preventive strategies were categorized as none, topical budesonide, oral prednisolone or steroid injection. The primary endpoint was post-ESD stricture, defined as luminal narrowing requiring endoscopic dilation. Secondary endpoints included risk factors for stricture, the effects of each preventive strategy, and the incidence of other adverse events. To reduce treatment-selection bias and to estimate marginal causal effects of each preventive strategy, propensity

ty scores were calculated. Inverse probability of treatment weighting (IPTW) was applied to logistic regression models, and these models were used to obtain predicted stricture risks across treatment groups.

Results Among 706 eligible cases from across participating centers, 18 were excluded due to insufficient follow-up, leaving 688 patients for the final analysis (85% male; median age 69 years [IQR 61–76]; median Body Mass Index (BMI) 27 kg/m² [IQR 24–30]). The length of Barrett's esophagus was characterized using the Prague classification, with a median circumferential (C) length of 2 cm (IQR 0–6) and a median maximal (M) length of 4 cm (IQR 2–7). Lesions were predominantly located in the lower thoracic esophagus (82%), followed by the abdominal (11%), middle (6.5%), and upper thoracic (0.5%) part. Prior treatment had been performed in 20.2% of patients, including EMR (9.1%), ESD (6.4%), RFA (8.7%), other ablative therapies (2.3%), surgery (1.4%) and radiation or chemoradiotherapy (1.0%). Histology at resection corresponded to adenocarcinoma in 71%, high-grade dysplasia in 17%, and low-grade dysplasia in 8.6%. LCI was <50% in 35%, 50–74% in 46%, 75–99% in 14%, and 100% in 5% of the cases. Stricture-preventive strategies were implemented in 25% of ESDs, with application rates increasing by circumferential involvement: 8% for LCI <50%, 19% for LCI 50–75%, and 67% for LCI ≥75%. The stricture-preventive approaches employed were topical budesonide in 14% of procedures, oral prednisolone in 11%, and local steroid injection in 4%. Overall, post-ESD stricture occurred in 14.8% of patients and increased with circumferential involvement (7.2% for LCI <50%, 10.4% for 50–74%, and 39.4% for ≥75%; $p < 0.0001$). Stricture risk was primarily driven by circumferential extent and prior endoscopic treatment. Using propensity score-based IPTW to estimate marginal causal effects, the predicted standardized risks for post-ESD stricture were 11.2% (95% CI 8.5–14.9) with no preventive therapy, 11.2% (95% CI 3.0–26.7) with oral prednisolone, 3.7% (95% CI 1.1–21.1) with steroid injection and 3.1% (95% CI 0.5–7.2) with topical budesonide. Topical budesonide was the only strategy that demonstrated a statistically significant reduction in standardized predicted stricture risk. Perforation occurred in 0.3% and bleeding in 3.9% of cases, all managed endoscopically. No severe adverse events resulted from preventive therapies.

Conclusions BEN-ESD is safe, with stricture occurring in 15% of patients. Circumferential extent ≥75% and prior treatment are the major risk factors for post-ESD stricture. Our results show that topical budesonide is the only preventative strategy with a meaningful reduction in predicted stricture risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP160 Longterm outcome of endoscopic management in elderly patients with Barrett's oesophagus-associated dysplasia and cancer predicted by Charlson Comorbidity index

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DOI 10.1055/s-0046-1820815

Aims The risk of dysplasia and cancer increases with age in Barrett's oesophagus. Advanced endoscopic therapy such as endoscopic resection and radiofrequency ablation (RFA) is indicated in dysplasia and intramucosal cancer, but is associated with higher risks in older patients with severe comorbidities. Little guidance is available as to when to stop endoscopic therapy and follow-up. Therefore, we analysed the outcomes of endoscopic therapy in elderly patients (>75 years) in a tertiary centre over the last 15 years in relation to their Charlson Comorbidity score (CSI).

Methods All patients aged >75 years who underwent endoscopic therapy since 2008 were selected from the prospectively maintained database. Their Elec-

tronic Patient Record (EPR) was searched to establish patient details and outcomes.

Results Since 2008, 109 patients aged >75 years with dysplasia or early Barrett's cancer underwent advanced endoscopic therapy. The median age was 80 years with a range from 75 to 90 years. Only 19/109 (17%) of patients were female. The majority of patients pre-therapy had high-grade dysplasia (59%) at the time of referral. The median Barrett's length was C3M5.

80/109 (73%) underwent EMR first, 10/109 underwent RFA first (9%) and 19/109 (17%) had APC only. 27% were on anticoagulation with warfarin or a DOAC (direct oral anticoagulant). 19% were on an antiplatelet. In terms of complications following therapy, there were 2 delayed haemorrhages, 1 stricture formation and no perforations.

72/109 patients (66%) achieved complete resolution of intestinal metaplasia (CR-IM) and 87/109 (80%) achieved complete resolution of dysplasia (CR-D) in the intention to treat analysis. Of the 4 patients with invasive adenocarcinoma (2 identified pre-therapy and 2 identified post-therapy), 2 patients achieved complete resolution of dysplasia. 31/109 patients died during the 15 years follow-up, with a median survival of 5 years after the start of treatment. Only 2 patients died from oesophageal cancer [1].

The overall all cause mortality was higher in patients with higher Charlson Comorbidity Index score ($p = 0.04$).

Conclusions Older patients were able to tolerate advanced endotherapy and endoscopic follow-up for Barrett's oesophagus well, with good resolution of metaplasia and/or dysplasia, similar to the UK HALO registry results in which the mean age was 67 years. In elderly patients over 75 years with advanced Barrett's dysplasia or early cancer, advanced endotherapy and follow-up is safe and should be considered in the context of patient's fitness and CCI reflecting life expectancy as well as individual risk of progression to invasive cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] UK RFA Study Group Wolfson P, Ho KMA, Wilson A, McBain H, Hogan A, Lipman G, Dunn J, Haidry R, Novelli M, Olivo A, Lovat LB Endoscopic eradication therapy for Barrett's esophagus-related neoplasia: a final 10-year report from the UK National HALO Radiofrequency Ablation Registry. *Gastrointest Endosc* 2022; Aug 96 (2): 223–233. doi:10.1016/j.gie.2022.02.016

HPB cancer: Diagnosis, biomarkers and beyond

15/05/2026, 12:00–13:00

Sky 1

OP161 Endoscopic Ultrasound-Guided Biomarker Evaluation of Pancreatic Cancer After Exposure to Therapy

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DOI 10.1055/s-0046-1820816

Aims Comprehensive molecular profiling by next-generation sequencing (NGS) of pancreatic adenocarcinoma (PDAC) can identify both prognostic and therapeutic biomarkers. Endoscopic ultrasound (EUS)-guided biopsy of PDAC is generally adequate for NGS testing. However, the impact of prior chemotherapy and radiotherapy on sample adequacy and NGS success from EUS-guided biopsies of the pancreas is not well described.

Methods All EUS-guided tissue acquisition by fine needle aspiration or core needle biopsy specimens diagnostic for PDAC at Memorial Sloan Kettering Cancer Center were retrospectively identified between 2014 and 2025. Comprehensive molecular profiling was performed using the institution's paired

tumor-normal, large panel, hybridization-capture based, NGS assay known as Memorial Sloan Kettering Integrated Mutation Profiling of Actionable Cancer Targets (MSK-IMPACT). NGS testing results were analyzed. Relevant clinical and pathologic data were obtained from the electronic medical record. The following methods of statistical analyses were utilized: Fisher's exact test for comparing categorical data between two groups, Chi-squared test for more than two categorical groups, and the Wilcoxon rank sum test for comparing groups of continuous data.

Results NGS testing was requested on 601 EUS-guided biopsies of PDAC and was successful on 468 (78 %) specimens. NGS success rates have significantly improved over time (68 % in 2015-2020 vs 86 % in 2021-2025, $p < 0.001$) with improvements in sequencing and DNA extraction. Most samples that failed testing were due to a low DNA concentration and low tissue cellularity. Of 591 specimens, 78 (13 %) were exposed to therapy preceding EUS-guided biopsy – 60 (77 %) with chemotherapy alone and 18 (23 %) with radiotherapy. All specimens exposed to radiation received concurrent chemotherapy. There was no statistically significant difference in NGS success with or without exposure to any therapy (74 % vs 80 %, $p = 0.3$). Sub-group analyses of NGS performance based on exposure to chemotherapy alone vs no prior therapy (77 % vs 79 %, $p = 0.6$) and to radiation vs no prior therapy (67 % vs 79 %, $p = 0.2$) confirm that prior treatment does not significantly affect the feasibility of NGS testing from EUS-guided biopsies of the pancreas. Further supporting this, the DNA concentration of specimens did not significantly differ comparing exposure to any therapy vs no prior therapy (2.2ng/uL vs 2.6ng/uL, $p = 0.3$), chemotherapy alone vs no prior therapy (2.4ng/uL vs 2.5ng/uL, $p = 0.7$), and radiation vs no prior therapy (2.0ng/uL vs 2.5ng/uL, $p = 0.2$). Of the successful cases, 95 % of them identified a significant hotspot mutation – a potential prognostic or therapeutic biomarker for matched targeted therapy.

Conclusions This is the largest series to date confirming the feasibility of EUS-guided biopsies of PDAC for NGS testing. It is also the first to evaluate whether therapy exposure prior to biopsy affects NGS performance. Although chemotherapy and radiotherapy can alter the tumor microenvironment, the analyses herein suggest that specimen adequacy for NGS is feasible in pre-treated PDAC. This emphasizes the clinical utility of EUS-guided biomarker evaluation of PDAC after initial therapy or at disease progression to identify potential new actionable targets. EUS-guided biopsies of PDAC is a valuable tool for obtaining tissue for NGS pre-, during, and after completion of therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP162 High sensitivity of Next-Generation Sequencing on bile-derived cell-free DNA for mutation-based diagnosis of perihilar cholangiocarcinoma: first results from the prospective BAMBI study

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DOI 10.1055/s-0046-1820817

Aims Differentiating benign from malignant biliary strictures in patients with suspected perihilar cholangiocarcinoma (pCCA) remains a major clinical challenge. The current diagnostic standard for pCCA is brush cytology which offers high specificity (95-100 %) but limited sensitivity (41-67 %). As a result, diagnosis is often delayed and additional invasive procedures are required, highlighting the need for more sensitive diagnostic tools. Liquid biopsy approaches are increasingly used in oncology, with plasma derived cell-free DNA (cfDNA) being the most widely investigated. However, plasma cfDNA performs poorly in early-stage or small tumors. Bile, in contrast, can contain up to 20-fold higher cfDNA concentrations than plasma, providing a potentially richer source of tumor-derived DNA for biliary tumors (1). Since bile can be collected during routine endoscopic retrograde cholangiopancreatography (ERCP), analysis of bile-derived cfDNA may enhance diagnostic sensitivity without additional procedural burden. The primary aim of this study was to evaluate the feasibility and accuracy of Next-Generation Sequencing (NGS) on bile-derived cfDNA for mutation-based diagnosis of pCCA [1].

Methods In this prospective cohort study, bile samples were collected during ERCP from consecutive patients with suspected pCCA from June 2023 onwards. Bile cfDNA was extracted using the QIAamp MinElute circulating cell free DNA Mini Kit. NGS was performed using Ion Torrent with the OncoPrint Pan-Cancer Cell-Free assay. Final diagnosis was established by histological evaluation of surgical or biopsy specimens and clinical follow-up consistent with malignant disease. Primary outcome was correct diagnosis of pCCA on cfDNA. Secondary outcome was correct diagnosis of pCCA based on bile cfDNA combined with brush cytology.

Results Between June 2023 and October 2025, bile samples were obtained from 60 patients with suspected pCCA. At the time of sample collection, 20 patients had metastatic disease, 20 were considered resectable, and 20 had locally advanced disease. High-quality cfDNA was successfully extracted from all samples, and NGS mutation analysis has thus far been completed in 43 patients. Among these, one or more (likely) pathogenic mutation(s) were detected in 37 patients, yielding a sensitivity of 86 % (37/43, 95 %CI 72-95 %). The most frequently detected mutations were KRAS (32 %), TP53 (23 %), BRAF (8 %), PIK3CA (8 %) and ERBB2/3 (5 %/4 %). Brush cytology was performed in 42 patients and was positive for malignancy in 31 cases (74 %, 95 %CI 58-86 %). When combining brush cytology with NGS of bile-derived cfDNA, a definitive diagnosis of pCCA was established in 41 cases, yielding a sensitivity of 95 % (95 %CI 84-99 %). NGS analysis of tissue (cytology or biopsy specimens) obtained during routine diagnostic work-up was available for 31 of 43 patients using standard-of-care panels. In 21 patients, mutation profiles matched those detected in bile cfDNA, and in two patients no mutations were detected in bile and tissue. Thus, in 23 out of 31 patients (74 %, 95 %CI 55-88 %), bile cfDNA mutation profiling was fully concordant. In five patients, mutations were identified in bile cfDNA but not in tissue, most commonly due to low DNA quality in the tissue samples. In three patients, mutations were detected in tissue but not in bile; in all three cases the tissue-detected mutations were not included in the OncoPrint panel used for bile cfDNA analysis.

Conclusions In the first results of this prospective proof-of-concept study, mutational analysis on bile-derived cfDNA was shown possible and substantially improved the detection of pCCA at the initial diagnostic stage. NGS on cfDNA in bile achieved a sensitivity of 86 %. When combined with brush cytology the sensitivity even increased to 95 %. These results may have major impact on diagnosis of pCCA. Moreover, identifying actionable mutations through cfDNA analysis may not only enhance detection but could also play an important role in guiding future targeted therapeutic strategies. Future studies should focus on developing a cholangiocarcinoma specific gene panel, considering the number of patients with mutations outside the current panel and thereby potentially improving diagnostic sensitivity even further.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Arechederra M, Rullán M, Amat I, Oyon D, Zabalza L, Elizalde M et al. Next-generation sequencing of bile cell-free DNA for the early detection of patients with malignant biliary strictures. *Gut*. 2022; 71 (6): 1141

OP163 Preoperative Evaluation of Lymph Nodes of resectable Cholangiocarcinoma by Endoscopic Ultrasound: the POELH-II trial

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DOI 10.1055/s-0046-1820818

Aims Lymph node (LN) metastases are a poor prognostic factor in intrahepatic cholangiocarcinoma (iCCA) and perihilar cholangiocarcinoma (pCCA). Extra-regional LN metastases (LNM) preclude surgical exploration. Knowledge pertaining to the presence of regional LNM can guide decision-making weighing the risks and benefits of surgical resection. When diagnosing suspicious lymph nodes, endoscopic ultrasound (EUS) offers the possibility of direct tissue acquisition (TA) for pathological confirmation. While the European Association for the Study of the Liver (EASL) Clinical Practice Guideline on the management of extrahepatic CCA already recommends preoperative EUS [1], the European Society of Gastrointestinal Endoscopy (ESGE) guideline on bile duct strictures makes no specific recommendations [2]. This prospective study aims to assess the yield of preoperative systematic EUS for LN staging for resectable iCCA and pCCA.

Methods We conducted a prospective, multi-center, international trial enrolling patients from seven tertiary referral centers in the Netherlands and Belgium. All presumed resectable iCCA and pCCA patients, without intra-pancreatic tumor ingrowth on cross-sectional imaging, were eligible. All patients, regardless of the LN findings on cross-sectional imaging, underwent a systematic EUS with extensive regional and extraregional LN sampling: attempting to biopsy all LN with ≥ 5 millimeter short-axis diameter. Abdominal LN stations 8 up to 18 are systematically checked according to the Japanese classification [3]. The primary outcome was the yield of EUS and its impact on clinical decision making, defined as the number of patients who were precluded from surgery due

to EUS findings (identification of regional or extraregional LNM and other findings) or had altered surgery strategy/approach. Secondary outcomes included EUS related adverse events defined according to the AGREE classification [4], and the 'miss' rate of LNM defined as LNM identified during surgical exploration not detected by EUS-TA.

Results A total of 254 patients were included (59% male, median age of 68 years [IQR: 61 – 74]), consisting of 62 iCCA and 192 pCCA patients. LNs were identified on cross-sectional imaging in 72% of patients. A total of 284 EUS procedures were performed, during which 1262 LN were identified in 243 patients (96%). EUS-TA was carried out for 418 LN (33%), yielding malignancy in 73 LN (58 regional and 15 extraregional) across 45 patients. In 13 patients (5%), pancreatic ingrowth was identified. At cross-sectional imaging performed before EUS, 43 (59%) of these EUS-TA proven LNM were described as pathological, 10 (14%) were described as non-pathological, and 20 (27%) were not mentioned.

EUS yielded clinically relevant findings in 50 of the 254 patients (20%): EUS precluded surgery in 43 patients (regional LNM: 21, extraregional LNM: 10, pancreatic ingrowth: 8, other reasons such as IgG4 cholangitis or adrenal metastasis diagnosis: 4), and altered the surgical plan in 7 patients (pancreatic ingrowth). In twelve patients regional LNM were identified but surgery was not precluded.

Among the 150 patients who finally underwent surgical exploration without EUS-TA sampled LNM, 'missed' LNM were identified in 106 of the 809 retrieved LN (13.1%), in 51 patients. Of the 106 LNM, 91 were regional and 15 extraregional. These 'missed' extraregional LNM were identified in 8 patients, regional LNM in 43 patients. EUS related complications occurred in 3 procedures (1%): bleeding requiring embolization (AGREE III) and hypotension (2x: AGREE I).

Conclusions EUS with systematic evaluation of regional and extraregional LN is safe and should be offered to all presumed resectable iCCA and pCCA patients. It provides information for clinical decision making in 20% of patients including identifying malignant extraregional lymph nodes precluding resection. (ClinicalTrials.gov, Number: NCT05678218).

Conflicts of Interest WJL received consultancy fees from Mediglobe. AI received speakers fee from Fujifilm, Micro-Tech, and Olympus. JEvH reports lecture fee from Cook Medical, Fuji Film, Olympus, Boston scientific and Falk. JWP performed as a consultant for Boston Scientific and Pentax Medical. RLJvW performed as a consultant for Boston Scientific and Cook Medical, received speakers fee from Olympus. RPV reports research grants from Boston Scientific, Cook Medical, Prion Medical, consultancy fee from Boston Scientific and Cook Medical, and speakers fee from Mediglobe. PH is a consultant and/or speaker for Boston Scientific, Fujifilm, MedWork and Viatrix. MJB reports research grants from Boston Scientific, Cook Medical, Pentax Medical, InterScope, and Mylan, and performed as a consultant for Boston Scientific, Cook Medical, and Pentax Medical. The remaining authors declare that they have no conflicts of interest

References

- [1] Nass KJ, Zwager LW, van der Vlugt M, Dekker E, Bossuyt PMM, Ravindran S et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointestinal Endoscopy* 2022; 95 (6): 1078–85.e8
- [2] Miyazaki M, Ohtsuka M, Miyakawa S, Nagino M, Yamamoto M, Kokudo N et al. Classification of biliary tract cancers established by the Japanese Society of Hepato-Biliary-Pancreatic Surgery: 3(rd) English edition. *J Hepatobiliary Pancreat Sci*. 2015; 22 (3): 181–96
- [3] Facciorusso A, Crinò SF, Gkolfakis P, Spadaccini M, Arvanitakis M, Beyna T et al. Diagnostic work-up of bile duct strictures: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2025; 57 (2): 166–185
- [4] Marzoni M, Maroni L, Aabakken L, Carpino G, Groot Koerkamp B, Heimbach J et al. EASL Clinical Practice Guidelines on the management of extrahepatic cholangiocarcinoma. *Journal of Hepatology* 2025; 83 (1): 211–38

OP164 Outcomes of a novel biliary hybrid metal stent composed of an inner-covered and an outer-uncovered stent for unresectable distal malignant biliary obstruction

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DOI 10.1055/s-0046-1820819

Aims Uncovered self-expandable metal stents (SEMS) are prone to tumor ingrowth, whereas covered SEMS carry the risk of migration. We evaluated the feasibility of a newly developed biliary hybrid SEMS, designed to prevent both issues, for patients with unresectable distal malignant biliary obstruction (MBO).

Methods Eighty patients with unresectable distal MBO underwent endoscopic placement of the hybrid SEMS (Two-in-One stent; Taewoong Corp., Goyang, Korea). This stent consists of an inner silicone-covered SEMS and an outer-uncovered SEMS. In cases of inner-covered SEMS dysfunction, it can be endoscopically removed while leaving the uncovered SEMS in place.

Results Stent placement was successful in all patients (80/80), with clinical success in 98.8% (79/80). Inner-covered stent dysfunction occurred in 28.9% (22/76), primarily due to biliary sludge (90.9%, 20/22). No stent migration or bile duct kinking occurred. Mean cumulative patency of the inner-covered and the Two-in-One stents were 537.5 days (95% confidence interval (CI), 433.8–641.2) and 778.7 days (95% CI, 709.6–847.8), respectively. The 6-, 12-month, and lifetime patency rates of the Two-in-One stent were 94.0%, 86.4%, and 78.9%, respectively. Early and late adverse events were observed in six patients (four with pancreatitis and two with cholecystitis) and 27 patients (22 with recurrent biliary obstruction [RBO] and five with non-RBO) patients, respectively [1–18].

Conclusions The Two-in-One stent demonstrates a high lifetime patency rate in patients with unresectable distal MBO, initially functioning as a non-migrating, partially covered SEMS and later transforming into an uncovered SEMS after removal of the clogged inner-covered SEMS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Isayama H, Hamada T, Yasuda I et al. TOKYO criteria 2014 for transpapillary biliary stenting. *Dig Endosc* 2015; 27: 259–264. doi:10.1111/den.12379
- [2] Kiriya S, Kozaka K, Takada T et al. Tokyo Guidelines 2018: diagnostic criteria and severity grading of acute cholangitis (with videos). *J Hepatobiliary Pancreat Sci* 2018; 25: 17–30. doi:10.1002/jhbp.512
- [3] Yokoe M, Hata J, Takada T et al. Tokyo Guidelines 2018: diagnostic criteria and severity grading of acute cholecystitis (with videos). *J Hepatobiliary Pancreat Sci* 2018; 25: 41–54. doi:10.1002/jhbp.515
- [4] Cotton PB, Eisen GM, Aabakken L et al. A lexicon for endoscopic adverse events: report of an ASGE workshop. *Gastrointest Endosc* 2010; 71: 446–454. doi:10.1016/j.gie.2009.10.027
- [5] Jeong S. Understanding mechanical properties of biliary metal stents for wise stent selection. *Clin Endosc* 2023; 56: 592–593. doi:10.5946/ce.2023.206
- [6] Isayama H, Nakai Y, Toyokawa Y et al. Measurement of radial and axial forces of biliary self-expandable metallic stents. *Gastrointest Endosc* 2009; 70: 37–44. doi:10.1016/j.gie.2008.09.032
- [7] Jirapinyo P, AlSamman MA, Thompson CC. Impact of infected stent removal on recurrent cholangitis with time-to-event analysis. *Surg Endosc* 2019; 33: 4109–4115. doi:10.1007/s00464-019-06714-0
- [8] Irisawa A. The optimal stent for unresectable distal malignant biliary obstruction: is the exit from the maze of stent selection still not in sight? *Gastrointest Endosc* Mar 2024; 99: 323–325. doi:10.1016/j.gie.2023.11.035
- [9] Tringali A, Hassan C, Rota M et al. Covered vs. uncovered self-expandable metal stents for malignant distal biliary strictures: a systematic review and meta-analysis. *Endoscopy* 2018; 50: 631–641. doi:10.1055/s-0043-125062
- [10] Chen MY, Lin JW, Zhu HP et al. Covered stents versus uncovered stents for unresectable malignant biliary strictures: a meta-analysis. *Biomed Res Int* 2016; 2016:6408067. doi:10.1155/2016/6408067

[11] Moole H, Bechtold ML, Cashman M et al. Covered versus uncovered self-expandable metal stents for malignant biliary strictures: a meta-analysis and systematic review. *Indian J Gastroenterol* 2016; 35: 323–330. doi:10.1007/s12664-016-0682-8

[12] Yamashita Y, Tachikawa A, Shimokawa T et al. Covered versus uncovered metal stent for endoscopic drainage of a malignant distal biliary obstruction: meta-analysis. *Dig Endosc* 2022; 34: 938–951. doi:10.1111/den.14260

[13] Li J, Li T, Sun P et al. Covered versus uncovered self-expandable metal stents for managing malignant distal biliary obstruction: a meta-analysis. *PLoS One* 2016; 11:e0149066. doi:10.1371/journal.pone.0149066

[14] Almadi MA, Barkun AN, Martel M. No benefit of covered vs uncovered self-expandable metal stents in patients with malignant distal biliary obstruction: a meta-analysis. *Clin Gastroenterol Hepatol* 2013; 11: 27–37 e1. doi:10.1016/j.cgh.2012.10.019

[15] Saleem A, Leggett CL, Murad MH, Baron TH. Meta-analysis of randomized trials comparing the patency of covered and uncovered self-expandable metal stents for palliation of distal malignant bile duct obstruction. *Gastrointest Endosc* 2011; 74: 321–327 e1–3. doi:10.1016/j.gie.2011.03.1249

[16] Nakai Y, Isayama H, Wang HP et al. International consensus statements for endoscopic management of distal biliary stricture. *J Gastroenterol Hepatol* 2019. doi:10.1111/jgh.14955

[17] Nakai Y, Isayama H, Wang HP et al. International consensus statements for endoscopic management of distal biliary stricture. *J Gastroenterol Hepatol* 2019. doi:10.1111/jgh.14955

[18] Saleem A, Leggett CL, Murad MH, Baron TH. Meta-analysis of randomized trials comparing the patency of covered and uncovered self-expandable metal stents for palliation of distal malignant bile duct obstruction. *Gastrointest Endosc* 2011; 74: 321–327 e1–3. doi:10.1016/j.gie.2011.03.1249

OP165 Comparison between tissue and liquid biopsy in pancreatic ductal adenocarcinoma and correlation with patient clinicopathological features

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DOI 10.1055/s-0046-1820820

Aims Pancreatic ductal adenocarcinoma (PDAC) is a highly aggressive disease with a poor prognosis. A deeper molecular characterization of PDAC could be useful to find new therapeutic options. By using a targeted NGS-based approach, we analyzed gene variants in time-matched solid and liquid biopsies to evaluate concordance rate and potential correlations with clinicopathological features.

Methods A prospective cohort of 30 PDAC patients was enrolled. Inclusion criteria were: age of pts ≥ 18 years, histological diagnosis of PDAC at all stages, availability of a formalin-fixed paraffin-embedded (FFPE) tumor sample obtained by EUS-FNB and availability of a time-matched blood sample. Cell-free DNA (cfDNA) was extracted from the plasma. For NGS analysis, a custom panel including 39 genes more frequently altered in PDAC according to literature was used. Fisher's exact test was applied to evaluate the association between gene variants and patients features [1–6].

Results Most of mutations were found in cancer driver genes, such as KRAS and TP53, in solid as well as in liquid biopsies. 24 out of 30 tumor biopsies were successfully analyzed by NGS, confirming EUS-FNB ability to provide adequate DNA for sequencing. In 5 patients, cfDNA analysis was able to detect variants undetectable in the time-matched solid biopsy. No statistically significant differences were found in different patient phenotypes.

Conclusions Assessment of PDAC mutational profile by a targeted NGS approach suggests the importance to characterize solid biopsies as well as liquid biopsies to improve the diagnostic typing. Future studies with larger patients

cohorts and longitudinal sampling are needed to elucidate the role of cfDNA in PDAC prognosis and treatment monitoring.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Takai E, Totoki Y, Nakamura H, Kato M, Shibata T, Yachida S. Clinical Utility of Circulating Tumor DNA for Molecular Assessment and Precision Medicine in Pancreatic Cancer. *Adv Exp Med Biol* 2016; 924: 13–17. doi:10.1007/978-3-319-42044-8_3 PMID: 27753011
- [2] Shen GQ, Aleassa EM, Walsh RM, Morris-Stiff G. Next-Generation Sequencing in Pancreatic Cancer. *Pancreas*. 2019; 48 (6): 739–748. doi:10.1097/MPA.0000000000001324 PMID: 31206465
- [3] Jung K, Lee S, Na HY, Kim JW, Lee JC, Hwang JH, Kim JW, Kim J. NGS-based targeted gene mutational profiles in Korean patients with pancreatic cancer. *Sci Rep*. 2022; 12 (1): 20937. doi:10.1038/s41598-022-24732-2 PMID: 36463295 PMID: PMC9719465
- [4] Imaoka H, Sasaki M, Hashimoto Y, Watanabe K, Miyazawa S, Shibuki T, Mitsunaga S, Ikeda M. Impact of Endoscopic Ultrasound-Guided Tissue Acquisition on Decision-Making in Precision Medicine for Pancreatic Cancer: Beyond Diagnosis. *Diagnostics (Basel)*. 2021; 11 (7): 1195. doi:10.3390/diagnostics11071195 PMID: 34209310 PMID: PMC8307595
- [5] Gan Q, Roy-Chowdhuri S, Duose DY, Stewart JM, Coronel E, Bhutani MS, Lee JH, Weston B, Ge PS, Ross WA, Maitra A. Adequacy evaluation and use of pancreatic adenocarcinoma specimens for next-generation sequencing acquired by endoscopic ultrasound-guided FNA and FNB. *Cancer Cytopathol*. 2022; 130 (4): 275–283. doi:10.1002/cncy.22533 Epub 2021 Dec 14 PMID: 34905283
- [6] Imaoka H, Sasaki M, Hashimoto Y, Watanabe K, Ikeda M. New Era of Endoscopic Ultrasound-Guided Tissue Acquisition: Next-Generation Sequencing by Endoscopic Ultrasound-Guided Sampling for Pancreatic Cancer. *J Clin Med*. 2019; 8 (8): 1173. doi:10.3390/jcm8081173 PMID: 31387310 PMID: PMC6723875

OP166 Three-prong asymmetric tip FNB needle to obtain tissue specimens of pancreatic ductal adenocarcinoma for personalized based chemotherapy

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DOI 10.1055/s-0046-1820821

Aims Patients with pancreatic ductal adenocarcinoma (PDAC) are increasingly being treated with chemotherapy, either as (neo-)adjuvant or palliative treatment. Histological confirmation is often required prior to treatment, with fine needle biopsy (FNB) being the preferred diagnostic approach. However, current FNB-needles achieve a diagnostic accuracy ranging from only 67 to 87 %. Furthermore, the guidelines of the European Society of Gastrointestinal Endoscopy do not provide specific recommendations regarding the optimal number of passes during a FNB procedure with a three-prong asymmetric tip FNB-needle. The aim of this study was to investigate the diagnostic accuracy of a novel three-prong asymmetric tip FNB needle (Micro-Tech, Nanjing, China) and to determine after how many passes PDAC was diagnosed. Additionally, the study evaluated the added value of rapid on-site evaluation (ROSE).

Methods We performed an investigator-initiated prospective cohort study in three hospitals in The Netherlands. Patients with suspected PDAC and an indication for EUS-FNB were included. During each procedure, three biopsies were obtained and placed in separate formalin containers. ROSE was performed until ROSE was representative.

Results In 125 of 138 included patients the diagnosis PDAC could be confirmed by using the three-prong asymmetric tip FNB needle (diagnostic accuracy of 90.6 %). Following the second and third pass, the diagnostic confirmation rate was 92.0 % and 96.8 %, respectively. Although ROSE was not representative after the first pass in 48 patients, a positive histological result was still obtained in 30 of these cases (62.5 %). A total of 14 complications were seen; 10 patients developed an acute pancreatitis; two patients after only EUS-FNB, and eight after a combination of EUS-FNB with Endoscopic Retrograde Cholangiopancreatography (ERCP).

Conclusions The three-prong asymmetric tip FNB needle demonstrated a high diagnostic accuracy, with a diagnostic confirmation rate of 92.0 % after two passes. However, ROSE had no additional diagnostic value in this group with high-likelihood PDAC, it can be considered in atypical difficult cases.

Conflicts of Interest Mike J.P. de Jong, Foke van Delft, Tanya M. Bisseling, Niels G. Venneman, Titus F.M. Wijnands, Pleun Appelhof, Yark Hazewinkel, Casper Jansen and Lodewijk A.A. Brosens have no conflicts of interest or financial ties to disclose. Erwin M. van Geenen reports research grants from Olympus, Boston Scientific, and MTW Endoskopie. Peter D. Siersema reports research grants from Pentax and Fujifilm. All outside the submitted work.

Clear Skies, Calm Seas: Sedation and Endoscopic Visibility

15/05/2026, 14:30–15:30

Sky 1

OP167 Efficacy of addition of oral simethicone emulsion on the quality of bowel preparation for colonoscopy– An open-label randomized controlled trial

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DOI 10.1055/s-0046-1820822

Aims High-quality bowel preparation is essential for optimal mucosal visualization, adenoma detection, and overall colonoscopy effectiveness. Simethicone, an antifoaming agent, has been studied as an adjunct to PEG regimens to reduce intraluminal bubbles, though most prior trials used tablet formulations. This study aims to assess whether adding simethicone emulsion to PEG-electrolyte solution improves the quality of bowel cleansing and other colonoscopic preparation parameters.

Methods Consecutive adult patients undergoing colonoscopy were screened between April 2024 to October 2025 and randomized into two groups: 2 L PEG-ELS split dose + 300 mg simethicone emulsion per liter of PEG-ELS (Group A) and 2 L PEG (Group B). The primary endpoint was the effectiveness of bowel cleansing, as assessed by the Boston Bowel Preparation Scale (BBPS). Secondary endpoints included bubble score, cecal intubation time, polyp detection rate (PDR), and adverse events (► Table 1).

► **Table 1** Comparison of outcomes between the patients in each group

Parameters	Group A (n = 72)	Group B (n = 72)	p-value
Boston Bowel Preparation Scale: Total	7.36 ± 1.33	7.19 ± 1.58	0.495
Adequate bowel preparation	63 (87.5 %)	59 (81.9 %)	0.354
Bubble score: Total	0.49 ± 0.80	2.67 ± 2.92	<0.001
Cecal intubation time (SD), in min	4.62 ± 1.54	5.96 ± 2.72	<0.001
Colon withdrawal time (SD), in min	6.54 ± 1.02	6.97 ± 1.19	0.027
Polyp detection rate, n (%)	8 (11.1 %)	8 (11.1 %)	1.000
Adverse events: Bloating, n (%)	1 (1.4 %)	4 (19.4 %)	0.001
Willing to undergo a repeat colonoscopy if indicated	64 (88.9 %)	54 (75.0 %)	0.030

Results After exclusion, 150 patients were randomized, out of which 3 did not complete the preparation, and 3 patients had luminal obstruction precluding completion of the procedure. A total of 144 patients were included in the analysis, with 72 in each group. There was no difference in age (48.33 ± 15.14 vs. 47.00 ± 14.78 years), body mass index (23.38 ± 3.57 vs. 22.58 ± 3.79 kg/m²), or the proportion of patients with comorbidities. Mean total BBPS scores did not differ significantly (7.36 ± 1.33 vs 7.19 ± 1.58 ; $p = 0.495$), nor did segmental scores for the right, transverse, or left colon ($p = \text{NS}$ for all). Adequate bowel preparation (BBPS ≥ 6 with neither segmental score < 2) was achieved in 87.5% of Group A and 81.9% of Group B ($p = 0.354$), indicating similar cleansing effectiveness. In contrast, bubble burden differed markedly between groups. Group A demonstrated significantly lower bubble scores across all colonic segments, including cecum ($p < 0.001$), ascending colon ($p < 0.001$), transverse colon ($p = 0.001$), descending colon ($p = 0.005$), and rectosigmoid ($p = 0.006$).

The total bubble score was significantly lower in Group A compared with Group B (0.49 ± 0.80 vs. 2.67 ± 2.92 ; $p < 0.001$), indicating substantially clearer mucosal visualization. Cecal intubation time was significantly shorter in Group A (4.62 ± 1.54 min) compared with Group B (5.96 ± 2.72 min; $p < 0.001$). Colon withdrawal time was also marginally but significantly shorter in Group A (6.54 ± 1.02 vs 6.97 ± 1.19 min; $p = 0.027$). Despite these differences in visualization and procedure times, polyp detection rates were identical (11.1% in both groups; $p = 1.000$). Adverse event profiles favored Group A. Bloating was significantly less frequent (1.4% vs 19.4%; $p = 0.001$). Rates of nausea/vomiting, abdominal cramps, and sleep disturbances did not differ significantly. Patient acceptability was higher in Group A, with more patients willing to undergo repeat colonoscopy if required (88.9% vs 75.0%; $p = 0.030$).

Conclusions The addition of simethicone emulsion to PEG-ELS demonstrated a significantly reduced bubble burden, shorter cecal intubation and withdrawal times, fewer adverse symptoms, and greater patient acceptability, despite similar BBPS scores and polyp detection rates. These findings support the added value of simethicone-based preparation in enhancing mucosal visibility and improving overall procedural quality and patient comfort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP168 Optimal Timing of Simethicone and N-Acetylcysteine Premedication to Improve Gastric Mucosal Visibility: A Randomized Controlled Trial

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DOI 10.1055/s-0046-1820823

Aims Adequate gastric mucosal visibility (GMV) is essential for high-quality upper gastrointestinal (GI) endoscopy. This study aimed to evaluate the optimal timing of premedication with simethicone and N-acetylcysteine (NAC) in improving GMV.

Methods In this single-center, randomized controlled trial, 1,200 adult patients undergoing elective upper GI endoscopy were randomized into four groups: placebo, simethicone + NAC with endoscopy performed after 10–20 minutes, 20–30 minutes, and > 30 minutes. The primary outcome was the proportion of patients achieving adequate gastric mucosal visibility (GMV), defined as a score of < 7 on a validated visibility scale. A pre-specified subgroup analysis of the > 30 minute group was performed by stratifying patients into 20-minute intervals (31–50, 51–70, and 71–90 minutes) to assess the durability of mucosal clarity over time (► **Table 1**).

► **Table 1**

Characteristic	Group 1 (Placebo)	Group 2 (10–20 min)	Group 3 (20–30 min)	Group 4 (> 30 min)	Overall p-value	Significant Differences (Post hoc)
Adequate GMV (%)	8 (2.7) ^a	75 (25.0) ^b	194 (64.7) ^c	200 (66.7) ^c	<0.0001	1 ≠ 2, 1 ≠ 3, 1 ≠ 4, 2 ≠ 3, 2 ≠ 4; 3 = 4
Mean Gastric Score	10.3 ^a	8.5 ^b	6.4 ^c	6.2 ^c	<0.0001	All pairs except 3 vs 4
Lesion Detection (%)	43.7	46.7	48.7	47.3	0.655	NS (Not Significant)

Results Adequate GMV was significantly higher in all preparation groups compared to placebo ($p < 0.001$). The 20–30 minute and > 30 minute groups demonstrated the highest rates of adequate visibility (64.7% and 67%, respectively), both significantly superior to the 10–20 minute group (25%) and placebo (2.7%). In the > 30 minute subgroup analysis, the 31–50 minute interval demonstrated the highest adequacy (73.5%). The 51–70 minute group showed moderate adequacy (52.1%), which was not significantly different from the 20–30 minute group ($p = 0.207$). However, the 71–90 minute group ($n = 16$) had reduced adequacy (43.8%) and did not differ significantly from the 10–20 minute group ($p = 0.145$). No adverse events were reported across study arms.

Conclusions Endoscopy performed between 20 and 50 minutes after mucosal preparation yields optimal gastric mucosal visibility. A decline in visibility beyond 50 minutes suggests a practical upper limit for endoscopy timing following preparation. These findings support structured, time-sensitive scheduling following mucosal cleansing to enhance procedural quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP169 Prospective Evaluation of Ketamine and Midazolam Sedation for ERCP: A Safe Strategy with Superior Respiratory Stability and Faster Recovery Compared to Opioid-Based Regimens

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DOI 10.1055/s-0046-1820824

Aims Sedation for endoscopic procedures often risks respiratory and cardiovascular depression, particularly in elderly and frail patients. In endoscopic retrograde cholangiopancreatography (ERCP), frequently performed in the prone position, maintaining cardiorespiratory stability is essential. Ketamine, when combined with low-dose midazolam, may offer safer hemodynamic and respiratory profiles than traditional opioid-based regimens. Our primary aim was to evaluate the safety and efficacy of sedation with ketamine combined with low doses of midazolam for ERCP. The secondary aim was to compare its tolerability and adverse event (AE) profile with opioid-based sedation (pethidine, fentanyl or propofol) combined with midazolam.

Methods All patients undergoing ERCP with ketamine and midazolam sedation in our Digestive Endoscopy Unit from September 2023 to November 2025 were prospectively collected (Group A). For comparison, all patients who underwent ERCP with opioid-based sedation plus midazolam (Group B) from September 2022 to November 2025 were retrospectively and prospectively included. Group B was subdivided into: B1 (pethidine + midazolam), B2 (fentanyl + midazolam), and B3 (propofol + midazolam). Outcomes included procedure duration, recovery time, pain (measured before and after ERCP using the Visual Analogue Scale [VAS]), technical and clinical success rates, and sedation-related adverse events (AEs). Statistical analysis was performed using chi-square test, Student's t-test, Mann–Whitney U test, logistic regression, with significance set at $p < 0.05$.

Results A total of 940 patients were included: 417 received ketamine + midazolam (Group A; 227 males, median age 78 [21–98]) and 523 received opioid-based sedation (Group B; 257 males, median age 79 [34–98]). Within Group B, 402 patients (76.8%) received pethidine + midazolam (Group B1), 72 (13.8%) fentanyl + midazolam (Group B2), and 49 (9.4%) propofol + midazolam (Group B3).

In Group A, median doses were ketamine 40 mg [10–130] and midazolam 2.5 mg [1–7.5].

In Group B, median doses were: pethidine 45 mg [10–100] + midazolam 3.5 mg [1–9]; fentanyl 50 mcg [25–125] + midazolam 3 mg [1–6]; propofol 160 mg [50–450] + midazolam 2.5 mg [1–6].

Technical success was 96% in Group A and 95.6% in Group B; clinical success was 99.5% and 99%, respectively.

Sedation-related AEs occurred in 4.1% (17/417) of Group A (2.2% hallucinations, 1.4% sialorrhea with mild desaturation, 0.5% vomiting) and in 9.4% (49/523) of Group B (Group B1: 7.7%; Group B2: 13.9%; Group B3: 16.3%). Reported AEs in Group B included hypoxemia, bradycardia, and hypotension. Respiratory insufficiency was more frequent in Group B (14/31 in Group B1, 7/10 in Group B2, 7/8 in Group B3), whereas Group A showed only two cases of mild desaturation. No severe AEs occurred in either group. The most severe hypoxemia occurred in Group B3, requiring temporary interruption of ERCP in four cases.

Pain control was excellent in Group A, with only one patient (0.4%) reporting a one-point increase in VAS after ERCP.

Median recovery time was significantly shorter with ketamine (16.8 ± 3.1 minutes) compared with opioids (26.6 ± 4.3 minutes).

No statistically significant differences were found between groups in ERCP duration ($p = 0.33$), pain control ($p = 0.63$), technical success ($p = 0.82$) or clinical success ($p = 0.56$).

AEs were significantly more frequent in Group B2 vs Group A ($p = 0.04$) and in Group B3 vs Group A ($p = 0.03$), particularly regarding respiratory insufficiency.

Conclusions Ketamine combined with low-dose midazolam is a safe and effective sedation strategy for ERCP, providing excellent pain control and a significantly lower incidence of respiratory events compared with opioid-based regimens. Given its favorable respiratory and hemodynamic profile and comparable procedural success, ketamine–midazolam represents a valuable alternative, especially for patients at increased risk of respiratory compromise during ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP170 Remimazolam versus midazolam for sedation during diagnostic gastroscopy: a multicenter, double-blind, randomized controlled trial

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DOI 10.1055/s-0046-1820825

Aims Midazolam is widely used for procedural sedation during gastrointestinal (GI) endoscopy, but its limitations include prolonged recovery and impaired post-procedural memory. Remimazolam, a novel sedative, may enable faster recovery with improved preservation of cognition. Although both agents have been extensively studied, head-to-head comparisons in a Western population are limited. We therefore aimed to compare remimazolam to midazolam for diagnostic upper GI endoscopy in a multicenter, double-blind, randomized controlled trial.

Methods This trial is being performed in three Dutch community hospitals involving five experienced endoscopists. Adult patients scheduled for diagnostic upper GI endoscopy with procedural sedation were eligible; anticipated use of fentanyl or other opioids was an exclusion criterion. Patients were randomized 1:1 for sedation with either remimazolam or midazolam, with both patients and observers blinded for allocation. Vital signs, the validated Modified Observer's Assessment of Alertness/Sedation (MOAA/S) scores, and the validated Aldrete recovery scores were monitored at pre-defined time intervals during one hour post-procedure. In a follow-up phone call one day after the procedure, a memory test and patient questionnaire were completed. Primary endpoint was time to full alertness, defined as the interval between the latest sedative dose and the first of three consecutive MOAA/S scores ≥ 5 . Secondary endpoints included sedation success rate, memory performance, the proportion of patients ready for discharge home at the time of leaving the endoscopy room, and adverse events. Sedation success was defined as completion of the procedure as intended, using ≤ 5 boluses of the sedative during endoscopy, and without the need for any additional sedative agents. Memory was evaluated by recall of a playing card shown after full alertness. Readiness for discharge was defined as the first Aldrete score ≥ 9 , according to current guidelines. We report interim outcomes of our study in the intention-to-treat analysis.

Results In this interim analysis, 141/148 (95 %) patients were enrolled, with 71/141 (50 %) patients receiving remimazolam and 70/141 (50 %) patients midazolam. Baseline characteristics were similar between groups (66 % male; mean age 68 ± 11 years). The most common indication for the endoscopy was Barrett surveillance (98/141 patients; 70 %).

Median total doses were 8mg (IQR 7-9) for remimazolam and 5mg (IQR 4-7) for midazolam. Median procedure times were similar: 6 minutes (IQR 4-8) in both groups ($p < 0.005$). Sedation success rate was 96 % (68/71, 95 % CI 88-99) with remimazolam and 97 % (68/70, 95 % CI 90-99) with midazolam ($p = 0.718$). Procedure failure occurred due to ongoing agitation (remimazolam, $n = 2$; midazolam, $n = 1$) and food in the stomach ($n = 1$ in both groups).

Time to full alertness was significantly shorter with remimazolam: median 10 minutes (IQR 8-13) versus 22 minutes (IQR 13-33) with midazolam ($p < 0.005$). Setback in full alertness occurred in 1 % (95 % CI 0-8) after remimazolam versus 19 % (95 % CI 11-29) after midazolam ($p < 0.005$).

At the time of leaving the endoscopy room, 93 % (95 % CI 85-97) of remimazolam patients were ready for discharge home, versus 30 % (95 % CI 21-42) of midazolam patients ($p < 0.005$). Successful memory testing was observed in 65 % (95 % CI 53-75) versus 17 % (95 % CI 10-28) for remimazolam and midazolam, respectively ($p < 0.005$). Endoscopist and patient satisfaction were high in both groups. No serious adverse events occurred.

Conclusions Remimazolam for diagnostic upper GI endoscopy, enables faster recovery than midazolam, allowing most patients to meet discharge criteria directly after leaving the endoscopy room. Together with superior post-procedural memory, and high satisfaction, these preliminary results may support the potential for safe, recovery-room-free discharge following remimazolam monotherapy in routine clinical practice.

Conflicts of Interest B.W. has received research funding from Pentax Medical, C2 Therapeutics, and Aqua Medical. K.M. has received speaker fee, fee for consultancy services and reimbursement of study-related travel costs from Pentax Medical.

OP171 Efficacy and safety of monotherapy remimazolam compared to propofol for sedation in gastrointestinal endoscopic procedures: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1820826

Aims Remimazolam, an ultrashort-acting benzodiazepine, is a promising sedative in the armamentarium for healthcare professionals who do not have access to non-anesthesiologist-administered propofol sedation. We aimed to evaluate the efficacy and safety of remimazolam compared to propofol as monotherapy for sedation in adults undergoing gastrointestinal endoscopic procedures.

Methods A systematic review across MEDLINE and Cochrane Central Register for RCTs was performed, evaluating the efficacy and safety of sedation with monotherapy remimazolam compared to propofol for sedation in GI endoscopic procedures, from 01.01.2019 to 31.07.2024. The primary outcome was the total adverse events rate, while sedation induction time, overall procedural time, sedation success, and patient satisfaction comprised the secondary outcomes. Pairwise meta-analyses were undertaken to present the effect size on study outcomes as either Risk Ratio (RR) or Mean Difference (MD) with 95 % confidence interval (CI). We also performed sensitivity analyses by type of adverse event rate (hypotension, bradycardia, respiratory). The quality of evidence was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Fourteen RCTs involving 3158 patients (remimazolam 1587, propofol 1571) were included. Compared to propofol, monotherapy with remimazolam was associated with a significantly lower total adverse event rate [RR 0.66, 95 % CI (0.56 – 0.78), $I^2 = 73$ %]. This effect was consistent for hypotension [RR 0.40, 95 % CI (0.29 – 0.54), $I^2 = 75$ %], bradycardia episodes [RR 0.46 95 % CI (0.32 – 0.67, $I^2 = 0$ %] as well as respiratory adverse events rate [RR 0.44, 95 % CI (0.27-0.74), $I^2 = 42$ %]; there was low confidence in estimates. Remimazolam administration resulted also in a shorter sedation induction time [MD -0.41, 95 % CI (-0.70 – 0.12), $I^2 = 97$ %]. On further analysis, procedural time, sedation success, and patient satisfaction were similar between the two medication treatments [MD 0.69, 95 % CI (-0.74-2.13); $I^2 = 54$ %; RR 0.99, 95 % CI (0.90-1.09), $I^2 = 98$ % and MD 0.77, 95 % CI (-0.22-1.76), $I^2 = 55$ %, respectively]. Certainty of evidence was low.

Conclusions Remimazolam monotherapy displays better safety profile with clinically similar efficacy when compared to propofol monotherapy for sedation in gastrointestinal endoscopic procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP172 Comparative Evaluation of Propofol-Based Sedation Strategies in Endoscopy: Safety, Recovery, and Satisfaction in Non-Anesthesiologist Administration

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DOI 10.1055/s-0046-1820827

Aims Propofol has become the cornerstone sedative in gastrointestinal (GI) endoscopy because of its rapid onset, short half-life, and predictable recovery profile. With the growing global adoption of nonanesthesiologist-administered propofol (NAAP), optimizing its delivery strategy is of increasing clinical relevance. While combining propofol with benzodiazepines has been proposed to achieve a dose-sparing effect and enhance sedation stability, the clinical benefit of this approach over propofol monotherapy remains uncertain. This study prospectively compared the safety, performance, satisfaction, and cost profiles of propofol monotherapy versus propofol-midazolam combination under standardized NAAP protocols.

Methods In this randomized, single-center trial, 330 adult patients undergoing elective upper, lower, or bidirectional endoscopy were assigned to receive either propofol alone or propofol combined with midazolam (1:1 ratio). Sedation was administered by trained gastroenterology teams following structured NAAP protocols. The primary endpoints were sedation-related complications and total propofol dosage. Secondary endpoints included procedure completion, recovery quality, patient and endoscopist satisfaction, and per-procedure sedation cost. Logistic regression identified independent predictors of compli-

cations, and receiver operating characteristic (ROC) analysis assessed the discriminatory capacity of propofol dosage.

Results Both sedation regimens were safe and effective, with no differences in overall (30.3 % vs. 33.3 %) or severe complications (1.8 % vs. 2.4 %). Propofol monotherapy required a higher total dose (197 ± 90 mg vs. 174 ± 75 mg, $P = 0.013$) but achieved significantly smoother and faster recovery ($P < 0.001$). Patient satisfaction exceeded 95 % in both groups, and endoscopist ratings of procedural comfort and sedation adequacy were uniformly high. Multivariable analysis identified bidirectional endoscopy (aOR = 2.49, 95 % CI: 1.57–3.97) and BMI > 30 (aOR = 1.69, 95 % CI: 1.02–2.78) as independent predictors of sedation-related events, while the propofol regimen itself was not associated with higher risk (aOR = 0.83, 95 % CI: 0.50–1.31). Propofol dose alone demonstrated limited predictive accuracy for adverse events (AUC = 0.64 monotherapy; AUC = 0.59 combination). Sedation costs were slightly lower for monotherapy (median 1.04 € vs. 1.29 €, $P < 0.001$).

Conclusions Propofol-based sedation administered by trained gastroenterology personnel is safe and efficient for routine endoscopic practice. Monotherapy, while requiring higher propofol doses, offers faster recovery, simplified administration, and marginal cost savings without compromising safety or satisfaction. The addition of midazolam does not confer measurable clinical benefit in standard elective cases but may be selectively advantageous for anxious or complex patients. These findings support the broader implementation of propofol monotherapy as a primary NAAP regimen and highlight the need for multicenter studies to further refine risk-adapted sedation algorithms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Cholangioscopy: From stones to cancer

15/05/2026, 14:30–15:30

Sky 2

OP173 Utility of peroral cholangioscopy in the diagnosis and management of intraductal papillary neoplasms of the bile duct

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DOI 10.1055/s-0046-1820828

Aims Intraductal papillary neoplasms of the bile duct (IPN-Bs), recognized as potential precursors of invasive cholangiocarcinoma, present diagnostic challenges due to their variable imaging characteristics, mucin production, and frequent tumor multiplicity. Conventional imaging modalities may be limited in accurately characterizing these lesions. We assessed the clinical utility of peroral cholangioscopy (POC) in the diagnosis and management of IPN-Bs.

Methods IPN-Bs were diagnosed in consecutive patients who underwent POC, based on a comprehensive assessment of clinical presentation, laboratory findings, imaging studies, and POC results. The primary outcome was the detection rate of IPN-Bs. The secondary outcomes were the technical success of POC and POC-guided forceps biopsy (POC-FB), procedure-related adverse events (AEs), detection rate of IPN-Bs missed on prior imaging, and management modification rate after POC.

Results POC was completed in 599 of 621 patients (94.9 %). Mild procedure-related AEs occurred in nine patients (1.4 %) and were managed conservatively. IPN-Bs were identified in 84 patients (13.3 %), including 25 (29.8 %) that had not been detected on prior imaging. Among the 81 of 84 patients in whom POC-FB was successful, histopathologic diagnoses included indefinite for dysplasia (17.3 %), low-grade dysplasia (53.1 %), high-grade dysplasia (13.6 %), and invasive carcinoma

(16.0 %). Among 59 patients with suspected IPNBs on conventional imaging, POC findings led to management modifications in 17 cases (20.2 %).

Conclusions POC is a useful diagnostic modality for the detection of IPN-Bs and facilitates accurate decision-making for subsequent management planning.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP174 Role of Pancreatocopy in the Differential Diagnosis Between Chronic Pancreatitis and IP-MN-MD: A Preliminary Analysis

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DOI 10.1055/s-0046-1820829

Aims Differentiating between main duct intraductal papillary mucinous neoplasm (IPMN) with the presence of segmental irregular wall thickening and/or millimetric mural nodules and chronic pancreatitis (CP) is a significant challenge. When the diagnosis is unclear, endoscopic ultrasound (EUS) is indicated. The Rosemont criteria, including main duct morphology, hyperechoic foci, calcifications in the pancreatic duct (MPD), pancreatic parenchymal changes, MPD irregular contour or dilation are essential for diagnosing CP but are not always conclusive. Instead IPMN-MD diagnosis depends on imaging techniques like MRI and EUS, revealing an MPD diameter > 5 mm and often the presence of wall thickening or mural nodules. In cases where chronic pancreatitis is considered definite or possible according to the Rosemont criteria, and there is dilation of MPD accompanied by segmental irregular wall thickening, the differential diagnosis becomes particularly challenging. In such cases, peroral pancreatocopy could be reliable for identifying IPMN and provide useful information. An accurate diagnosis is crucial because patients may need a total pancreatectomy, which is associated with both short-term complications (e.g., infections, organ failure) and long-term issues (e.g., diabetes, malabsorption syndrome). The 5-year survival rate for these patients ranges from 25 % to 60 %.

Methods In this case series 5 patients who underwent EUS for differential diagnosis between CP and IPMN-MD with the presence of segmentary irregular wall thickening or millimetric mural hyperechoic nodule < 5 mm from January 2023 to November 2024 were included. All patients had EUS evidence of MPD dilation > 10 mm, with irregular contour e/o mural nodules not clearly suggestive of plugs, calcifications, or intraluminal growth. Contrast-enhanced EUS (CH-EUS) were performed, showed the presence of MPD nodules. Because definitive diagnosis of IPMN-MD could be challenging in advanced chronic pancreatitis cases, we scheduled a peroral pancreatocopy (POPS) using the Spyglass DS system. Pancreatocopy allowed direct high-definition visualization of the pancreatic ducts and targeted biopsy on abnormal-appearing mucosal lesions for histological confirmation [1–11].

Results The cohort had a mean age of 60 years (3 male, 2 female), with a median follow-up of 84 days. MPD dilation was 17.2 mm (SD 7.5mm). In 2 cases, pancreatocopy revealed an MPD covered by regular epithelium with raised areas of hyperemia, where spybite biopsies confirmed nonspecific inflammation. In 1 case, the MPD was covered by fish-egg-like protrusions without vascular structures (type 2, Hara et al.), while in 2 cases, it showed villous-type protrusions (type 4, Hara et al.) (figure 1) with histology confirming low-grade IPMN in one patient and high-grade IPMN in two. The three IPMN patients underwent surgery, with histology confirming low-grade dysplasia in one and high-grade dysplasia in two.

Conclusions These preliminary findings suggest that pancreatocopy is a valuable tool in resolving the differential diagnosis between CP and IPMN-MD with irregular wall thickening. It can help avoid unnecessary invasive procedures in CP patients and provide a more accurate assessment of IPMN-MD severity. Further prospective studies with larger cohorts are needed to confirm these

results and explore the potential of pancreatoscopy as a standard practice in differentiating these two conditions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kato T. et al. 2017; "International evidence-based Kyoto guidelines for the management of intraductal papillary mucinous neoplasm of the pancreas.". *Pancreatology*.
[2] Frossard J.-L. et al. 2018; "Long-term Consequences of Total Pancreatectomy: A Review of Nutritional and Metabolic Complications.". *Digestive Diseases & Sciences*.
[3] Di Carlo V. et al. 2017; "Total Pancreatectomy and Long-Term Diabetes Management.". *Journal of Clinical Endocrinology & Metabolism*.
[4] Seelen J.P. et al. 2019; "Multiorgan Failure after Major Pancreatic Surgery.". *The Lancet Gastroenterology & Hepatology*.
[5] Hata Y. et al. 2019; "Postoperative Complications after Total Pancreatectomy: A Review.". *Surgical Today*.
[6] Kato T. et al. 2017 "International evidence-based Kyoto guidelines for the management of intraductal papillary mucinous neoplasm of the pancreas.". *Pancreatology*
[7] Hata Y. et al. 2019; "Postoperative Complications after Total Pancreatectomy: A Review.". *Surgical Today*.
[8] Seelen J.P. et al. 2019; "Multiorgan Failure after Major Pancreatic Surgery.". *The Lancet Gastroenterology & Hepatology*.
[9] Di Carlo V. et al. 2017; "Total Pancreatectomy and Long-Term Diabetes Management.". *Journal of Clinical Endocrinology & Metabolism*.
[10] Frossard J.-L. et al. 2018; "Long-term Consequences of Total Pancreatectomy: A Review of Nutritional and Metabolic Complications.". *Digestive Diseases & Sciences*.
[11] Noda Y. et al. 2016; "Long-term Outcomes of Total Pancreatectomy: A Retrospective Study.". *Annals of Surgical Oncology*.

OP175 Cholangioscopy guided electrohydraulic lithotripsy for large common bile duct stones- safety and feasibility evaluation of a large 1.5mm EHL probe (CRAC-Stones study) under direct vision. An interim analysis

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DOI 10.1055/s-0046-1820830

Aims Cholangioscopy-guided electrohydraulic lithotripsy (EHL) is an established therapy for difficult bile duct stones [1]. However, small-diameter probes have limited its effectiveness [1]. With the introduction of digital cholangioscopes featuring 2.0-mm working channels, larger and potentially more efficient probes can now be used. The CRAC-STONE trial is the first prospective multicenter cohort study evaluating the safety and efficacy of a **1.5-mm EHL probe** used in digital single-operator cholangioscopy for large bile duct stones.

Methods This ongoing study includes patients with large or difficult bile duct stones from seven high-volume German centers.

Inclusion criteria: Common bile duct stone ≥ 10 mm and/or lumen occluding
Indication for endoscopic retrograde cholangiography with cholangioscopy and electrohydraulic lithotripsy

Primary endpoint: Technical Success rate defined as stone clearance or ability to pass a stent if previously not possible

Secondary endpoints: Rate of interventions with ability to advance the 4.5FR/1.5mm EHL probe at the stone and apply electrohydraulic lithotripsy. Rate of AE within 30 days after the procedure, Number of 4.5FR/1.5mm EHL probes used to achieve primary endpoint (PE)

Results (interim analysis, n = 24):

Mean stone size was 16,3mm. Technical success was achieved in **21/24 cases (87,5%)**. Probe advancement to the target stone was successful in **22 cases (91,6%)**. Mean procedure duration was **57 min**. A mean of **1.4 probes** were required per procedure. No severe adverse events occurred. Minor adverse events included transient abdominal discomfort and two cases of mild post-ERCP pancreatitis, all resolving with conservative management. At 30-day follow-up, **21/24 patients (87,5%)** demonstrated sustained clinical success, and re-intervention was required in **2 cases**.

Conclusions Use of a 1.5-mm EHL probe via digital single-operator cholangioscopy appears highly feasible, safe, and effective for treating large bile duct stones. This larger-diameter probe may enhance fragmentation efficiency and overall procedural performance. Final results from the full cohort are awaited.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bokemeyer A, Gerges C et al. Digital single-operator video cholangioscopy in treating refractory biliary stones: a multicenter observational study. *Surg Endosc* 2020; 34 (5): 1914–1922

OP176 Diagnostic Performance and Clinical Impact of Single-Operator Cholangioscopy for Indeterminate Biliary Strictures: A 5-year retrospective observational cohort study

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DOI 10.1055/s-0046-1820831

Aims Indeterminate biliary strictures remain diagnostically challenging, with conventional ERCP tissue sampling offering low sensitivity (21-66% [1]). Single operator cholangioscopy (SOC) allows direct intraductal visualization and targeted biopsies, potentially improving diagnostic accuracy. However, real-world, long-term data on its diagnostic yield and safety remain limited.

Methods We performed a retrospective observational cohort study of all adults undergoing SOC between January 2020 and December 2024 at a tertiary referral centre. The aim was to identify the diagnostic yield for malignancy of SOC visual assessment and targeted biopsies (► **Table 1**).

► Table 1 Diagnostic Yield of Cholangioscopy		
		95 % CI (lower, upper)
Prevalence	0.33	0.20, 0.49
Sensitivity	0.87	0.60, 0.98
Specificity	0.80	0.61, 0.92
Positive predictive value	0.68	0.43, 0.87
Negative predictive value	0.92	0.75, 0.99
Positive likelihood ratio	4.33	2.06, 9.11
Negative likelihood ratio	0.17	0.05, 0.61

Statistical analysis included descriptive summaries, group comparisons using chi-square and t-tests, and diagnostic accuracy evaluation with sensitivity, specificity, predictive values, likelihood ratios, and AUC. Group comparisons between benign and malignant final diagnoses were performed using chi-square tests for categorical variables and t-tests for continuous variables, with significance set at $p < 0.05$.

Results Among 433 SOC procedures, 330 were performed for stone management and 10 with incomplete data were excluded, leaving 93 patients for analysis. Most patients were male (62.4%) with a mean age of 57 years. SOC visual impression and histology were strongly associated with final diagnosis ($p < 0.001$), whereas other clinical and procedural factors did not reach statistical significance. 70 (75.3%) had benign and 23 (24.7%) had malignant strictures as their final diagnosis. Based on visual impression and biopsy confirmed histological diagnosis, sensitivity for malignancy was 0.87 (95% CI 0.60–0.98) and specificity was 0.80 (95% CI 0.61–0.92). The positive predictive value was 0.68 (95% CI 0.43–0.87), while the negative predictive value was 0.92 (95% CI 0.75–0.99). Two patients (2.2%) experienced adverse events in the form of cholangitis.

The Area under the Curve was calculated at 0.83, suggesting that the model reliably aids in ruling out malignancy in strictures. After adjusting for indication and stricture location, the model's discriminative ability decreased substantially (with an AUC of 0.7247), highlighting their importance in the diagnostic yield of SOC.

Conclusions SOC demonstrated high negative predictive value, supporting its clinical utility in the differentiation of benign and malignant biliary strictures when compared to reported performance of conventional ERCP tissue sampling. Prospective, multicentre studies with larger sample sizes are needed to validate these findings, refine SOC-based diagnostic criteria, and better define when to include SOC in the diagnostic algorithm for biliary strictures.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the remaining authors have no relevant financial disclosures or conflicts of interest to declare.

References

[1] Gerges C, Beyna T, Tang RSY, Bahin F, Lau J, van Geenen EV et al. Digital single-operator peroral cholangioscopy-guided biopsy versus ERCP-guided brushing for indeterminate biliary strictures: a prospective, randomized multicenter trial. *Gastrointest Endosc* 2020; 91 (6): 1105–13.e2. doi:10.1016/j.gie.2019.11.025

OP177 Pancreatotomy-guided laser lithotripsy to treat symptomatic chronic pancreatitis-related stone disease

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DOI 10.1055/s-0046-1820832

Aims Chronic pancreatitis often leads to debilitating pain, malnutrition, and steatorrhea, with pain driving poor quality of life, opioid dependence, and frequent emergency department (ED) presentations.

Obstructing main pancreatic duct (PD) stones are postulated to contribute to pain through ductal hypertension. Endoscopic stone clearance with ERCP is technically challenging and frequently unsuccessful. Pancreatotomy-guided lithotripsy (PL) using Holmium laser (HL) is a novel therapeutic adjunct, but both short- and long term outcome data are limited.

We aimed to evaluate the safety, effectiveness, and long-term outcomes of PL-HL for symptomatic obstructing main PD stones.

Methods Patients with symptomatic PD stones were prospectively enrolled. After ERCP with sphincterotomy and stricture dilatation, PL-HL was performed for stone fragmentation using a 10FG Boston Scientific Spyglass pancreatoscope advanced over an 0.025inch guidewire and Lumenis Verapulse Holmium YAG laser with a 272µm fibre. The primary outcome was reduction in pain-related

ED presentations. Secondary outcomes included total stone clearance, weight gain, changes in Izicki pain score, opioid use, and adverse events.

Results Over a nine year period, 22 patients referred for treatment underwent PL-HL (median age 68 [IQR 55–78], 46% female). Baseline main pancreatic duct (MPD) diameter was 7mm [IQR 7–10] and 10 (65%) patients had more than one PD stone.

17 (77%) patients had chronic pain with 11 (50%) requiring regular opioids. The median Izicki Pain Score was 38.8 [IQR 19.5–43.8].

Overall 31 pancreatoscopy procedures were performed in the 22 patients with 5 (23%) of patients requiring multiple PL-HL sessions. Total stone clearance was achieved in 91% of cases. The median laser settings were 1.4 J, 15 Hz with median total energy delivered 2.6 kJ [IQR 0.7–5.0].

Post-procedural complications occurred in 9% of procedures, this was predominantly short-lasting pain in 2 cases (6%) with only 1 (3%) case of mild pancreatitis.

Median follow up was 13 months [IQR 7–40]. Full results are shown in the Table. There was a significant reduction in ED presentations following PL-HL treatment ($p = 0.018$). Similarly, Izicki Pain Scores, median patient weights, and MPD diameters also improved significantly with a trend to improvement in steatorrhea (► Table 1).

► Table 1 Patient outcomes post laser lithotripsy in 22 patients

Outcome	Pre-Treatment (%)	Post-Treatment (%)	P value
MPD diameter (mm) [^]	7 [7-9]	5 [4-7]	0.002
Weight (kg) [^]	61 [54-89]	73 [58-90]	0.002
ED presentations [^]	1 [0-3]	0 [0-1]	0.018
Izicki Pain Score [^]	39 [20-44]	0 [0-21]	<0.001
Opioid use			
Any	11 (50)	10 (46)	1.000
Daily	5 (23)	3 (14)	0.500
Steatorrhea	11 (52)	2 (10)	0.008

Conclusions In a single tertiary endoscopy centre, PL-HL achieved total main PD stone clearance in 91% of cases. Stone clearance was associated with significant improvements in Izicki pain scores, subsequent ED presentations, weight, and MPD diameter. Therefore, among symptomatic chronic pancreatitis patients with main PD stones: PL-HL appears safe and is associated with clinically meaningful improvements in patient quality of life and reduced healthcare utilisation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP178 The significance of cholangioscopic atypia in indeterminate biliary stricture specimens in patients with or without primary sclerosing cholangitis

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DOI 10.1055/s-0046-1820833

Aims Indeterminate biliary strictures (IBS) are those with an uncertain diagnosis following investigation including cross-sectional imaging, endoscopic ultrasound, and endoscopic retrograde cholangiopancreatogram. Digital cholangioscopy (DC) has emerged as a valuable tool to assess IBS allowing direct visualization and targeted biopsies, most centres do not use aspiration cytology. The clinical significance of finding histological or cytological atypia in IBS

remains uncertain. Atypia may reflect inflammation or herald malignancy, with prior studies suggesting malignancy rates of 50 % in non primary sclerosing cholangitis (PSC) cohorts. Clarifying the prognostic implications of atypia is essential to guide clinical decision-making and avoid delays in diagnosis and treatment. This study aimed to assess the long-term outcomes of patients with IBS undergoing DC in whom histological or cytological atypia was identified, stratified by PSC status.

Methods We analysed a prospectively collected cohort of 45 patients between 2017-2024 from a tertiary referral centre in Sydney, Australia with indeterminate strictures and atypia. Patients were stratified into PSC (n = 13) and non-PSC (n = 32) groups. Clinical variables included age, gender, serum bilirubin and Ca19.9 levels, stricture location, preceding stent placement and time to final diagnosis (FD). At cholangioscopy IBS were visually assessed and then specimens obtained for histology and aspiration cytology. Sampling modality with atypia was categorised as biopsy alone, cytology alone, or both. FD malignancy was determined by DC specimens, surgical pathology, or multidisciplinary team consensus based on imaging and clinical progress after at least 6 months follow-up post DC. Statistical analyses included odds ratios for malignancy and Fisher's exact test for atypia severity.

Results The median age was 66 years, with PSC patients younger (52) than non-PSC patients (70); 64 % male. Median follow-up was 49 (8-87) months. Atypia was identified by aspiration cytology in 20 (45 %) patients, histology in 6 (13 %), and both modalities in 19 (42 %). Overall, 29/45 patients (64 %) were malignant: 22 cholangiocarcinoma, 7 other malignancies.

Non-PSC patients had malignancy identified in 27/32 (84 %) versus PSC patients 2/13 (15 %) with odds ratio for malignancy 0.01 (95 % CI 0.0–0.3, p = 0.009). Finding atypia on both biopsy and cytology specimens trended toward increased malignancy risk (OR 17.0, p = 0.058). Serum bilirubin and Ca19.9 levels, gender, stricture location and previous stenting were not predictive. "Highly atypical" cytology or histology was identified in 14 (31 %), all had FD malignancy (Fisher's exact p < 0.001).

Conclusions In patients with IBS with atypia identified on DC:

1. The diagnostic yield is increased with additional aspiration cytology
2. Highly atypical findings suggest malignancy
3. Non-PSC patients usually harbour malignancy and should be considered for further intensive investigations and early treatment
4. The presence of atypia in PSC although concerning, is usually associated with a benign course

Conflicts of Interest Authors do not have any conflict of interest to disclose.

The Role of Endoscopy in liver transplantation

15/05/2026, 14:30–15:30

Aqua 1 + 2

OP179 Biliary anastomotic strictures after liver transplantation: performance of multiple plastic stents and intraductal metal stents

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DOI 10.1055/s-0046-1820834

Aims Biliary anastomotic strictures (AS) occur in 10-25 % of cases after liver transplantation (LT) and ERCP with multiple plastic stenting (MPS) is the mainstay of treatment. The aim of this study was to assess the performance of three different endoscopic strategies: 1) only MPS, 2) combination of MPS and double-flared intra-ductal covered metal stents (IDS), 3) only IDS [1].

Methods This is a retrospective single center study on patients affected by AS treated with MPS, MPS + IDS or IDS. Exclusion criteria were: 1) previous or intervening treatment with percutaneous techniques or with traditional transpapillary fully covered metal stents (SEMS), 2) presence of concomitant non-anastomotic biliary strictures. In case of AS, MPS or IDS were placed, then removed and possibly replaced in case of AS persistence; the procedures were scheduled according to symptoms, biochemistry and imaging; changing from one type of stent to the other was up to the endoscopist. After the treatment period or during the follow-up, based on the ERCP or MRCP results, we defined: 1) healing, when the AS disappeared after stent removal and it did not recur in the follow-up; 2) relapse, when the AS recurred after resolution; 3) failure, if the AS persisted or if the stricture extended upwards to the hilum. We recorded these outcomes according to the type of stents used, the duration of treatment (DOT), the number of procedures done (NOP) (► **Table 1**).

► **Table 1**

	MPS (16 pts)	MPS + IDS (17 pts)	IDS (16 pts)
Healing	9 pts (56.3 %)	14 pts (77.8 %)	14 pts (87.4 %)
	DOT = 11.7 months	DOT = 15.6 months	DOT = 6.9 months
	NOP = 12.2	NOP = 5.2	NOP = 2.6
Relapse	3 pts (18.7 %)	2 pts (11.1 %)	1 pt (6.3 %)
	DOT = 19.7 months	DOT = 5.5 months	DOT = 10 months
	NOP = 8.7	NOP = 7.0	NOP = 6
Failure	4 pts (25.0 %)	1 pt (5.6 %)	1 pt (6.3 %)
	DOT = 15.8 months	DOT = 22 months	DOT = 5 months
	NOP = 7.7	NOP = 15	NOP = 4

Results In the period 2015-2025 562 patients underwent LT; 81 (14.4 %) developed an AS after a mean of 13.2 months; 49 of them entered the study. Overall, 37 patients (75.5 %) healed (current mean FU: 15.9 months), the others relapsed or failed. MPS obtained a lower healing rate and required a higher NOP compared to MPS + IDS or IDS (p < 0.05); to get AS resolution IDS needed for a shorter DOT compared to MPS or MPS + IDS (p < 0.05). Overall, 6 patients relapsed after a mean of 18.2 months; 5 healed after further endoscopic stenting, 1 underwent LT. The 6 patients who experienced endoscopic failure were treated transcutaneously or underwent LT.

Conclusions Compared to the MPS alone, the use of IDS, alone or in combination with MPS, was associated with better outcomes in terms of AS resolution, NOP or DOT. Future studies should compare the performance of IDS and SEMS in this setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dumonceau J, Tringali A, Papanikolaou I et al. Endoscopic biliary stenting: indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated October 2017. Endoscopy 2018; 50: 910–930. doi:10.1055/a-0659-9864.

OP180 Biliary complications following liver transplantation: a long-term follow-up in a high-volume tertiary center

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DOI 10.1055/s-0046-1820835

Aims Biliary complications following liver transplantation are among the most common complications affecting graft function and patient morbidity after transplantation. Several risk factors have been identified, and continuous improvements in surgical techniques and perioperative care have been made. While insufficient data exists to draw conclusions, internal biliary stents have been reported to decrease the rate of biliary complications [1–3].

Methods We retrospectively analyzed prospectively collected data with long-term follow-up from a high-volume tertiary center. The study included all adult patients who underwent deceased-donor liver transplantation (DDLT) or living-donor liver transplantation (LDLT) between 2005 and 2023, with a minimum follow-up period of one year. The aim of the study was to assess the incidence and trends of biliary complications during those years, determine the risk factors, and evaluate the prophylactic effect of internal biliary stents on the development of biliary complications.

Results This study included 1,775 liver transplant recipients (1,804 transplants), predominantly male (59.1%), with a median age at transplantation of 55.9 years. Of these patients, 326 patients (18, 2%) received an internal biliary stent perioperatively due to a bile duct diameter of less than 6 mm or mismatched bile duct sizes. Overall, biliary complications occurred in 23.7% of patients, with a statistically significantly higher incidence among LDLT recipients (52.6%; $p = 0.006$). The incidence of biliary complications with a stent was higher (29.4% v.s. 22.4%; $p = 0.009$). The year of liver transplantation (OR = 0.96; $p = 0.0001$), the presence of a hepaticojunction anastomosis (OR = 0.56; $p = 0.0019$), and split liver grafts (OR = 1.77; $p = 0.0062$) were significant risk factors for the development of biliary complications.

Conclusions Biliary complications remain a significant issue following liver transplantation, particularly in LDLT. Several risk factors have been identified, including the type of biliary anastomosis and the type of liver graft. Biliary stenting in liver transplant recipients hasn't proved its prophylactic effect.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Elkomos BE, Abdelaal A. Do We Need to Use a Stent in Biliary Reconstruction to Decrease the Incidence of Biliary Complications in Liver Transplantation? A Systematic Review and Meta-Analysis. *J Gastrointest Surg* 2023; 27 (1): 180–196. doi:10.1007/s11605-022-05479-7
- [2] Fasullo M, Patel M, Khanna L, Shah T. Post-transplant biliary complications: advances in pathophysiology, diagnosis, and treatment. *BMJ Open Gastroenterol* 2022; 9 (1):e000778. doi:10.1136/bmjgast-2021-000778
- [3] Goumard C, Boleslawski E, Brustia R et al. Duct-to-duct biliary reconstruction with or without an intraductal removable stent in liver transplantation: The BILIDRAIN-T multicentric randomised trial. *JHEP Rep* 2022; 4: 100530. Published 2022 Jul 6. doi:10.1016/j.jhepr.2022.100530

OP181 Comparative Effectiveness and Safety of Endoscopic Retrograde Cholangiopancreatography Versus Percutaneous Transhepatic Radiological Procedures in Managing Post-Liver Transplantation Biliary Complications: A Systematic Review

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DOI 10.1055/s-0046-1820836

Aims This systematic review aims to evaluate and compare the effectiveness, safety, and long-term outcomes of Endoscopic Retrograde Cholangiopancreatography (ERCP) versus Percutaneous Transhepatic Radiological Procedures (PTRPs) in managing biliary complications following liver transplantation (LT). The study addresses the clinical challenge of selecting the optimal intervention for complications such as anastomotic strictures (AS), non-anastomotic strictures (NAS), bile leaks, and biliary stones [1].

Methods A systematic review was conducted according to PRISMA 2020 guidelines, analyzing 31 studies published between 1997 and 2023. Data were sourced from six electronic databases including PubMed/MEDLINE, Embase, and Cochrane Library. Eligible studies included adult and pediatric LT recipients experiencing post-transplant biliary complications treated with ERCP or PTRPs (PTBD, PTC, PTC). Outcomes assessed were technical and clinical success, adverse events, recurrence rates, and retreatment needs. Quality was appraised using the Newcastle-Ottawa Scale. Due to heterogeneity, a narrative synthesis was performed.

Results ERCP demonstrated high clinical success rates for bile leaks (71–100%) and anastomotic strictures (65–96%), but lower efficacy for non-anastomotic strictures (12–42%). PTRPs showed superior efficacy in complex strictures, with success rates between 70% and 90.6%, and achieved 100% success in pediatric cohorts. Comparative studies revealed ERCP technical success rates ranging from 65% to 94.9%, while PTRP technical success reached up to 90.6%. Safety profiles differed: ERCP was associated with pancreatitis incidence of 4–10%, bleeding in 2.6–16%, and cholangitis in 1.3–10.6%; PTRPs carried hemorrhage risks of 1.4–11.1%, sepsis rates of 5–22%, and catheter-related complications including dislodgement (9.1%) and occlusion (27.1%). Long-term outcomes favored ERCP for AS, with recurrence rates between 0% and 32%, particularly lower (7.7%) with plastic stents versus 30.3% with covered self-expandable metal stents (cSEMS). NAS recurrence after ERCP was higher (33–50%), often requiring additional interventions. PTRP maintained approximately 70% patency at 3.5 years but required repeat interventions in 43–53% of cases. Hybrid ERCP-PTRP approaches achieved over 90% success in complex cases, reducing surgical revision rates by 38–62%.

Conclusions ERCP remains the preferred first-line intervention for bile leaks and accessible anastomotic strictures due to its minimally invasive nature and favorable safety profile. PTRPs are valuable for complex or ERCP-refractory strictures, especially in pediatric patients, despite higher complication rates. Hybrid strategies combining ERCP and PTRP optimize outcomes in anatomically challenging cases. Future research should focus on randomized controlled trials comparing these modalities, development of predictive models for individualized treatment, and innovations in stent technology and procedural guidance. Standardized outcome definitions and multidisciplinary collaboration will enhance clinical decision-making and patient care in post-LT biliary complication management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gadour E, Miutescu B, Hassan Z, Aljahdli ES, Raees K. Advancements in the diagnosis of biliopancreatic diseases: A comparative review and study on future insights. *World J Gastrointest Endosc* 2025; 17: 103391. doi:10.4253/wjge.v17.i4.103391 PMID: 40291132 PMID: PMC12019128

OP182 Efficacy and long-term outcomes of endoscopic therapy for post-transplant anastomotic biliary strictures and bile leaks: a single center experience

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DOI 10.1055/s-0046-1820837

Aims Biliary complications including anastomotic strictures and bile leak occur in approximately 14%-20% of patients post-orthotopic liver transplantation (post-OLT). Endoscopic retrograde cholangiopancreatography (ERCP) and insertion of plastic stents represent the standard treatment for these biliary complications, however, there is limited data on the rate of resolution of stricture or bile leak, stricture or leak recurrence and long-term outcomes of ERCP in liver transplant patients with these biliary complications

Methods We reviewed clinical records of 3590 consecutive patients who underwent OLT between January 2011 to January 2023. For the patients who developed anastomotic biliary strictures (ABS) or bile leak (BL), specific data including the demographics, indication of OLT, graft type, configuration of bile ducts, number of biliary anastomosis, and procedure-related data including number of ERCP sessions required and requirement of per-cutaneous transhepatic biliary drainage (PTBD) were extracted. Primary outcome was rate of stricture or bile leak resolution and secondary outcomes were to estimate the rate of stricture or leak recurrence and identify predictive factors for recurrence of biliary complications [1].

Results Of total 3590 patients who underwent liver transplant, 540 (15%) patients (male = 465, 86.1%; mean age- 49.3 ± 10.6 years) developed biliary complications [ABS – 469 (86.9%) patients; BL – 60 (11.1%) patients; stricture with bile leak – 11 (2%) patients]. The median time to stricture formation after OLT was 6 (IQR: 3- 10) months, and the median time from OLT to bile leak was 29.5 (IQR:15- 51.5) days. The technical success for ERCP was 89.1% (481/540); 59 (10.9%) patients required a combination of ERCP and PTBD (followed by rendezvous ERCP) for biliary drainage and one patient required surgery. Of 480 patients with ABS, 409 (85.2%) patients achieved stricture resolution after a median 3 (IQR:2- 4) ERCP sessions and median 6 (IQR:4-9) months. Rest required surgery. Stricture recurrence occurred in 20.5% (84/409) patients after median 5 (IQR: 3-12) months of stent free trial; 90% (76/84) patients were subsequently managed by ERCP successfully, and 8 patients required surgery. Of 60 patients with BL, rate of resolution was 95% (57/60) after median 1 (IQR: 1-2) ERCP session and median 3 (IQR: 3-4) months; none of these patients developed recurrence. On multivariate analysis, requirement of more than 3 ERCP sessions (aOR: 1.6, 95% CI: 1.1-1.8; p = 0.004) and multiple duct-to-duct anastomosis (aOR: 1.7, 95% CI: 1.2-2.7; p = 0.02) predicted recurrence of strictures.

Conclusions ERCP is an effective for post-OLT biliary anastomotic strictures and bile leaks. The number of ERCP procedures and multiple duct-to-duct anastomosis were predictors of stricture recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pinheiro LW, Martins FP, Ferrari AP, Tafner E, De Paulo GA, Della Libera E. Long-term outcomes of post-transplant biliary anastomotic strictures: Endoscopic therapy with plastic and metal stents. *World J Gastrointest Endosc* 2025; 17: 103183. doi:10.4253/wjge.v17.i6.103183. PMID: 40547547 PMID: PMC12179921

OP183 Per-Oral Cholangioscopy-Guided Tissue Sampling Reveals Fibrogenic Signaling Activation in Biliary Anastomotic Strictures after Liver Transplantation

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DOI 10.1055/s-0046-1820838

Aims Biliary anastomotic strictures (BAS) are the most common biliary complication in liver transplant (LT) recipients. BAS are associated with significant morbidity leading to higher rates of graft failure and retransplantation. The underlying mechanisms involved in the development of fibrosis of BAS are not well understood; however, animal studies suggest that overexpression of transforming growth factor beta (TGF-β) can play an important role. Per-oral digital cholangioscopy (POCS) allows clear visualization of the common bile duct and adequate sampling of the biliary epithelium in order to evaluate factors associated with local fibrosis. This prospective study aims to investigate the underlying pathophysiology of BAS, with direct visualization using POCS to allow biopsy sampling, and support the identification of novel therapeutic targets to block fibrogenic and reparative pathways [1-3].

Methods We conducted a prospective, controlled, single-center study including LT recipients with BAS that underwent cholangioscopy with biopsy, as well as patients undergoing surgery for BAS. RNA was extracted from bile duct samples of LT patients with BAS (experimental group) and without BAS (control group). Analyses included quantification of TGF-β and its membrane receptors, interleukin-6 (IL-6), and evaluation of downstream intracellular signaling mediators (phosphorylated SMADs and STATs) using real-time quantitative reverse transcription PCR (RT-qPCR). Normal bile duct tissue from liver donors (distal common bile duct) served as controls.

Results Thirty-two LT recipients with BAS underwent POCS or surgery; 24 of these provided adequate RNA for molecular analysis. These samples were compared with 8 controls. RT-qPCR showed significant differences in SMAD1, SMAD2, and α-SMA mRNA expression between BAS and control tissues (p < 0.05). Although TGF-β, its membrane receptors, IL-6, and STAT3 levels were higher in BAS samples, these differences did not reach complete statistical significance.

Conclusions This study provides molecular evidence of activation of TGF-β-related fibrogenic pathways in BAS after LT, as reflected by significant increases in SMAD1, SMAD2 and α-SMA expression. Overall, the findings highlight downstream fibrotic signaling as a potential therapeutic target and emphasize the value of POCS-guided tissue sampling in understanding the pathophysiology of BAS.

Conflicts of Interest Andres Cardenas (AC) is a consultant for Boston Scientific Corporation. The other authors do not have any conflict of interest

References

[1] Elmunzer BJ, Maranki JL, Gómez V et al. ACG Clinical Guideline: Diagnosis and Management of Biliary Strictures. *American Journal of Gastroenterology* 2023; 118: 405-26. doi:10.14309/ajg.0000000000002190
[2] Kohli DR, Desai MV, Kennedy KF et al. Patients with post-transplant biliary strictures have significantly higher rates of liver transplant failure and rejection: A nationwide inpatient analysis. *J Gastroenterol Hepatol* 2021; 36: 2008-14. doi:10.1111/jgh.15388
[3] Massagué J, Sheppard D. TGF-β signaling in health and disease. *Cell* 2023; 186: 4007-37. doi:10.1016/j.cell.2023.07.036

OP184 Pre-Transplant ErCP With Sphincterotomy Reduces Post-Liver Transplant Biliary Complications In Patients With Primary Sclerosing Cholangitis

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DOI 10.1055/s-0046-1820839

Aims Primary sclerosing cholangitis (PSC) is a chronic cholestatic liver disease and a major indication for orthotopic liver transplantation (OLT). Post-transplant biliary complications, including bile leaks and anastomotic strictures, remain common and significantly impact graft function and patient outcomes. Pre-transplant endoscopic retrograde cholangiopancreatography (ERCP) with sphincterotomy is frequently performed in PSC patients with dominant strictures, but its potential protective effect on post-OLT biliary outcomes has not been clearly established.

The aim was to evaluate whether ERCP with sphincterotomy performed before OLT is associated with a reduction in post-transplant biliary complications in patients with PSC.

Methods A retrospective analysis was conducted on 45 patients with PSC who underwent OLT at the S.Orsola University Hospital. Patients were divided into two groups: those who underwent ERCP with sphincterotomy prior to OLT (n = 30) and those who did not (n = 15). Baseline characteristics, ERCP features, and post-OLT outcomes were assessed. Post-transplant biliary complications were categorized as early (<30 days) or delayed (>30 days).

Results Among 45 PSC patients (M:F 33:12; mean age 47 years), 24 had associated inflammatory bowel disease. Of the 30 patients in the sphincterotomy group, 22 underwent more than one ERCP procedure, totaling 54 ERCPs. Presence of dominant strictures was the main indication for ERCP (n = 25/30), with plastic biliary stents placed in 14 patients. Post-ERCP adverse events occurred in 4/54 (7%) procedures, all mild pancreatitis managed conservatively [1–3]. Post-OLT biliary complications occurred in 2/30 patients (6.7%) in the sphincterotomy group, 1 early bile leak and 1 delayed anastomotic stricture. In the no-sphincterotomy group 6 complications occurred in 5/15 patients (33.3%): 3 early (2 bile leaks and 1 acute stricture) and 3 delayed anastomotic strictures. The difference in overall complication rates between the two groups was statistically significant (p = 0.032).

Conclusions ERCP with sphincterotomy prior to OLT in PSC patients is associated with a significantly lower rate of post-transplant biliary complications. These findings suggest that pre-transplant endoscopic sphincterotomy may have a protective effect on the biliary anastomosis and should be considered as part of the pre-OLT evaluation strategy in selected PSC patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ravikumar R, Tsochatzis E, Jose S, Allison M et al. Risk factors for recurrent primary sclerosing cholangitis after liver transplantation. *J Hepatol* 2015; 63 (5): 1139–46
- [2] Saner FH, Frey A, Stüben BO, Hoyer DP et al. Transplantation for Primary Sclerosing Cholangitis: Outcomes and Recurrence. *J Clin Med* 2023; 12 (10): 3405
- [3] Eaton JE, Haseeb A, Rupp C, Eusebi LH et al. Predictors of Jaundice Resolution and Survival After Endoscopic Treatment of Primary Sclerosing Cholangitis. *Hepatology* 2022; 6 (4): 809–820

Endoscopic Procedures & Patient Care

15/05/2026, 16:00–17:00

Aqua 3 +4

OP185 Establishing a Structured Barrett's Esophagus Care Program to Enhance Patient Engagement and Care Continuity in a High-Volume Tertiary Center: A Quality Improvement Framework

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DOI 10.1055/s-0046-1820840

Aims Patients referred for dysplastic Barrett's Esophagus (BE) often travel long distances for specialized endoscopic therapy, frequently arriving without understanding their diagnosis, treatment options, or cancer risk. This information gap contributes to patient anxiety, missed appointments, loss to follow-up and worse outcomes, while placing additional administrative and educational burden on physicians. To design, implement, and evaluate a structured care program aimed at improving patient education, engagement, and continuity of care for individuals with dysplastic BE referred to a high-volume tertiary endoscopy center.

Methods The program introduced a standardized workflow for pre- and post-procedure patient engagement. Educational resources covering BE pathophysiology, endoscopic therapies and lifestyle modification were developed and approved by the institutional Patient Education Committee. An EDC platform was used to document intake, disseminate materials, and track patient progress.

Results Over a three month initial implementation period, 305 patients were enrolled in the Barrett Care Program. Pre-procedure engagement improved markedly, with 93% of patients contacted prior to their visit to address questions, review expectations, and clarify logistics. Detailed medical histories and medication reviews were completed for 64% of patients, facilitating earlier identification of comorbidities and potential procedural risks. Appointment preparation and counselling were successfully completed for all contacted patients, 34% required additional outreach for individualized issues. Educational reach was broad among all enrolled patients receiving targeted information regarding EMR, ESD, cryotherapy and RFA prior to their procedures. With regards to home monitoring post procedure at days 3, 7, and 14; 70% of patients were followed-up, allowing timely assessment of symptoms, early detection of complications, and direct patient-initiated communication with the care team, including any necessary escalations to emergent care (3%). A total of 783 pathology reports were entered into the program database, ensuring complete documentation to support timely case escalation, multidisciplinary review, and coordinated discharge back to community care. The program enhanced patient understanding, reduced procedural anxiety, and improved satisfaction with communication and follow-up. Physicians reported smoother coordination and fewer administrative delays, highlighting improved integration across the care program's framework.

Conclusions By embedding structured education, proactive outreach, and centralized tracking into BE care, the program improved patient engagement, adherence, and continuity in a high-volume tertiary setting. This scalable QI model demonstrates that structured navigation frameworks can enhance both patient-centered and system-level outcomes in specialized endoscopic practice.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

OP186 Optical diagnosis of diminutive colorectal polyps performed by endoscopy nurses using virtual chromoendoscopy or Computer-aided diagnosis (CADx) system: preliminary results of a prospective single-center study

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DOI 10.1055/s-0046-1820841

Aims Virtual chromoendoscopy and AI-based computer aided characterization systems (CADx) have been investigated for optical diagnosis (OD) of diminutive (≤ 5 mm) colorectal polyps. However available clinical trials on OD mostly involved expert endoscopists from tertiary referral centres. While limited evidence on less experienced endoscopists (e.g., trainees) exists, there are no data on diagnostic performances of chromoendoscopy-based and CADx-assisted OD performed by endoscopy nurses. The present study was aimed at comparing diagnostic performances of endoscopy nurses in OD of diminutive colonic polyps either with virtual chromoendoscopy or with CADx assistance.

Methods The study involved two steps (Phase 1 and Phase 2). In Phase 1, endoscopy nurses from a single endoscopy center (O.V.) performed OD of consecutive diminutive colorectal polyps by using virtual chromoendoscopy with Blue Light Imaging (BLI, Fujifilm Co. Tokyo, Japan). In Phase 2, the OD was performed with the assistance of a CADx system (CADEYE; Fujifilm Co., Tokyo, Japan). For each colonic polyp evaluated in both study phases the OD (dichotomized as adenoma or non-adenoma) was recorded, along with the level of confidence (high or low). All diminutive polyps were resected and sent for histopathological evaluation (reference standard). Overall diagnostic accuracy of high confidence ODs, as well as rate of polyps evaluated with high confidence were compared across the two study phases. While performing OD nurses were blinded to the endoscopist's evaluation. In both study phases all participating nurses were asked to evaluate at least 50 consecutive diminutive polyp each.

Results Seven endoscopy nurses participated in both study phases. In Phase 1 (from April 1st to June 30th 2025) a total of 525 diminutive polyps were evaluated. Of them 460 were assessed with high confidence (high-confidence rate: 88%, 95% CI: 84–90%). The mean number of polyps analyzed with high confidence per nurse was 65 (SD 9.77, range 54–79). The overall high confidence diagnostic accuracy was 83% (95% CI: 80–87%, range 78–91%). From July 1st 2025 to August 31st 2025 (Phase 2) a total of 179 polyps were evaluated. One hundred forty-nine polyps were assessed with high confidence (high-confidence rate: 83%, 95% CI: 77–88%). The mean number of polyps analyzed per nurse was 21 (SD 5, range 15–31). In Phase 2 the overall high confidence diagnostic accuracy was 78% (95% CI: 70–84%, range 65–94%). Both the overall high confidence accuracy and high-confidence rate were comparable across the two study phases (chi-square: 2.42, $p=0.13$ and chi-square: 2.19, $p=0.13$, respectively).

Conclusions According to our preliminary results, no statistically significant differences were disclosed in both diagnostic high confidence accuracy and high-confidence rate for the OD of diminutive colorectal polyps when performed using chromoendoscopy alone or with the assistance of a CADx system by a group of endoscopy nurses.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP187 Establishing Recommendations to Develop a Standardized Curricula for Nursing Education and Training in ERCP: a Modified Delphi Consensus

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DOI 10.1055/s-0046-1820842

Aims Endoscopic Retrograde Cholangiopancreatography (ERCP) is a technically complex therapeutic endoscopic procedure that requires highly skilled nurses trained to assist physicians who are performing, not only basic ERCPs, but also the most complex advanced practice procedures. An exceptional level of coordination and communication is required between endoscopists and nurses to optimize patient care and outcomes. Despite the procedure's widespread use, there are currently no standardized global guidelines or curricula to guide nursing education and training in ERCP. Following an international survey [1] conducted in 2024 that revealed substantial variability and gaps in ERCP nursing education, our objective was to develop consensus-based recommendations to inform a standardized ERCP nursing curriculum.

Methods A steering committee established a modified Delphi process involving 19 international experts representing diverse geographical regions (all 5 continents) and clinical settings. The expert panel was comprised of experienced endoscopy nursing professionals, 80% of whom worked in academic centres. Most (90%) held a Bachelor's degree or higher credentials in nursing. Participants had long clinical tenure (median 20 years in nursing; 16 years in endoscopy) and substantial ERCP exposure (median 10 years assisting in ERCP; median 25 ERCP cases per month). Experts reviewed and rated draft statements derived from the global needs assessment, literature review, and existing perioperative and gastroenterology nursing guidelines. Consensus was defined a priori as $\geq 80\%$ agreement across panelists.

Results A total of 19 international experts from North and South America, Europe, Africa, Asia, and Oceania participated in the study, representing both academic and high-volume community ERCP centers. Consensus was achieved across all proposed domains, with agreement levels ranging from 88% to 100%. The highest consensus was observed for statements emphasizing structured, competency-based learning, mentorship, and progressive skill acquisition. Eg: Statement: Training should ensure progressive mastery, moving from observation of live cases to guided assistance and eventually to independent technical support under supervision. Experts strongly supported incorporating both didactic and hands-on components, including simulation, case-based discussions, and real-time procedural exposure. Domains rated as most essential included patient safety, infection control, scope and equipment handling, fluoroscopy principles, and post-procedural care. Eg: Statement: Infection prevention training should ensure that nurses are competent in duodenoscope reprocessing, equipment labelling, and compliance with institutional and regulatory safety alerts. The panel also emphasized the importance of competency assessment tools and periodic revalidation to maintain standards. In the second round, six statements reached perfect consensus with a median score of 10 and no variability (range 10–10), indicating universal agreement among experts on core ERCP nursing competencies. These top-ranked priorities centered on procedural literacy, safe and proficient handling of ERCP accessories, guidewire and cannulation support, structured error analysis, and alignment

of training content with procedural indications and real-world clinical demands (► **Table 1** below).

► **Table 1**

ERCP nursing education must integrate knowledge of procedural indications with practical competency in equipment handling and anticipation of accessory requirements.
Nurses must be proficient in the preparation and safe handling of key ERCP accessories (sphincterotomes, guidewires, balloons, baskets, and stents) and understand their indications and limitations.
Nurses must be competent in supporting cannulation by preparing, exchanging, and managing guidewires under fluoroscopic guidance, preventing wire displacement.
Errors and complications should be analyzed constructively, emphasizing learning and system improvement.

Conclusions This Delphi study establishes international consensus that no standardized ERCP nursing curriculum currently exists and confirms the need for a structured, competency-based program. The proposed framework emphasizes theoretical knowledge, supervised hands-on training, clear learning objectives, and continuous evaluation. Implementation of these recommendations may enhance the safety, efficiency, and quality of ERCP practice worldwide.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

References

[1] Banavage DKK, Tham D, Calo N, Clancy J. Evaluating ERCP Training for Nursing Professionals: Identifying Gaps via an International Survey to Develop a Standardized Curriculum. *Endoscopy* 2025; 57: OP162. doi:10.1055/s-0045-1805268

OP188 Analysis of the quality of endoscopic reports for screening colonoscopy using the human error rate prediction (THERP) technique. A retrospective analysis at the Endoscopy Clinic of Senigallia (Central Italy)

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DOI 10.1055/s-0046-1820843

Aims An adequate documentation is considered a quality marker in endoscopy. The Medical Reporting SW used at the Endoscopy Clinic in Senigallia (Central Italy) cannot be updated to meet current quality standards, so in 2024 the nursing staff implemented a nursing record, which is archived with the endoscopic clinical record but not delivered to the patient [1].

IT engineers are implementing a new health documentation digital system for the local health company (AST Ancona), that will feed the Electronic Health Record (EHR). In particular, it should contain mandatory fields referring to quality standards for endoscopic procedures, in order to create a digital health record that improves the coordination and accessibility of care by consolidating patient information.

Methods Retrospective analysis of all medical/nursing records of screening colonoscopies performed in the period September 2024 – September 2025. The authors applied the THERP technique (Technique for Human Error Rate Prediction) applying the Hierarchical Task Analysis to a screening colonoscopy procedure and identifying incomplete/missing data in the medical reporting software and in the nursing chart and nursing documentation. Data was analyzed using Chi square statistics.

Results In the observation period we performed 407 screening colonoscopies, the sample included 187 females aged 63.9 ± 11.3 y. (IQR = Q3-Q1 = 71 – 58 = 13) and 220 males aged 64.6 ± 10.4 y. (IQR = Q3-Q1 = 72 – 58 = 14).

All patients were assessed in the pre-procedure step (informed consent, correct bowel preparation, time-out).

The Cecal Intubation Rate (CIR) was 97.33%. In 5 female patients (2.77%) the colonoscopy was postponed due to the presence of solid feces.

The assigned BBPS score was statistically different between males and females only in scores ≥ 6 ($p < .05$).

Biopsies of mucosal lesions or polypectomies were performed in 67.27% males and in 52.94% females ($p < .05$).

The BBPS was inadequate (< 6) in 66 patients (31.26%); 40 men and 26 women. Twenty patients were rescheduled for a repeat procedure due to failure to discontinue antiplatelet/anticoagulant medications.

The BBPS was not indicated in 27 patients (13.08%), respectively 17 males and 10 females.

Conclusions The current SW does not help endoscopic staff to comply with recommendations on correct colonoscopy reporting, because it lacks information on pre-procedure assessment (only in nursing documentation) and sometimes lacks data on cecal intubation, retraction times, and BBPS assessment. Also post procedure surveillance data are currently recorded in nursing documentation, which is archived and not given to the patient. This information can help software engineers create more suitable software that includes both nursing and medical information and complies with ESGE recommendations (e.g., calculating the ADR score for each endoscopist).

Specifically, mandatory fields include: type of bowel preparation (PEG/ELS, volume, same day/fractionated dose), BBPS score, and post-procedure recommendations (i.e. resuming antiplatelet or anticoagulant therapy or dietary recommendations).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bretthauer M et al. Requirements and standards facilitating quality improvement for reporting systems in gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2016; 48: 1–4

OP189 Nursing consultation for biofeedback. Improving the quality of life of our patients

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DOI 10.1055/s-0046-1820844

Aims Anorectal biofeedback is a learning method in which physiological activity is monitored. Through visual or auditory means, the patient receives information about this activity, which helps them to modify and control it. It is a non-invasive behavioural therapy with no known adverse effects. It is the first-line therapy for patients with dyssynergic defecation or faecal incontinence who have not responded to pharmacological and behavioural treatment. It can also be used less frequently in patients with levator ani syndrome and solitary rectal ulcer syndrome.

In 2025, our unit initiated the Biofeedback Nursing Consultation, where nurses are responsible for managing and conducting as many sessions as necessary, as well as discharging patients.

The main objective of this consultation is to improve patients' quality of life by providing them with tools to reduce and control faecal incontinence events.

Once an anal manometry test has identified that a patient is a candidate for biofeedback, they are referred to the Nursing Consultation Service. Nurses are fully responsible for scheduling and conducting any necessary sessions. They can also suggest any additional tests that may be required.

Methods The first session lasts 45 minutes, while subsequent sessions last 30 minutes. The number of sessions depends on the patient's progress, with appointments every two weeks and weekly telephone follow-ups.

During the first visit, a personalised interview is conducted to assess the impact of incontinence on the patient's daily life. An initial biofeedback session is then carried out according to the patient's specific needs. Recommendations for home practice are provided, and health education on healthy lifestyle habits is reinforced [1–3].

Each scheduled session begins with a brief interview to assess the patient's ongoing condition. A biofeedback session is then conducted, adapted to the individual's needs.

The patient should lie on their left side and face the monitor while performing contraction/relaxation exercises under observation. A balloon may be inflated if needed, in order to create a sensation of fullness in the anus.

Continence should be improved as soon as the slightest sensation of rectal fullness is felt, by contracting the anal sphincter muscles voluntarily for as long as possible and with sufficient intensity to prevent leakage. If dyssynergia is present, the aim is to achieve coordinated bowel movements and re-establish a regular bowel rhythm.

A discharge report is prepared once treatment is complete.

Results Patients have been pleased with the establishment of this clinic, as they see it as a way to receive treatment for a condition that affects not only their physical health, but above all their psychological and social well-being. Up to now, 15 patients have been taken home, all of whom are female with an average age of 70. They were diagnosed with mixed faecal incontinence (hypotonia and hyposensitivity) and required an average of three to four sessions before being discharged.

Conclusions Biofeedback is an easy and effective method of improving faecal incontinence. Nurses provide patients with the necessary tools to take responsibility for the entire process. Proper health education is essential for the success of this therapy. Supporting patients is essential to ensure they adhere to the established guidelines at home.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Markland AD, Jelovsek JE, Whitehead WE et al. Improving biofeedback for the treatment of fecal incontinence in women: implementation of a standardized multi-site manometric biofeedback protocol. *Neurogastroenterol and Motil* 2017; 29: 1–10
- [2] Rao SS, Benninga MA, Bharucha AE, Chiaroni G, Di Lorenzo C, Whitehead WE, et al. ANMS-ESNM position paper and consensus guidelines on biofeedback therapy for anorectal disorders. *Neurogastroenterol and Motil* 2015; 27: 594–609
- [3] Fernandez-Fraga X, Azpiroz F, Casaus M, Aparici A, Malagelada J-R. Responses of anal constipation to biofeedback treatment. *Scan J Gastroenterol* 2005; 40: 20–27

OP190 My worst case scenario: Voluntary ingestion of foreign bodies by an teenage psychiatric patient

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DOI 10.1055/s-0046-1820845

Aims Report an endoscopic case in which multiple emergency endoscopies were performed on a psychiatric patient due to foreign body ingestion.

Deliberately ingesting foreign objects is a relatively common phenomenon among people with substance use disorders or psychiatric conditions. When this behaviour is repeated, it may indicate a pattern of self-harm or a way of

seeking relief. These patients are difficult to treat, so a coordinated multidisciplinary team must examine the biological, social and psychological needs.

Patients with suspected or diagnosed foreign bodies in the upper digestive tract should undergo endoscopy to confirm the diagnosis and establish the optimal treatment. The therapeutic approach to removing ingested objects varies depending on their location, nature and any associated complications. If endoscopy fails, surgery should be performed.

Methods 17-year-old female patient with a history of attachment disorder, personality disorder (cluster B) and eating disorder without substance abuse is presented. Several healthcare visits were made by the patient due to voluntary ingestion of foreign bodies.

The first upper gastrointestinal endoscopy was performed, with the last documented procedure. In total, 34 emergency endoscopies were performed due to foreign body ingestion [1–3].

Of these, 19 were performed in the Digestive Endoscopy Unit itself. Due to the potential risk posed by the ingested foreign body, 12 endoscopies were performed in the operating theatre and one in the resuscitation room of the Emergency Department.

All endoscopies were performed under sedation and/or general anaesthesia depending on the procedure location, with only one performed while the patient was conscious.

In only 16 out of the total number of endoscopies carried out, foreign objects were observed. These objects included plastic (5) or medical supplies such as an identification bracelet or a peripheral venous extension tube and others, as well as batteries (3), a carabiner, a chess piece, a screw, and pieces of glass (3). The procedure has not been without complications. On two occasions, ulcers were observed as a result of the presence of batteries, as well as one tear and two lacerations.

There was an irregular frequency pattern, with some dates showing repeat endoscopies on the same day or consecutive days, and others showing breaks of weeks or even months.

Results The nursing staff care for the patient throughout the emergency endoscopy. However, our work ends once the foreign body has been removed. The large number of endoscopies we have performed over the years has made us feel impotent, as we are unable to provide a lasting solution to the problem. The patient is still undergoing psychiatric and psychological treatment, which is essential for her recovery.

Conclusions Endoscopic treatment is only a solution for removing foreign bodies that could lead to complications. Psychological therapy, combined with medication, can help to reduce the number of voluntary ingestions by providing an explanation and treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Artluri D, Veluru C, Chopra A, Mullen KD. Recurrent intentional foreign body ingestion: an endoscopist's dilemma. *Gastroenterol Hepatol* 2012; 8: 482–484
- [2] Palta R, Sahota A, Bemarki A, Salama P, Simpson N, Laine L. Foreignbody ingestion: characteristics and outcomes in a lower socioeconomic population with predominantly intentional ingestion. *Gastrointest Endosc* 2002; 69: 426–433
- [3] Libuit J, Banez V. Repeated foreign body ingestion in a psychiatric patient. *J Interv Gastroenterol* 2014; 4: 135–138

Reflux and esophageal complications: Old wine in new barrels

15/05/2026, 16:00–17:00

Sky 1

OP191 Prophylactic Self-Dilatation After Large-Circumference Oesophageal ESD: The First Clinical Experience and Real-World Effectiveness Data

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DOI 10.1055/s-0046-1820846

Aims Stricture formation is a recognised complication after oesophageal endoscopic submucosal dissection (ESD), particularly following extensive resections, and frequently necessitates repeated therapeutic intervention. Oesophageal self-dilatation (SD) is an established approach for managing refractory benign strictures but has not previously been evaluated as a prophylactic strategy after ESD. This study reports our initial clinical experience with prophylactic SD in patients undergoing oesophageal ESD.

Methods A retrospective analysis of all oesophageal ESDs performed at a single centre between July 2023 and September 2025. Since July 2024, early SD was offered to patients undergoing large-circumference oesophageal ESD (LC-ESD) defined as those involving >75% circumferential extent. Patients treated before SD introduction, and those treated thereafter who did not undertake SD for any reason, formed the real-world comparator cohort. Collected variables included demographic data, lesion characteristics and procedural factors. The primary outcome was stricture requiring therapeutic endoscopic intervention (SRT). Secondary outcomes included number of dilatations at 2, 4, and 6 months and at last follow-up; change in dysphagia grade; and clinically important events (stenting, non-oral feeding, stricture-related perforation). Between-group comparisons used chi-square or Fisher's exact tests for categorical variables and Mann-Whitney U tests for continuous variables. An exploratory logistic regression model was used to evaluate the independent association between SD and SRT, adjusting for resection-risk category, selected on the basis of observed group differences and clinical relevance.

Results Twenty-two LC-ESD were included (SD n = 7 vs non-SD n = 15). The technical success rate of SD was 7/8 (87.5%). Baseline characteristics were broadly comparable. Median circumferential extent was 100% in both groups, median age was 79 vs 73 years, and median lesion location was 27 cm vs 30 cm. Small numerical differences were noted in sex distribution (57% vs 86% male), median lesion length (50 mm vs 70 mm), and the proportion of T1b lesions (14% vs 46%), although none were statistically significant (all $p > 0.20$). The main numerical imbalance was resection-risk category, with a higher proportion of "high-risk" resections in the non-SD group (53% vs 14%; $p = 0.07$). SRT occurred in 3/7 (42.9%) SD patients compared with 12/15 (80.0%) non-SD patients ($p = 0.14$). The crude odds ratio for SD was 0.19, corresponding to an approximate 80% relative reduction in the odds of SRT. After adjusting for resection-risk category, SD continued to show a protective association (adjusted OR 0.20, 95% CI 0.02–1.67), although this did not reach statistical significance ($p = 0.14$) and the confidence interval remained wide due to small sample size. The number of endoscopic dilatations was consistently lower among SD patients across all timepoints: at 8 weeks (median 0 vs 2; $p = 0.30$), 4 months (0 vs 2.5; $p = 0.28$), 6 months (0 vs 2.5; $p = 0.26$), and last follow-up (0 vs 4; $p = 0.11$). Time to first endoscopic dilatation was similar, with a median of 35

days (IQR 35–35.5) in the SD group and 28 days (15–41) in the non-SD group. Peak dysphagia grade compared with pre-ESD was lower in the SD group (median 1, IQR 0–2) than in the non-SD group (median 2, IQR 1–3.5; $p = 0.26$). Dysphagia at last follow-up was low in both groups (median 0). No SD-related perforations occurred. Stenting was required in 1/7 (14.3%) SD vs 4/15 (26.7%) non-SD patients, and non-oral feeding was needed in 0/7 vs 2/15 (13.3%) respectively. All perforations (1 SD vs 2 non-SD) occurred during endoscopic dilatation rather than during SD.

Conclusions Prophylactic self-dilatation after LC-ESD appears feasible, safe, and may be associated with lower stricture rates and dilatation burden. Although the observed differences were not statistically significant, the magnitude and consistency of the findings suggest a potential clinical benefit. These early real-world data provide initial support for SD as a useful patient-directed prophylactic strategy, warranting confirmation in larger prospective studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP192 Self-bougienage for the management of post Endoscopic Submucosal Dissection refractory oesophageal strictures

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DOI 10.1055/s-0046-1820847

Aims Oesophageal strictures occur in up to 90% of patients post Endoscopic Submucosal Dissection (ESD) involving >75% of the oesophageal circumference. Despite prophylactic measures, up to 40% of patients develop refractory strictures. Oesophageal self-bougienage therapy (OSBT) is an alternative for refractory strictures and may reduce procedural risk and cost and improve patient satisfaction. The study aims to describe the impact of introducing OSBT in the management of post-ESD refractory oesophageal strictures.

Methods High stricture risk (>75% circumferential) ESD patients received prophylactic treatment in the form of systemic (8 weeks) and topical (6 weeks) steroid and planned endoscopic oesophageal dilations commencing at 2 weeks post-ESD. Patients were eligible for OSBT if they required frequent endoscopic dilation with a stable endoscopic dilation diameter of >10mm. Patients underwent supervised introductory sessions with their gastroenterologist, and periodic planned endoscopic dilation for home bougie up-sizing. Demographics, clinical characteristics, stricture and procedural data, and complications were recorded.

Results There were 43 high stricture risk oesophageal ESD patients between May 2022–May 2025. Of these, 6 (13.3%) were enrolled from May 2024 onward and 5/6 (83%) successfully initiated OSBT and were included in the final analysis. Three (60%) were female with a median (IQR) age of 77 years (65.0–83.0). All patients underwent 100% circumferential ESD for squamous cell high grade dysplasia or pT1a carcinoma, with a median (IQR) ESD length of 10cm (8.0–13.0). Two (40%) had undergone triamcinolone injection. Median (IQR) time to enrolment from ESD was 6.0 (4.0–18.0) months. Over a median (IQR) follow-up of 5.0 months (4.0–7.5), patients required a median (IQR) of 2 (2.0–2.0) educational sessions prior to initiating self-bougienage. There were no adverse events. OSBT significantly reduced the median (IQR) number of endoscopic dilations required, from 10 (8.0–12.5) in the 6-months pre-enrolment to 4 (2.5–6.0) in the 6-months post-enrolment ($p = 0.02$). All patients had improved stricture diameter, with an increase in median (IQR) bougie diameter of 11 (10.5–13) to 14mm (13–16) at last follow-up ($p = 0.04$).

Conclusions OSBT resulted in significant reduction in endoscopic dilation frequency and improved stricture diameter, with a reduction in health service utilization, and potential cost implication and improved patient satisfaction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP193 A New Vacuum Endotherapy Era: A Multi-center study of Endoscopic Vacuum Therapy Versus Self-Expanding Metal Stents for Gastrointestinal Tract Leaks and Fistulae

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DOI 10.1055/s-0046-1820848

Aims Gastrointestinal (GI) tract leaks and fistulae represent serious clinical challenges with substantial morbidity and mortality. Self-expanding metal stents (SEMS) have long been the standard endoscopic intervention. More recently, endoscopic vacuum therapy (EVT) has emerged as a promising endoscopic alternative. This multicenter analysis compares the efficacy and safety of EVT and SEMS for managing GI tract leaks and fistulae.

Methods A total of 90 patients were included: 58 treated with SEMS between 2014 and 2024 and 32 treated with EVT from 2022 onward (27 with Eso/Endo-SPONGE[®] [Boston Scientific, Marlborough, Massachusetts, USA] and 5 with VacStent Glä [Micro-Tech Europe GmbH, Düsseldorf, Germany]). Demographic variables, clinical characteristics, and therapeutic outcomes were analyzed. Primary outcome was successful leak/fistula closure, confirmed through both endoscopic and radiologic assessment. Secondary outcomes included need for additional endoscopic therapy, and complication, readmission, and mortality rates.

Results Baseline characteristics—including age, gender, etiology (benign vs malignant), timing of endoscopic intervention, and leak size—were comparable across treatment groups ($p > 0.05$). EVT demonstrated a significantly higher closure rate compared to SEMS (84.2 % vs. 65.5 %, $p = 0.044$). Despite requiring more treatment sessions (median 4.5 vs. 1 [MS1] [MOU2] , $p < 0.001$), EVT required fewer adjuvant endoscopic interventions (5.3 % vs. 36.2 %, $p = 0.001$) and was associated with significantly fewer technique-related complications (5.3 % vs. 62.1 %, $p < 0.001$), as well as lower readmission rates (13.5 % vs. 47.3 %, $p = 0.016$). Mortality was not significantly different between two groups.

Conclusions In this multicenter study, EVT proved to be a highly effective and safe modality for managing spontaneous and postoperative GI tract leaks/fistulae. With superior closure rates and fewer complications compared to SEMS—even when analyzed against a decade of retrospective stent experience—EVT shows strong potential to become the preferred endoscopic therapy for these complex clinical scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP194 VAC-Stent versus EsoSponge for Anastomotic Leak Management after Gastroesophageal Surgery: A Multicenter Pilot Study

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DOI 10.1055/s-0046-1820849

Aims Anastomotic leak (AL) after gastroesophageal surgery is a potentially life-threatening condition and the complex management still remains non-standardized.

Endoscopic vacuum therapy (EVT) has emerged as an effective therapeutic option, facilitating rapid clearance of the leak and promoting granulation tissue formation.

Two EVT systems are currently available: a polyurethane sponge attached to a 10 Fr tube, featuring an intraluminal or intracavitary treatment, and a self-expandable metal stent (SEMS) with an embedded polyurethane sponge (VAC-Stent). Both systems have shown promising results; however, comparative evidence remain limited.

The aim of the study was to compare the efficacy and safety of treating upper GI AL using the VAC-Stent or the sponge (EsoSponge).

Methods We conducted a retrospective multicenter comparative study across five Italian tertiary referral centers, including patients treated for benign or malignant upper GI anastomotic leaks, using either the VAC-Stent or the EsoSponge system.

The primary endpoint was clinical success, defined as complete healing of the transmural defect with coverage by granulation tissue. Therapy was considered ineffective in cases of defect persistence or progression during treatment (▶ **Table 1**).

▶ **Table 1**

	VAC-stent	Eso-sponge	p-value
Clinical Success			0,04
- Yes	35; 81 %	14; 56 %	
-No	8; 19 %	11; 44 %	
30-day mortality			1
- Yes	6; 14 %	3; 12 %	
-No	37; 86 %	22; 88 %	
N° of procedures (Mean ± SD)	2,4 ± 1	4,4 ± 3,8	0,001
PCR T0 mg/dl (Mean ± SD)	10 ± 8	13 ± 13	0,03
PCR T24 mg/dl (Mean ± SD)	6 ± 9	16 ± 14	0,003
PCR T5 mg/dl (Mean ± SD)	4 ± 6	10 ± 8	0,007

Secondary endpoints included trends in inflammatory biomarkers, complication rates, use of additional therapeutic treatments, number of endoscopic sessions, and mortality during follow-up.

Results 68 patients were treated (43 VAC-Stent, 25 EsoSponge) with comparable demographics, including mean age (61.6 years in both groups) and sex distribution. Malignant disease was predominant (72 % vs 56 %) and Ivory-Lewis esophagogastric resection accounted for 37 % and 48 % of procedures, respectively.

Clinical success was significantly higher with VAC-Stent (81 % vs 56 %, $p = 0.04$), while 30-day mortality was similar (14 % vs 12 %).

VAC-Stent achieved better inflammatory control (C reactive protein 6.3 vs 16.1 mg/dL at 24 h, $p = 0.003$; 4.0 vs 9.9 mg/dL at day 5, $p = 0.007$) and required fewer procedures (median 2 vs 4, $p = 0.001$). The VAC-Stent group required fewer additional interventions than the EsoSponge group (35 % vs 52 %, $p = 0.07$). Additional treatments included stent placement (33 % vs 30 %), pigtail drainage (7 % vs 31 %), and other endoscopic or surgical procedures (33 % vs 23 %).

Conclusions Both VAC-Stent and EsoSponge proved effective in managing AL after gastroesophageal surgery. VAC-Stent provided faster inflammatory control, fewer device replacements, and a shorter therapeutic course, resulting in

higher clinical success rates. Prospective randomized studies are warranted to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP195 Safety and efficacy of transoral incisionless fundoplication (TIF2.0) for the treatment of gastroesophageal reflux disease: first results from the European TIF registry (EURO-TIF)

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DOI 10.1055/s-0046-1820850

Aims Transoral Incisionless Fundoplication (TIF2.0) is an endoscopic procedure for gastroesophageal reflux disease (GERD), which aims to recreate the oesophageal flap valve using the EsophyX device. TIF2.0 is currently endorsed by the American Society of Gastrointestinal Endoscopy as a mechanical option for patients with proven GERD. We report on the largest dataset outside North America on the safety and efficacy of TIF2.0 conducted within the European TIF registry (EURO-TIF).

Methods A prospective, multi-centre registry conducted across seven European centres and registered at Cleveland Clinic London (CCL-2021-TIF). All prospectively collected data among patients undergoing TIF2.0 for GERD since 2021 were eligible for inclusion. The primary outcomes were change in reflux-specific quality of life questionnaire (GERD-HRQL) and acid suppression use from baseline to 24-months follow-up. Secondary outcomes included procedural outcomes, changes in oesophageal physiological parameters, and adverse events (AGREE classification). Within-patient changes were analysed using paired t-tests and a linear mixed-effects model. Univariable logistic regression explored predictors of anti-acid discontinuation and AET normalisation.

Results In total, 261 patients have undergone TIF2.0 with data available on 192. The average age was 47 years (IQR 36-56), 38.5 % were female (n = 74), and the median Charleson Co-morbidity Index was 0 (IQR 0-1). Most were treatment naïve (97.4 %, n = 187) and 91.1 % (n = 175) were on regular anti-acid therapy. A hiatus hernia (HH) was observed in 51.9 % (n = 97) with an average size of 1 cm (IQR 1-2). Baseline physiological testing was conducted in 161 patients (wireless capsule in 52.5 % [n = 85]), which showed an average acid exposure time (AET) of 10.1 % (IQR 6.8-15.3), total reflux episodes of 86.3 (SD 52.8; catheter-based), and average daily reflux episodes of 58.2 (SD 21.7; wireless). The average GERD-HRQL score at baseline was 19.2 (SD 11.7; n = 171) with a dissatisfaction score in 81.4 % (n = 140). Technical success was 99.5 % (n = 191), the average procedure time was 39.0 minutes (SD 11.5), an average 14 pairs of plications were used (IQR 10-14), and median inpatient stay was 1 day (IQR 1). Over 30-days, there were 18 adverse events including 12 AGREE grade I, 3 AGREE grade II, and 3 AGREE grade IIIa (bleeding at the fundoplication). At 6-, 12-, and 24-months post-procedure, 78.6 % (n = 151), 53.6 % (n = 103), and 18.2 % (n = 35) were available for follow-up. The average GERD-HRQL was 3.9 (95 % CI; 2.7-5.1; p < 0.001), 4.0 (95 % CI 2.8-5.3; p < 0.001), and 3.5 (95 % CI 0.7-6.2; p = 0.01), which corresponded to a mean within patient

reduction of -13.5 (SD 10.0; p < 0.001), -14.2 (SD 10.5; p < 0.001), and -23.1 (SD 14.5; p < 0.01), respectively. The total number of patients able to discontinue anti-acid therapy was 84.5 % (n = 87/103), 85.3 % (n = 70/82), and 84.6 % (n = 11/13). Finally, among patients undergoing physiological testing with or without recurrent symptoms, the average AET was significantly lower at both 6-months (2.3 %; SD 3.3; n = 24; p < 0.001) and 12-months (4.5 %; SD 4.2; n = 21; p = 0.01) follow-up. No baseline variable predicted anti-acid discontinuation or AET normalisation at 12 months in univariable analysis.

Conclusions We present the largest worldwide dataset on patients undergoing TIF2.0 demonstrating a safe and effective mechanical intervention for GORD with significant symptomatic and physiological improvements.

Conflicts of Interest RH discloses receipt of research funding from Merit Medical to support research infrastructure

OP196 Stretta Improves Extraesophageal Reflux Symptoms: 12-Month Interim Results From a Randomized Trial

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DOI 10.1055/s-0046-1820851

Aims Extraesophageal reflux (EER) is a challenging GERD phenotype with limited response to pharmacological therapy. The mechanism of Stretta remains uncertain, with proposed neuromodulatory and esophagogastric junction-related effects. High-quality evidence in EER is lacking. This study aimed to evaluate the clinical effectiveness of Stretta in patients with objectively confirmed GERD, with a prespecified 12-month interim subgroup analysis focused on patients with clinically significant extraesophageal reflux.

Methods Adults with symptomatic GERD and abnormal esophageal acid exposure were randomized 1:1 to Stretta or conservative therapy. Outcomes included daily PPI dose and two validated symptom scores — the GERD-HRQL (GERD Health-Related Quality of Life) and RSI (Reflux Symptom Index) — as well as esophageal acid exposure time (AET). A complete-case analysis was performed at 12 months. A responder was defined as ≥ 50 % improvement in the respective parameter. A predefined subgroup analysis was conducted for patients with clinically significant extraesophageal reflux (RSI ≥ 13).

Results Fifty-three patients were randomized. Complete 12-month data were available for PPI (n = 28), GERD-HRQL (n = 31), RSI (n = 31), and AET (n = 29). At 12 months, Stretta achieved significantly greater improvement than conservative therapy in daily PPI use (median 0 vs 20 mg/day; p = 0.003), GERD-HRQL (11 vs 32; p = 0.02), and RSI (7.5 vs 21; p = 0.02), while AET remained comparable between groups (p = 0.20).

Within the Stretta arm, RSI (p = 0.01) and daily PPI use (p = 0.02) improved significantly from baseline, whereas GERD-HRQL showed a non-significant trend toward improvement (p = 0.06). No significant within-group changes occurred in the conservative arm.

Stretta achieved higher ≥ 50 % responder rates across all primary outcomes compared with conservative therapy (PPI 100 % vs 56.2 %; RSI 46.2 % vs 11.8 %; GERD-HRQL 53.8 % vs 17.6 %).

In the predefined EER subgroup (RSI ≥ 13), treatment separation further increased, with responder rates of 100 % vs 50 % for PPI, 54.5 % vs 9.1 % for RSI, and 70 % vs 9.1 % for GERD-HRQL. Between-group comparisons confirmed significant advantages of Stretta for PPI (p = 0.007), GERD-HRQL (p = 0.006), and RSI (p = 0.01), with moderate-to-large effect sizes, while AET changes remained non-significant (p = 0.48).

Conclusions This interim analysis of a randomized controlled trial in patients with objectively confirmed GERD provides the first prospective randomized evidence evaluating Stretta in extraesophageal reflux. Stretta resulted in clinically meaningful improvement in EER symptoms and marked PPI reduction, with the greatest benefit in patients with clinically significant EER. These findings support Stretta as a promising endoscopic option for this difficult-to-treat GERD phenotype. Final RCT outcomes are forthcoming.

Conflicts of Interest KK has received honoraria for lectures and workshops from Imedex, a distributor of Stretta in the Czech Republic.

Quality matters: Colonoscopy in Colorectal Cancer

15/05/2026, 16:00–17:00

Sky 2

OP197 Quality Indicators in Colonoscopy: Results from Two Decades of Colorectal Cancer Screening Program

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DOI 10.1055/s-0046-1820852

Aims Colorectal cancer (CRC) is the third most common malignancy worldwide, and screening colonoscopy in selected high-risk population plays a pivotal role in the early detection and removal of precancerous lesions [1]. The effectiveness of screening program depends on achieving and maintaining high-quality performance standards, including the cecal intubation rate, the bowel preparation adequacy, and the adenoma detection rate (ADR) [2]. Furthermore, with the recognition of the serrated pathway of colorectal carcinogenesis, accounting for approximately one-third of CRC cases, the detection of sessile serrated lesions has recently emerged as an additional key quality indicator [3].

This study evaluated temporal trends in key quality indicators over a 20-year period within a CRC screening program.

Methods This was an observational study that included all patients aged 50–69 years who participated in fecal immunochemical test (FIT)-based CRC screening program between 2006 and 2024

Only high-quality index colonoscopies performed after a positive FIT result, with adequate bowel preparation (Boston Bowel Preparation Score ≥ 2 in each segment), and complete procedures (reaching the cecum) were included in the analysis.

The primary endpoints were ADR, advanced ADR (AADR), serrated detection rate (SDR), proximal SDR (PSDR) and PSDR ≥ 10 mm. The secondary endpoint was to evaluate possible risk factors associated with the primary outcomes.

Results Overall, 30118 high-quality index colonoscopies were analyzed. Of these, 46.8 % were performed in females; 25.1 % of patients were aged 50–54 years, 21.6 % were 55–59 years, 24.5 % were 60–64 years, and 28.8 % were 65–69 years. The mean ADR, AADR, SDR, PSDR and PSDR ≥ 10 mm was 46.4 %, 30.4 %, 11.2 %, 4.1 % and 0.9 %, respectively.

We observed a substantial increase in PSDR, rising from 4.7 % in 2006 to 6.6 % in 2024, as well as in PSDR ≥ 10 mm, which increased from 0.3 % to 1.5 %. Conversely, ADR, AADR, and SDR showed an initial decline over time, followed by subsequent stabilization.

Univariate and multivariate analyses indicated that male sex and older age were associated with a higher ADR (RR 1.41, 95 % CI [1.38–1.45]; RR 1.29, 95 % CI [1.25–1.35] age 65–69; $p < 0.001$), AADR (RR 1.40 [1.35–1.45]; RR 1.27 [1.20–1.34] age 65–69; $p < 0.001$), and SDR (RR 1.40 [1.31–1.49] $p < 0.001$; RR 1.12 [1.01–1.23] age 65–69, $p = 0.034$), whereas only older age was associated with

PSDR (RR 1.33 [1.11–1.60] age 65–69, $p = 0.002$). Conversely, female sex was associated with a higher PSDR ≥ 10 mm (male vs female RR 0.72 [0.57–0.93], $p = 0.010$).

Finally, we evaluated how the interval between the FIT invitation and the subsequent colonoscopy influenced detection outcomes. Compared with patients undergoing their index colonoscopy after prior negative FIT results, progressively higher ADRs were observed in those receiving colonoscopy after their first FIT invitation (RR 1.09, 95 % CI 1.05–1.14, $p < 0.001$), in those who had never previously accepted a FIT invitation (RR 1.26, 95 % CI 1.22–1.31, $p < 0.001$), and in patients with a history of screening colonoscopies in which cancer or adenomas were detected (cancer/advanced adenomas: RR 1.27, 95 % CI 1.02–1.58, $p = 0.033$; initial adenomas: RR 1.22, 95 % CI 1.06–1.41, $p = 0.007$). Conversely, lower detection rates were observed among participants with previously negative colonoscopies (RR 0.75, 95 % CI 0.67–0.83, $p < 0.001$). A similar pattern was noted for AADR. Interestingly, this association was not evident for SDR, PSDR, or PSDR ≥ 10 mm.

Conclusions Over two decades of FIT-based CRC screening, a notable increase was observed in the detection of proximal serrated lesions, particularly those measuring ≥ 10 mm. This upward trend likely reflects improved endoscopic awareness, advancements in imaging technology, and growing recognition of the serrated pathway as an independent contributor to colorectal carcinogenesis. Moreover, unlike ADR and AADR, which were influenced by sex, age and proper adherence to the screening program, serrated lesion detection showed a distinct epidemiologic pattern. Our findings highlight the essential role of serrated lesion detection in effective CRC prevention and reinforce the need to standardize serrated-specific quality indicators within screening programs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hassan C, Repici A, Rizkala T et al. Could the sessile serrated lesion detection rate become an ESGE quality parameter? *Endosc Int Open* 2023; 11: E105–E106
- [2] Rex DK, Schoenfeld PS, Cohen J et al. Quality indicators for colonoscopy. *Gastrointest Endosc* 2015; 81: 31–53
- [3] Madhav D, Anderson JC, Kaminski M et al. Sessile serrated lesion detection rates during average risk screening colonoscopy: A systematic review and meta-analysis of the published literature. *Endosc Int Open* 2021; 09: E610–E620

OP198 Individual risk factors and comorbidities are linked to risk for post-colonoscopy colorectal cancer in high-quality screening colonoscopies

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DOI 10.1055/s-0046-1820853

Aims While many post-colonoscopy colorectal cancers (PCCRC) occur due to poor procedure quality, little is known about the PCCRC risk in persons with adequate colonoscopy quality. The aim of this study was to identify risk factors for PCCRC in colonoscopies with adequate bowel preparation, cecal intubation, and an endoscopist ADR > 25 .

Methods Screening colonoscopy baseline data were extracted from the Austrian screening colonoscopy registry and linked to nation-wide insurance claims data and electronic health record databases. PCCRC was defined as a CRC occurring > 6 months after a negative index colonoscopy, in line with the World Endoscopy Organization terminology. A multivariable time-to-event analysis was performed to evaluate risk factors for PCCRC.

Results We analyzed records from 54,559 screening participants who developed 73 PCCRCs. The detection of high-risk polyps (HR 2.21, 95 % CI 1.52, 3.23) was associated with PCCRC, compared to persons with a negative screening colonoscopy. Strong associations for PCCRC were observed for plasma GGT levels (HR per unit increase 1.003, 95 % CI 1.0004–1.0056), type 2 diabetes mellitus (HR 2.66, 95 % CI 1.48, 4.77) and low physical activity level (HR 1.73, 95 % CI 1.02, 2.94).

Conclusions Individual risk factors provide the missing link to PCCRC risk in otherwise adequate screening colonoscopies. Patient characteristics should be included into tailored surveillance recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP199 Incidence and mortality from PCCRC due to inadequate bowel preparation differs by sex

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Aims Adequate bowel preparation is one of the key quality parameters in screening colonoscopy. Although men tend to have worse bowel preparation scores than women, it is unknown whether male sex is an independent risk factor for post-colonoscopy colorectal cancer (PCCRC) when bowel preparation is inadequate (► Table 1).

► Table 1

	HR for PCCRC	95 % CI	HR for PCCRC death	95 % CI
Female and adequate preparation	—	—	—	—
Female and inadequate preparation	1.59	1.09, 2.33	1.14	0.41, 3.15
Male and adequate preparation	1.35	1.20, 1.51	1.91	1.51, 2.41
Male and inadequate preparation	3.02	2.30, 3.98	6.02	3.80, 9.52

Methods The Austrian screening colonoscopy quality assurance registry was used for the analyses. Data on PCCRC mortality were obtained through the Austrian death registry, and incident PCCRC > 6 months after screening colonoscopy were obtained through insurance claims data from the Austrian Social Insurance Institution. Cox proportional hazards model adjusted for age and sex was used to investigate the association of bowel preparation quality and the outcomes of interest. Adequate bowel preparation was defined as a score of either “excellent”, “good” or “fair” on the Aronchick scale, according to the current guidelines.

Results A total of 381,069 patient were analyzed. We investigated 1213 incident PCCRC and 242 PCCRC deaths. When women with adequate bowel preparation were considered the reference, men with adequate bowel preparation had higher hazards for PCCRC (HR 1.35, 95 % CI 1.20, 1.51) and PCCRC death (HR 1.91, 95 % CI 1.51, 2.41). While women with inadequate bowel preparation had 1.59 times higher hazards for PCCRC (95 % CI 1.09, 2.33) and PCCRC death (HR 1.14, 95 % CI 0.41, 3.15), the risk was highest for men with inadequate bowel preparation (HR for PCCRC 3.02, 95 % CI 2.30, 3.98, HR for PCCRC death 6.02, 95 % CI 3.80, 9.52).

Conclusions Men have a disproportionally higher risk for PCCRC and associated mortality when bowel preparation standards are not met. Intensive efforts should be made to ensure repeat colonoscopy in male patients with inadequate bowel preparation is performed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP200 Comparison of 1 L, 2 L, and 4 L polyethylene glycol solutions for colonoscopy preparation in hospitalised patients: a multicentre, randomised controlled trial

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DOI 10.1055/s-0046-1820855

Aims Adequate bowel preparation is essential for high-quality colonoscopy, yet remains particularly challenging among hospitalised patients, who frequently present multiple risk factors for poor cleansing. Current European guidelines provide no specific recommendations, while US guidelines favour high-volume (4 L) polyethylene glycol (PEG) regimens despite low-quality evidence. We conducted a multicentre, randomised, endoscopist-blinded trial to compare the efficacy, safety, tolerability, and patient acceptability of 1 L PEG–ascorbate, 2 L PEG–ascorbate, and 4 L PEG in inpatients. We tested the hypothesis that 1 L PEG–ascorbate would be non-inferior to higher volumes in achieving adequate bowel cleansing [1–3].

Methods This investigator-initiated phase IV trial was conducted in seven Italian hospitals (June 2021–January 2025). Hospitalised adults scheduled for elective colonoscopy were randomised (1:1:1) to receive 1 L PEG–ascorbate (PLENVU), 2 L PEG–ascorbate (MOVIPREP), or 4 L PEG (SELG-ESSE), all in split-dose regimen. Endoscopists were blinded to allocation. The primary endpoint was adequate cleansing, defined as Boston Bowel Preparation Scale (BBPS) ≥ 6 with all segments ≥ 2. Secondary outcomes included high-quality cleansing (BBPS 8–9), right-colon cleansing, tolerability, willingness to repeat, adverse events, and compliance (≥ 75 % intake). Analyses were performed on the modified full analysis set (mFAS), excluding incomplete colonoscopies due to strictures, previous colectomy, or therapeutic procedures. Non-inferiority was concluded if the lower bound of the two-sided 95 % CI for 1 L versus comparator was above –10 %. Missing data were conservatively imputed as failures.

Results Overall, 665 patients were randomised (1 L = 228; 2 L = 218; 4 L = 219); 624 constituted the mFAS (1 L = 210; 2 L = 204; 4 L = 210). Baseline characteristics were balanced across arms. Adequate cleansing was achieved in 84.8 % with 1 L PEG–ascorbate, 79.5 % with 2 L PEG–ascorbate, and 79.1 % with 4 L PEG. The absolute difference versus 2 L PEG–ascorbate was +5.3 % (95 % CI –2.2 to +12.8) and versus 4 L PEG +5.7 % (95 % CI –1.7 to +13.1), meeting non-inferiority criteria. High-quality cleansing (BBPS 8–9) was superior with 1 L (50.0 %) compared with 2 L (36.6 %) and 4 L (39.1 %); absolute difference +13.4 % (95 % CI +3.9 to +22.7) and +10.9 % (95 % CI +1.4 to +20.3), respectively. Right-colon high-quality cleansing (BBPS = 3) was achieved in 41.9 %, 28.8 %, and 31.9 % (p < 0.05), translating to numbers-needed-to-treat of 7.6 (1 L vs 2 L) and 10 (1 L vs 4 L). Compliance (≥ 75 % intake) was 95.6 %, 94.5 %, and 93.6 % across groups (p = 0.643). Despite more vomiting (14.9 % vs 7.3 % vs 11.4 %) and thirst (27.6 % vs 14.2 % vs 14.2 %), willingness to repeat was highest with 1 L (84.2 %) versus 2 L (82.1 %) and 4 L (68.0 %; p < 0.001). Serious adverse events were rare: one bowel perforation (in 1 L group) and one hypertensive crisis (4 L), both judged unrelated to treatment. No clinically relevant electrolyte disturbances or renal impairment were observed.

Conclusions Among hospitalised patients, 1 L PEG–ascorbate achieved non-inferior adequate cleansing and superior high-quality and right-colon cleansing compared with 2 L and 4 L PEG regimens. Despite higher transient symptoms (i.e., vomiting, thirst), patient acceptability was significantly greater, suggesting easier intake and reduced procedural burden. These findings support the use of a low-volume regimen as an effective, safe, and patient-centred alternative for inpatient bowel preparation. Adoption of 1 L PEG–ascorbate in real-world practice may streamline preparation, improve adherence, and reduce the need for repeated colonoscopies—challenging current US guideline assumptions, and addressing a gap in European recommendations.

Conflicts of Interest Franco Radaelli is a member of the Norgine Advisory Board. Cesare Hassan reports receiving an honorarium from Norgine for participation in a symposium outside the submitted work. All remaining authors have no conflict of interest to declare.

References

- [1] QIPS study group Fuccio L, Frazzoni L, Spada C, Mussetto A, Fabbri C, Manno M, Aragona G, Zagari RM, Rondonotti E, Manes G, Occhipinti P, Cadoni S, Bazzoli F, Hassan C, Radaelli F Factors That Affect Adequacy of Colon Cleansing for Colonoscopy in Hospitalized Patients. *Clin Gastroenterol Hepatol* 2021; 19 (2): 339–348.e7
- [2] Hassan C, East J, Radaelli F, Spada C, Benamouzig R, Bisschops R, Bretthauer M, Dekker E, Dinis-Ribeiro M, Ferlitsch M, Fuccio L, Awadie H, Gralnek I, Jover R, Kaminski MF, Pellisé M, Triantafyllou K, Vanella G, Mangas-Sanjuan C, Frazzoni L, Van Hooft JE, Dumonceau JM. Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2019. *Endoscopy*. 2019; 51 (8): 775–794
- [3] Jacobson BC, Anderson JC, Burke CA, Dominitz JA, Gross SA, May FP, Patel SG, Shaikat A, Robertson DJ. Optimizing Bowel Preparation Quality for Colonoscopy: Consensus Recommendations by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology*. 2025; 168 (4): 798–829

OP201 Automated linking of data from the Dutch national endoscopy and pathology databases for continuous monitoring of polyp detection rates: feasibility and first results

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DOI 10.1055/s-0046-1820856

Aims Given their well-established inverse association with the risk of post-colonoscopy colorectal cancer (CRC), polyp detection metrics such as the adenoma detection rate (ADR) are considered key quality indicators for colonoscopy. However, the widespread monitoring of these metrics is hindered by the need to link endoscopy and pathology data. This study evaluated the feasibility of an infrastructure for automated linking of data from the Dutch national endoscopy and pathology databases to enable nationwide, continuous, and low-effort monitoring of pathology-dependent polyp detection metrics [1].

Methods Structurally reported data from the Dutch Gastrointestinal Endoscopy Audit (DGEA) and Automated National Pathological Anatomy Archive (PALGA) were linked using an automated stepwise protocol. The adequacy of linking was assessed per endoscopy unit and colonoscopy indication category. Included categories involved colonoscopies after a positive fecal immunochemical test (FIT) for the CRC screening program (i.e. 'FIT positive colonoscopies') and colonoscopies for post-polypectomy and CRC surveillance, familial CRC risk, or evaluation of symptoms (collectively referred to as 'diagnostic colonoscopies'). Units for which adequate linkage was established were included to evaluate polyp detection metrics across the different categorized colonoscopy indications, as well as inter-unit variability in various polyp detection metrics. Included metrics were the ADR, advanced ADR (AADR), adenomas per colonoscopy (APC), proximal serrated polyp detection rate (PSPDR), and sessile serrated lesion detection rate (SSLDR). Additionally, the extent to which units met the recently proposed polyp detection performance targets of the American Society for Gastrointestinal Endoscopy was evaluated: for FIT-positive colonoscopies an ADR > 50 % is recommended, while for diagnostic colonoscopies in individuals aged > 45 years an ADR > 35 %, APC > 0.6, and SSLDR > 6 % are recommended [1].

Results In total, 182,539 colonoscopies from 36 units were included. Adequate linkage was achieved for 30/32 (94 %) units for FIT-positive colonoscopies, for 22/35 (63 %) units for post-polypectomy and CRC surveillance colonoscopies, for 14/25 (56 %) units for colonoscopies for familial CRC risk, and for 17/36 (47 %) units for colonoscopies for evaluation of symptoms. The main cause of inadequate linkage involved the absence of structurally recorded histopathology results in the PALGA pathology database. Median polyp detection rates for categorized colonoscopy indications are reported in ► **Table 1**. Detection rates varied considerably across units, with observed differences between units ranging up to 21 % (ADR), 11 % (AADR), 0.7 (APC), 15 % (PSPDR) and 17 % (SSLDR). The ADR performance target for FIT-positive colonoscopies was achieved by 28/30 (93 %) units. The ADR, APC and SSLDR performance targets for diagnostic colonoscopies were achieved by 15/21 (71 %), 19/21 (90 %) and 18/21 (86 %) units, respectively.

Conclusions This is the first study to describe an infrastructure for automated linking of data from national endoscopy and pathology databases. It demonstrates that if both endoscopy and pathology data are consistently recorded using standardized templates, as was done for FIT-positive colonoscopies, automated calculation of histopathology-dependent polyp detection metrics is possible for almost all endoscopy units. As such, the described linking protocol could allow for scalable, resource-efficient, nationwide and continuous monitoring of polyp detection metrics. Linked data revealed that most units achieve established polyp detection performance targets, though substantial inter-unit variability exists. To further leverage the potential of the described infrastructure, efforts to improve availability of structured endoscopy and pathology data for all units and colonoscopy indications are warranted.

Conflicts of Interest E. Dekker has received a research grant from Fujifilm, honoraria for consultancy from Olympus, Fujifilm, Ambu, InterVenn, Norgine, and Exact Sciences, and speaker fees from Olympus, GI Supply, Norgine, IPSEN/Mayoly, FujiFilm, and Steris. P. Fockens has received consulting fees from Olympus and Cook Endoscopy. The other authors declare that they have no conflict of interest.

► **Table 1** Medians (interquartile range) for various polyp detection metrics across categorized diagnostic colonoscopy indications

	ADR, %	AADR, %	APC, n	PSPDR, %	SSLDR, %
FIT positive	59.3 (44.9-62.8)	15.9 (14.6-17.2)	1.4 (1.2-1.6)	14.6 (13.5-18.0)	13.2 (11.7-15.1)
Diagnostic	37.5 (34.8-43.2)	4.0 (2.6-4.6)	0.8 (0.7-0.9)	11.1 (9.6-13.8)	8.9 (7.3-11.2)

References

[1] Rex DK, Anderson JC, Butterly LF et al. Quality Indicators for Colonoscopy. *Am J Gastroenterol* 2024; 119: 1754–1780. doi:10.14309/ajg.0000000000002972

OP202 Evaluating COLOFIT for triage of urgent colorectal cancer referrals: a multi-centre validation study

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DOI 10.1055/s-0046-1820857

Aims Colorectal cancer (CRC) is a major cause of cancer-related morbidity and mortality. In the UK, a faecal immunochemical test (FIT) threshold of $\geq 10 \mu\text{g/g}$ is used to determine the need for urgent investigation. However, as in many other healthcare systems, the demand for colonoscopy or computed tomography colonography (CT-C) exceeds capacity. For example, within London there are 70,000 patients a year who are referred to the urgent suspected cancer service. The COLOFIT model, incorporating FIT, age, sex and routine blood parameters, was recently developed to improve CRC risk stratification and therefore prioritisation of patients for urgent investigation. We aimed to externally validate the COLOFIT model in a multicentre secondary care setting among patients referred under an urgent suspected cancer pathway, comparing its diagnostic performance to FIT alone and assessing its potential to reduce the number of urgent referrals.

Methods We performed a retrospective multicentre cohort study of patients referred under urgent suspected cancer pathways to eight London hospitals between 2023 and 2025. Patients with all available COLOFIT variables (FIT, age, sex, platelet count and mean cell volume) and a confirmed CRC outcome were included. We evaluated the diagnostic performance of COLOFIT across a range of thresholds and compared it with $\text{FIT} \geq 10 \mu\text{g/g}$. Discrimination and calibration were assessed using the area under the receiver operating characteristic curve (AUC) and the observed-to-expected (O/E) ratio, respectively [1].

Results 2512 patients were included (median age 63 years and 47 % male). 117 (4.7 %) were diagnosed with CRC. Using $\text{FIT} \geq 10 \mu\text{g/g}$, sensitivity for CRC was 94.0 % (95 % CI: 88.2–97.1 %) with a specificity of 19.5 % (CI: 18.0–21.1 %). We identified that a COLOFIT threshold of 0.75 % 1-year CRC risk captured the same number of cancers as $\text{FIT} \geq 10 \mu\text{g/g}$ and would have led to a reduction in urgent referrals by 303 (12 %). This COLOFIT threshold had a sensitivity of 94.0 % (CI: 88.2–97.1 %) and a specificity of 32.2 % (CI: 30.4–34.1 %). The COLOFIT model demonstrated higher discriminatory performance with AUC 0.76 (CI: 0.71–0.80) compared to AUC 0.73 (CI: 0.68–0.77) for FIT alone. COLOFIT was overall well calibrated but slightly underestimated CRC risk with observed cases being approximately 8 % higher than expected (O/E ratio 1.08, CI 0.89–1.28).

Conclusions Our study externally validates the COLOFIT model in patients urgently referred for suspected cancer. The COLOFIT model would lead to a reduction in urgent referrals by 12 %. In London, this could lead to a reduction in 8700 referrals per year to the urgent suspected cancer pathway. The COLOFIT model is a potential

tool to lower urgent referral volume without compromising diagnostic performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] COLOFIT Research Group Crooks CJ, West J, Jones J, Hamilton W, Bailey SER, Abel G, Banerjee A, Rees CJ, Tamm A, Nicholson BD, Benton SC, Hunt N, Humes DJ. COLOFIT: Development and Internal-External Validation of Models Using Age, Sex, Faecal Immunochemical and Blood Tests to Optimise Diagnosis of Colorectal Cancer in Symptomatic Patients. *Aliment Pharmacol Ther* 2025; 61: 852–864. doi:10.1111/apt.18459. Epub 2025 Jan 7 PMID: 39764729 PMID: PMC11825929

Endohepatology: The new frontier?

15/05/2026, 16:00–17:00

Aqua 1 +2

OP203 Endoscopic Ultrasound-Guided Portal Pressure Gradient Predicts Hepatic Decompensation in Compensated Cirrhosis: A Multicenter Retrospective Study

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DOI 10.1055/s-0046-1820858

Aims Endoscopic ultrasound-guided portosystemic pressure gradient (EUS-PPG) is an alternative method of assessing portal hypertension by directly obtaining portal and hepatic venous pressure measurements. Transjugular hepatic venous portal gradient (HVPG) has been the gold standard for measuring portal hypertension, with measurements $\geq 10 \text{ mm Hg}$ defined as clinically significant portal hypertension. Previous studies have shown that EUS-PPG correlates with HVPG along with clinical parameters of portal hypertension, FIB-4 and histologic fibrosis staging; however, downstream clinical outcomes such as hepatic decompensation have yet to be elucidated. In this study, we aim to evaluate the utility of EUS-PPG in predicting new hepatic decompensation in patients with compensated cirrhosis (▶ Table 1).

Methods This was a retrospective study at two tertiary academic hospitals of patients with compensated cirrhosis who underwent EUS-PPG from 2014 to 2025. Clinical, laboratory, procedural, and follow-up data including development of decompensation event (variceal hemorrhage, new ascites, hepatic encephalopathy, and jaundice) were collected. Baseline demographics were compared between patients with and without new decompensation. Univariate and multivariate logistic regression were performed to determine predictors of new decompensation. Receiver operating characteristic curve was analyzed to further assess the ability of EUS-PPG in predicting decompensation. Post-hoc-analysis was performed to establish optimal PPG cutoff with maximal negative predictive value [1].

Results A total of 134 patients with cirrhosis who underwent EUS-PPG between 2014 to 2025 were identified. 44 patients had previous history of decompensation while 90 were well compensated at time of EUS-PPG. For the compensated cohort of cirrhotic patients, the mean age was 60.8 (SD = 10.79) and 60 % were female. Mean MELD-Na was 10 (SD = 34.05) and mean Child-Pugh score was 5.3 (SD = 0.62). Most common liver disease etiology was MASLD (54 %). Within the follow-up interval up to 36 months after EUS-PPG, new decompensation occurred in 13.3 % (12/90) of patients. The mean PPG in the group of patients who developed decompensation was 10.5 mmHg compared to 7.14 mmHg in the group who remained compensated ($p = 0.040$).

► Table 1

	Univariate Analysis			Multivariate Analysis		
	OR	95% CI	p-value	OR	95% CI	p-value
Age	1.08	0.99-1.16	0.06	1.14	1.01-1.29	0.048
Sex	1.083	0.32-3.72	0.899	4.15	0.68-25.24	0.681
BMI	1.04	0.97-1.11	0.259	1.09	0.98-1.21	0.106
NSBB	1.53	0.29-8.14	0.616	0.65	0.08-5.61	0.697
MELD	1.04	0.90-1.20	0.601	0.73	0.51-1.04	0.084
CP	2.33	1.13-4.82	0.022	6.34	1.46-27.56	0.014
PPG	1.11	1.01-1.24	0.049	1.21	1.04-1.42	0.016

42% of the decompensated group had PPG ≥ 10 mmHg, compared to 28% in the compensated group ($p = 0.024$). In multivariate analysis, PPG, Child-Pugh scores and age were found to be significant predictors of decompensation. ROC curve for diagnostic capacity of EUS-PPG showed C-statistic of 0.660. In post-hoc analysis, a PPG ≤ 6 yielded a 97% negative predictive value for the absence of new decompensation.

Conclusions Higher EUS-PPG values were linked with increased risk of first hepatic decompensation in this multicenter cohort. These findings highlight the potential of EUS-PPG to support risk stratification in compensated cirrhosis and to complement existing tools to anticipate clinical progression.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kolb JM, Monachese M, Rubin RA, Wang TJ, Choi A, Bazarbashi AN, Brahmabhatt B, Zakaria A, Cortes P, Kesar V, Abel WF. Endoscopic Ultrasound-Guided Portosystemic Pressure Gradient Correlates with Clinical Parameters and Liver Histology. *Clinical Gastroenterology and Hepatology*. 2025

OP204 EUS-Guided Portal Pressure Gradient: Prognostic Utility and Concordance With the Hepatic Venous Pressure Gradient

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DOI 10.1055/s-0046-1820859

Aims Clinically significant portal hypertension (CSPH) is the strongest predictor of hepatic decompensation. The hepatic venous pressure gradient (HVPG) is the gold standard for diagnosing CSPH, but it provides only an indirect estimate of portal pressure and may underestimate presinusoidal or mixed forms of portal hypertension (PH), particularly in porto-sinusoidal vascular disorder (PSVD) and metabolic-associated steatotic liver disease (MASLD). Endoscopic ultrasound (EUS)-guided portal pressure gradient (PPG) measurement enables direct recording of portal and hepatic vein pressures, potentially offering a more comprehensive hemodynamic assessment. This study evaluated the concordance between EUS-PPG and HVPG and assessed their prognostic value in predicting hepatic decompensation.

Methods In this prospective single-center study, consecutive patients with suspected CSPH of various etiologies underwent both EUS-PPG and HVPG measurement. Baseline demographic, biochemical, and clinical data were collected. EUS-PPG was obtained using the EchoTip Insight system, and HVPG was measured according to Baveno VII recommendations. Correlation between EUS-PPG

and HVPG was assessed using Pearson's coefficient, while agreement was evaluated with Bland-Altman analysis. Predictors of hepatic decompensation (ascites, variceal bleeding, or hepatic encephalopathy) were explored using univariate and multivariate logistic regression analyses [1–5].

Results Ninety patients were enrolled (45.6% male; mean age 60 years). Liver disease etiologies included PSVD (35.6%), MASLD (31.1%), autoimmune liver diseases (14.4%), metabolic/alcohol-related liver disease (7.8%), viral hepatitis (7.8%), and alcohol-related liver disease (3.3%). All procedures were technically successful without severe adverse events.

Mean EUS-PPG and HVPG values were 14 ± 6 mmHg and 9 ± 5 mmHg, respectively. Seventy patients (77.8%) had PPG > 10 mmHg, while only 41 (45.6%) had HVPG > 10 mmHg. Concordance between methods was modest, with a mean PPG–HVPG difference of $+4.7$ mmHg (95% limits of agreement ranging from -9.6 to $+18.9$ mmHg) and a weak linear correlation ($r = 0.036$, $p = 0.73$). During a median follow-up of 12 months, 17 patients (18.9%) developed hepatic decompensation. At univariate analysis, PPG (OR 1.27; 95% CI 1.11–1.44; $p = 0.0003$) and platelet count (OR 0.97; 95% CI 0.95–0.99; $p = 0.001$) were significantly associated with the occurrence of hepatic decompensation.

In the multivariate logistic regression model including significant variables, EUS-PPG (OR 1.40; 95% CI 1.11–1.76; $p = 0.004$), together with platelet count (OR 0.97; 95% CI 0.95–1.00; $p = 0.037$) remained independent predictors of hepatic decompensation.

Conclusions EUS-PPG is a feasible, safe, and informative method for assessing portal hypertension across heterogeneous liver disease etiologies. It independently predicts hepatic decompensation, suggesting potential advantages over HVPG especially in presinusoidal or mixed forms of portal hypertension such as PSVD and MASLD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kim MY, Baik SK, Suk KT et al. Portal hypertension in nonalcoholic fatty liver disease. *Clin Mol Hepatol* 2023; 29: 1–14
- [2] Elkrif L, Rautou PE, Ronot M et al. Porto-sinusoidal vascular disease: A new name for an old disease. *J Hepatol* 2019; 70: 195–198
- [3] García-Pagán JC, Hernández-Gea V, Bosch J. The hepatic venous pressure gradient: Clinical use in chronic liver disease. *Hepatology* 2012; 57: 206–214
- [4] Huang JY, Samarasekera JB, Tsujino T et al. EUS-guided portal pressure gradient measurement with a novel device: Human pilot study. *Gastrointest Endosc* 2017; 85: 996–1001
- [5] de Franchis R, Bosch J, Garcia-Tsao G et al. Baveno VII – Renewing consensus in portal hypertension. *J Hepatol* 2022; 76: 959–974

OP205 Same session validation of a custom-built 22G with the commercial 25G system for EUS-guided portal pressure gradient measurement

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Aims Endoscopic ultrasound-guided portal pressure gradient (EUS-PPG) measurement is a promising alternative to hepatic venous pressure gradient (HVPG) assessment, especially in settings where HVPG is unavailable or limited. The commercial 25-gauge (25G) system showed good correlation against hepatic venous pressure gradient (HVPG). However, the 25G has drawbacks due to its small calibre and the proprietary pressure transducer. The aim of this study is to validate a custom-built 22G conventional intravascular pressure transducer system (22G EUS-PPG).

Methods In this prospective study, 26 patients underwent EUS-PPG measurement using both systems during the same session. The primary outcome was the correlation of PPG values. Secondary outcomes included the correlation and variability of portal vein pressure (PVP) and hepatic vein pressure (HVP) measured by both systems.

Results PPG values showed excellent correlation of both systems ($r = 0.901$, $p < 0.001$). 25G EUS-PPG correctly identified clinically significant portal hypertension (CSPH, defined as $PPG \geq 10$ mmHg) in 25 of 26 (96.2%) cases. Portal vein and hepatic vein pressures also correlated significantly ($r = 0.776$ and $r = 0.673$, respectively) between both systems. Variability within both systems was very low to low.

Conclusions EUS-PPG measurements obtained with the commercial 25G and custom-built 22G EUS-PPG systems are validated. The custom-built 22G system excels due to pressure-tracing quality control, availability and cost-efficiency.

Conflicts of Interest JT was supported by the German Research Foundation (DFG) project ID 403224013 – SFB 1382 (A09), by the German Federal Ministry of Education and Research (BMBF) for the DEEP-HCC project and by the Hessian Ministry of Higher Education, Research and the Arts (HMWK) for the ENABLE and ACLF-I cluster projects. The MICROB-PREDICT (project ID 825694), DECISION (project ID 847949), GALAXY (project ID 668031), LIVERHOPE (project ID 731875), and IHMCSA (project ID 964590) projects have received funding from the European Union's Horizon 2020 research and innovation program. MP is funded by the Ernst-und-Berta Grimmke Foundation (No. 5/19) and BONFOR research program of the University of Bonn (grant ID 2020-2A-07 and 2021-2A-07) and by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC2151 – 390873048. He also serves as a consultant for Gore and Cook Medical. WL received funding from the MICROB-PREDICT (project ID 825694), is a co-holder of the Boston-Scientific Chair in interventional echoendoscopy and a consultant for Cook Medical, CSL Behring and MRM Health.

OP206 Echo-Endoscopic Shear-Wave Elastography of the Spleen: A Cohort Study Measuring Splenic Stiffness with Liver Elastography

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DOI 10.1055/s-0046-1820861

Aims Splenic stiffness is influenced by portal venous pressure, yet its behaviour when assessed by endoscopic ultrasound point shear-wave elastography (EUS-pSWE) and its relationship with liver elastography across common clinical phenotypes remain insufficiently described. This study aimed to characterise splenic stiffness measured by EUS-pSWE, determine its agreement with splenic shear-wave speed, compare it with concurrent liver elastography, and evaluate potential threshold values for excluding or confirming advanced fibrosis.

Methods In this prospective cohort from a single centre, 59 adults undergoing clinically indicated EUS received standardized EUS-pSWE of the spleen along with same-day liver vibration-controlled transient elastography (VCTE). Reliable exams required ≥ 10 valid measurements and an IQR/median ratio $< 30\%$. Non-parametric testing was used for group analyses, and associations were assessed using Spearman correlation. Two predefined splenic-stiffness thresholds (~ 25 and ~ 32 kPa) were examined for their diagnostic ability to identify advanced fibrosis ($F \geq 3$) defined by VCTE.

Results Twelve participants met criteria for obesity; this subgroup was younger (49.6 ± 13.5 vs 70.2 ± 27.2 years, $p = 0.0073$) and predominantly male (50% vs 14.9% , $p = 0.0258$). Splenic and hepatic stiffness values were comparable (all $p \geq 0.4456$). Liver stiffness rose steadily with fibrosis severity (from 5.12 kPa at F0–1 to 19.36 kPa at F4), whereas splenic stiffness did not demonstrate a monotonic trend across fibrosis stages (24.34 kPa at F0–1, 33.03 kPa at F3, 26.98 kPa at F4; Kruskal–Wallis $p = 0.18$), consistent with its hemodynamic dependency. Splenic stiffness showed strong internal agreement with splenic shear-wave speed ($p = 0.955$, $p < 0.001$). No significant correlations were observed between splenic parameters and either liver stiffness ($p = 0.124$, $p = 0.357$) or CAP ($p = 0.199$, $p = 0.14$).

A splenic-stiffness cut-off near 25 kPa provided high negative predictive value (93.8%) with moderate sensitivity (77.8%), specificity (60.0%), and LR– of 0.37 ($\chi^2 p = 0.0362$). A threshold around 32 kPa offered strong rule-in performance (specificity 88.0%, sensitivity 44.4%, LR + 3.7, NPV 89.8%; $\chi^2 p = 0.0169$).

Conclusions Splenic stiffness measured via EUS-pSWE demonstrates excellent internal consistency, appears largely independent of liver stiffness, and yields clinically practical thresholds for excluding (~ 25 kPa) and confirming (~ 32 kPa) advanced fibrosis. These findings support the incremental diagnostic value of splenic EUS-pSWE during routine endoscopic assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP207 Comparative Diagnostic Performance of 19G Versus 22G Needles in EUS-Guided Liver Biopsy: A Systematic Review and Network Meta-Analysis

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DOI 10.1055/s-0046-1820862

Aims This study aimed to determine the optimal needle type for endoscopic ultrasound-guided liver biopsy (EUS-LB) by comparing the diagnostic accuracy and specimen adequacy of various 19G and 22G fine-needle aspiration (FNA) and fine-needle biopsy (FNB) needles through a systematic review and network meta-analysis of randomized controlled trials (RCTs).

Methods We conducted a network meta-analysis of five RCTs published between 2016 and 2022 in the USA, including 251 adult patients undergoing EUS-LB for parenchymal liver disease. The needles compared were 19G FNA, 19G Franseen FNB, 19G Fork-tip FNB, 22G Franseen FNB, and 22G Fork-tip FNB. Primary outcomes were total specimen length (mm) and number of complete portal tracts (CPTs).

Results Both 19G Fork-tip and 19G Franseen FNB needles yielded significantly longer specimens compared to 22G Franseen FNB (MD 2.76 mm [95% CI 1.43 to 4.10] and 3.19 mm [2.07 to 4.31], respectively) and 22G Fork-tip FNB (MD 4.78 mm [0.95 to 8.62] and 5.21 mm [1.45 to 8.97], respectively). They also outperformed 19G FNA (MD 3.92 mm [0.51 to 7.33] and 3.49 mm [0.01 to 6.98], respectively). No significant difference was found between 19G FNA and 22G Franseen or Fork-tip needles. SUCRA rankings for specimen length favored 19G Franseen (0.91) and 19G Fork-tip (0.83). Regarding CPT count, 19G Franseen and 19G Fork-tip FNB significantly exceeded 22G Fork-tip FNB (MD 23.62 [5.25 to 41.98] and 22.80 [5.92 to 39.68], respectively) and 19G FNA (MD 21.50 [7.98 to 35.02] and 22.32 [6.98 to 37.65], respectively), with no significant difference compared to 22G Franseen FNB. SUCRA rankings for CPTs were 0.85 for 19G Fork-tip and 0.82 for 19G Franseen (Table 1). Diagnostic adequacy was higher with 19G Fork-tip (RR 6.61 [1.08 to 40.53]) and 19G Franseen (RR 8.50 [1.76 to 41.09]) compared to 22G Franseen FNB. Adverse events were rare, with only one gastric hematoma and mild abdominal pain episodes reported [1, 2].

Conclusions The 19G end-cutting FNB needles (Franseen and Fork-tip) provide superior specimen length and portal tract yield compared to smaller gauge or FNA needles, supporting their preferential use in EUS-LB. These findings suggest larger caliber needles improve diagnostic quality without compromising safety. However, low evidence quality warrants further high-powered RCTs to confirm these results and guide clinical practice guidelines.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gadour E, Miutescu B, Okasha HH. Insights and perspectives: EUS in post-liver transplantation care. *Endosc Ultrasound* 2024; 13: 283–286. doi:10.1097/eus.0000000000000084. Epub 2024 Nov 5 PMID: 40386457 PMID: PMC12080695
- [2] Facciorusso A, Crinò SF, Fugazza A et al. Comparative diagnostic yield of different endoscopic techniques for tissue sampling of upper gastrointestinal subepithelial lesions: A network meta-analysis. *Endoscopy*. 2024; 56: 31–40

OP208 Sample Adequacy and Diagnostic Accuracy of a 22-Gauge FNB Needle vs a 19-Gauge FNB Needle for EUS-guided Liver Biopsy in the same patients and in the same lobe: a Prospective Trial

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DOI 10.1055/s-0046-1820863

Aims Endoscopic ultrasound (EUS)-guided liver biopsy is gaining rapid interest, but there is still debate over biopsy site, the types and diameters of needles and the biopsy technique. We performed a prospective, head-to-head trial to compare the diagnostic efficacy and the sample quality of a 19-gauge fine-needle biopsy (FNB) needle and a 22-gauge FNB needle.

Methods Between July 1st, 2024, and March 1st, 2025, we performed EUS-guided liver biopsies on forty consecutive patients. We took two biopsies from each patient's left lobe; one with a 19-gauge FNB needle and the other

with a 22-gauge needle, both performed by the same endoscopist at the same session. The biopsy technique was wet-suction with heparin-primed needles, without a stylet, performed as one pass with five actuations. We recorded demographic factors, assessed specimen quality, and followed up on adverse events [1–3].

Results All patients had a diagnosis, but four patients undergoing sampling with the 22-gauge FNB needle had microscopically inadequate specimens. The diagnosis was made based on biopsy findings from the 19-gauge FNB needle in these patients. Mean preprocessing total length and the longest length of the tissue core were significantly higher with 19-gauge needles [58 (25 – 142, min-max)mm and 15.1 (4 – 31, min-max) mm] vs. [45 (6 – 67) and 12.2 (3 – 28) mm, respectively; $p < 0.001$]. The number of complete portal tracts was significantly higher with the 19-gauge needle [35 (17–110) (min-max) vs 20 (5–65) (min-max), respectively; $p < 0.001$]. The only adverse event was hepatic abscess in one patient, which resolved with EUS-guided internal drainage using a lumen-apposing metal stent. The abscess culture showed *Streptococcus anginosus*, a bacterium associated with poor dental hygiene and the spontaneous development of hepatic abscesses after dental procedures.

Conclusions EUS-guided liver biopsy with a 19-gauge FNB needle is superior to a 22-gauge FNB needle. (Clinicaltrials.gov identifier; NCT06643520)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Diehl DL, Sangwan V, Johal AS et al. Comparing a 19-gauge fine-needle biopsy needle with a 22-gauge fine-needle biopsy needle for EUS-guided liver biopsy sampling: a prospective randomized study. *Gastrointest Endosc* 2024; 99: 931–937
- [2] Dalal A, Kamat N, Patil G et al. Comparison of diagnostic outcomes, safety, and cost of Franseen-tip 19G versus 22G needles for endoscopic ultrasound-guided liver biopsies. *Endosc Int Open* 2024; 12: E291–E296
- [3] Shah RM, Schmidt J, John E et al. Superior Specimen and Diagnostic Accuracy with Endoscopic Ultrasound-Guided Liver Biopsies Using 19-Gauge versus 22-Gauge Core Needles. *Clin Endosc* 2021; 54 (5): 739–744

Optimizing EMR for today's practice: Part 1

15/05/2026, 17:30–18:30

Aqua 3 + 4

OP209 Risk Factors and Prediction of Recurrence After Hot and Cold EMR of Large Colorectal Polyps

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DOI 10.1055/s-0046-1820864

Aims The Sydney EMR recurrence tool was developed nearly a decade ago [1]; since then, EMR technique and best practices has evolved. We aimed to reassess predictors of residual or recurrent neoplasia after EMR of large colorectal polyps and to evaluate risk stratification performance.

Methods This study used data from three large international multicenter prospective studies enrolling patients undergoing EMR of large (≥ 20 mm), non-pedunculated colorectal polyps between 2013 and 2025. Patients with complete initial resection who underwent at least one surveillance colonoscopy with identification of the EMR resection site were included. Recurrence was defined as biopsy-proven residual or recurrent neoplasia at the first surveillance colonoscopy. The primary outcomes of interest were patient-, polyp-, and procedure-level characteristics associated with recurrence following EMR. Analyses were additionally stratified by resection approach (hot vs cold EMR). Associations were evaluated using multivariable logistic regression. Risk estimates from multivariable models were used to derive additive risk scores, and predictive performance was assessed using receiver operating characteristic curves. All analyses were performed using R.

Results A total of 1,629 patients with 1,718 non-pedunculated colorectal polyps ≥ 20 mm underwent EMR (76 % hot EMR, 24 % cold EMR). Recurrence at first surveillance colonoscopy (median 6.0 months) occurred in 19.0 % of polyps. Recurrence was independently associated with larger polyp size (≥ 40 mm; OR 2.31), sessile morphology with any Paris 1s component (OR 1.38), intraprocedural bleeding (IPB, OR 1.74), incomplete submucosal lifting (OR 1.58), nonuse of a distal attachment cap (OR 1.58), incomplete or absent margin ablation (OR 2.02), and cold EMR compared with hot EMR (OR 2.95) (all $p \leq 0.024$). Serrated histology, dysplasia, colonic location, visible fibrosis, and perceived ease of resection were not associated with recurrence. For hot EMR only, most factors remained associated with recurrence except sessile morphology. For cold EMR, recurrence was associated with larger size, IPB, and high-grade dysplasia (HGD). Across all EMR, absence of any identified risk factor defined a low-risk group with a negative predictive value of 95 %, while presence of at least one risk factor accounted for 93 % of recurrent lesions (sensitivity 93 %); however, prediction models demonstrated limited discrimination (AUC 0.64–0.66).

Conclusions This large multicenter analysis confirms established risk factors for recurrence after EMR (polyp size and IPB) and identifies additional factors (sessile morphology, submucosal lifting, margin ablation, cold resection, and cap use). Risk factor profiles differed between hot and cold EMR, and the modest discriminatory performance of prediction tools suggests a meaningful contribution of operator-related factors beyond measured polyp and procedure characteristics.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Tate DJ, Desomer L, Klein A et al. Adenoma recurrence after piecemeal colonic EMR is predictable: the Sydney EMR recurrence tool. *Gastrointest Endosc* 2017; 85: 647–656 e6

OP210 Clinical Outcomes of Margin Thermal Ablation After Piecemeal EMR and Predictors of Recurrence in Routine Practice: A Comparative Cohort Analysis

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Aims Recurrence after piecemeal endoscopic mucosal resection (pEMR) of large nonpedunculated colonic polyps (LNPCPs) remains a major limitation of this technique. Margin thermal ablation (MTA) has been shown in randomized trials to reduce recurrence neoplasia, but evidence of its effectiveness and predictors of recurrence in routine clinical practice is still limited. This study evaluated the recurrence rates after pEMR of LNPCPs (≥ 20 mm) before and after implementation of MTA in a single high-volume endoscopy center. Secondary aims were to identify independent risk factors for local recurrence and to compare adverse events between two cohorts.

Methods This single-center retrospective comparative cohort study included consecutive patients undergoing pEMR for LNPCPs ≥ 20 mm during two time periods: 2013–2015 (without MTA) and 2022–2024 (with systematic MTA). Patients treated with standard pEMR without MTA between January 2013 and December 2015 were used as a historical control cohort, as complete endoscopic and surveillance data were available for this period and MTA had not yet been implemented in our unit. These outcomes were compared with a contemporary cohort of patients treated with pEMR and systematic MTA between 2022 and 2024. The primary endpoint was local recurrence at the first surveillance colonoscopy (SC1), performed 4–6 months after resection. Secondary outcomes included risk factors for recurrence and adverse event rates. Recurrence was defined as endoscopic and/or histological evidence of adenomatous tissue at SC1. All surveillance examinations were performed using high-definition white light and virtual chromoendoscopy.

Results Data from 359 patients with 384 LNPCPs were analyzed. Of these, 232 LNPCPs were resected by pEMR. During 2013–2015, a total of 108 LNPCPs were treated with standard pEMR without MTA (S-pEMR), whereas during 2022–2024, 124 LNPCPs were resected with pEMR and systematic margin thermal ablation using snare-tip soft coagulation (T-pEMR). Baseline characteristics of patients undergoing SC1 were similar between groups. Local recurrence at SC1 was detected in 11 lesions (9 %) in the T-pEMR group compared with 28 lesions (26 %) in the S-pEMR group ($p = 0.0005$; RR = 0.34; 95 % CI, 0.18–0.65). Local recurrence decreased by 17 %, corresponding to a 66 % relative risk reduction. Local recurrence was significantly associated with lesions ≥ 30 mm ($p = 0.005$) and high-grade dysplasia ($p = 0.005$). Adverse events were comparable between groups, with no significant differences.

Conclusions Margin thermal ablation following piecemeal EMR significantly reduced local recurrence in routine clinical practice, resulting in a 17 % absolute and 66 % relative reduction in recurrence without an increase in adverse events. High-grade dysplasia, and lesion size ≥ 30 mm were independent predictors of recurrence. Recognition of these risk factors may help guide more tailored surveillance strategies.

Supported by the Ministry of Health of the Czech Republic in cooperation with the Czech Health Research Council under project No.NU22-08-00424, educational projects DZRVO MO1012 and Cooperatio.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP211 Optimizing Endoscopic Mucosal Resection Outcomes through Adjunctive Techniques for Complex Colorectal Polyp Resection: a Retrospective Observational Cohort Study

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DOI 10.1055/s-0046-1820866

Aims Endoscopic mucosal resection (EMR) remains the cornerstone for managing complex colorectal polyps, yet local recurrence after piecemeal resection remains a major limitation. To mitigate this, adjunctive methods, including cold avulsion with snare-tip soft coagulation (CAST), hot avulsion and snare-tip submucosal release have been introduced to improve histologic completeness and long-term durability.

Methods This retrospective observational cohort study included all consecutive patients who underwent EMR for complex colorectal polyps between 2019 and 2025 at St. Michael's Hospital, Toronto, Canada. Adjunctive methods were applied at the discretion of the endoscopist according to lesion morphology, completeness of and/or predicted success of snare resection, and recurrence risk. In our practice, distal-cap assisted EMR (EMR-DC) is not considered an adjunctive technique. Primary outcomes were technical success, procedure-related adverse events, and recurrence at first surveillance colonoscopy (► **Table 1**).

► **Table 1**

	CAST (n = 453)	Hot Avulsion (n = 111)	Submu- cosal release (n = 123)
Technical success	437 (96.47); p = 0.74	107 (96.4); p = 0.92	113 (91.87); p = 0.007
Intra-procedural Perforation (DMI 4-5)	3 (0.66); p = 0.48	1 (0.9); p = 0.23	4 (3.3); p = 0.49
Delayed Bleeding	8 (1.77); p = 0.28	3 (2.7); p = 0.81	1 (0.8); p = 0.23
Delayed Perforation	0 (0); p = 0.18	0 (0); p = 0.58	1 (0.8); p = 0.18
Recurrence at first surveillance	36 (7.95); p = 0.02	6 (5.4); p = 0.78	8 (6.5); p = 0.49

Results Among 1,364 lesions resected by EMR, adjunctive techniques were frequently applied to optimize resection outcomes. CAST was used in 453, hot avulsion in 111, and submucosal release in 123 resections. Technical success was high across all adjunctive methods, with CAST achieving 96.47% (437/453; p = 0.74), hot avulsion 96.40% (107/111; p = 0.92), and submucosal release 91.87% (113/123; p = 0.007). Clinically significant intra-procedural perforation (DMI 4–5) was uncommon across techniques. CAST was associated with 3 such events (0.66%; p = 0.48), hot avulsion with 1 event (0.9%; p = 0.23), and submucosal release with 4 events (3.3%; p = 0.49), with no statistically significant differences between groups. Delayed bleeding occurred in 1.77% of CAST (8/453; p = 0.28), 2.7% of hot avulsion (3/111; p = 0.81), and 0.8% of submucosal release cases (1/123; p = 0.23). Delayed perforation was rare, occurring in none of the CAST or hot avulsion cases and in 1 patient (0.8%; p = 0.18) following submucosal release. Recurrence at first surveillance colonoscopy was lowest for hot avulsion (5.4%; 6/111; p = 0.78) and submucosal release (6.5%; 8/123; p = 0.49). CAST demonstrated a significantly higher recurrence rate at surveillance 7.95% (36/453; p = 0.02), despite its high technical success rates.

In multivariable analysis, none of the adjunctive techniques were independently associated with recurrence: CAST (OR 0.75, 95% CI [0.39–1.46]; p = 0.401), hot avulsion (OR 1.82, 95% CI [0.64–5.13]; p = 0.260), and submucosal release (OR 1.06, 95% CI [0.39–2.86]; p = 0.906). Lesion characteristics such as Paris morphologies (e.g., Ip vs IIa: OR 0.26, 95% CI [0.08–0.90], p = 0.033; Ip vs IIa + Ic: OR 0.09, 95% CI [0.02–0.42], p = 0.002) and size (e.g., > 50 mm vs 20–29 mm: OR 0.20, 95% CI [0.06–0.68], p = 0.010; > 50 mm vs 30–50 mm: OR 0.39, 95% CI [0.20–0.75], p = 0.005) remained significant predictors of recurrence.

Conclusions Our analysis suggests that recurrence is driven primarily by intrinsic lesion characteristics, such as size and morphology, rather than the specific adjunctive technique employed. Thus, the choice of adjunct should be tailored to the lesion characteristics and procedural goals. Snare-tip submucosal release offers a valuable rescue option for fibrotic, non-lifting, or recurrent lesions despite its greater procedural complexity, whereas CAST and hot avulsion remain effective, lower-risk tools. A selective, lesion-tailored adjunctive strategy can maximize EMR curative yield, maintain safety, and may reduce the need for escalation to ESD in complex colorectal lesions.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

OP212 Endoscopic submucosal dissection (ESD) versus endoscopic mucosal resection (EMR) for colorectal granular laterally spreading tumors (LST-G)

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DOI 10.1055/s-0046-1820867

Aims Complete resection of polypoid colorectal lesions is essential to prevent local recurrence and progression to colorectal cancer. Laterally spreading tumors of granular type (LST-G) represent a common indication for advanced endoscopic resection. Our aim was to compare efficacy and safety of EMR versus ESD for the treatment of colorectal LST-G.

Methods This is an interim analysis of an ongoing multicenter randomized controlled trial involving five Italian centers. Consecutive patients aged > 18 years, with life expectancy > 10 years, and presenting with colorectal LST-G > 20 mm referred for endoscopic resection were included. Exclusion criteria were non-granular LST, presence of depressed areas, lesions on scars or anastomoses, polyps in inflammatory bowel disease, patients with familial adenomatous polyposis and Lynch syndrome, and Kudo V pattern. Patients were randomized to EMR or ESD. The primary outcome was local recurrence at 6 and 12 months. Secondary outcomes included R0 resection, en bloc resection, procedure time, and early adverse events.

Results A total of 269 patients (134 ESD, 135 EMR) were analyzed after exclusion of 25 patients with incomplete data. Baseline age, sex and lesion size were comparable between groups. Lesion distribution differed significantly, with a higher prevalence of rectal lesions in the ESD group (p < 0.001). En bloc resection rate was significantly higher in the ESD group (96.7% [117/121] vs 30.9% [38/123]; p < 0.001). Procedure speed was higher with EMR (median 314 [179;440] mm²/min) compared with ESD (median 200 [131;273] mm²/min;

$p < 0.001$). Early bleeding (3/121 ESD vs 1/123 EMR; $p = 0.105$) and perforation (9/121 ESD vs 3/123 EMR; $p = 0.172$) were comparable in the two groups. Recurrence at 6 and 12 months tended to be lower in ESD group (6 months: 1.4% vs 5.4%; 12 months: 0% vs 6%) however, these differences were not statistically significant ($p = 0.063$), as follow-up is still ongoing.

Conclusions In this interim analysis, ESD showed safety comparable to EMR for treating colorectal LST-G, with similar rates of early adverse events. However, ESD achieved a significantly higher en bloc resection rate at the expense of a lower resection speed and longer procedure time. A trend towards reduced recurrence was observed after ESD, which was not yet statistically significant pending full completion of follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP213 Comparative Efficacy and Safety of Different Endoscopic Resection Techniques for Large Non-Pedunculated Colorectal Polyps: A Network Meta-Analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1820868

Aims Hot endoscopic mucosal resection (HEMR) and endoscopic submucosal dissection (ESD) are established approaches for large colorectal lesions. Several alternative strategies, including cold EMR (CEMR), HEMR with margin ablation (HEMR-A), underwater EMR (UEMR), and endoscopic full-thickness resection (EFTR), have recently emerged, but their comparative efficacy and safety remain uncertain.

Methods A systematic search of PubMed/MEDLINE, Embase, and Scopus identified randomized controlled trials (RCTs) comparing endoscopic resection techniques for large non-pedunculated colorectal polyps. Primary outcomes were local recurrence and adverse events (AEs). Both direct and indirect comparisons were performed, and results were expressed as odds ratios (ORs) with 95% confidence intervals (CIs). Heterogeneity, network inconsistency, risk of bias, and certainty of evidence were assessed using a frequentist random-effects network meta-analysis (NMA) and GRADE methodology.

Results Nine RCTs comprising 2,379 procedures and six resection strategies were included. Regarding recurrence, ESD demonstrated superior efficacy, significantly outperforming HEMR (OR 0.10; 95% CI 0.01–0.85) and HEMR-A (OR 0.12; 95% CI 0.01–0.94). Conversely, CEMR ranked lowest, showed the highest recurrence rate, proving inferior to HEMR (OR 2.18; 95% CI 1.43–3.32), HEMR-A (OR 2.63; 95% CI 1.75–3.95), UEMR (OR 3.64; 95% CI 1.79–7.40), and ESD (OR 22.58; 95% CI 2.68–189.97). In terms of safety, CEMR ranked highest, with fewer AEs than HEMR (OR 0.37; 95% CI 0.18–0.74), HEMR-A (OR 0.38; 95% CI 0.16–0.88), and ESD (OR 0.16; 95% CI 0.06–0.45). In contrast, ESD presented the poorest safety profile, showing higher AEs versus HEMR-A (OR 2.31; 95% CI 1.34–3.99).

Conclusions ESD offers the greatest efficacy in reducing recurrence but at the cost of increased procedural risk, whereas CEMR provides the most favorable safety profile with lower efficacy. HEMR, HEMR-A, and UEMR demonstrate in-

termediate performance, underscoring inherent trade-offs between efficacy and safety. These findings support an individualized, lesion and patient-specific approach to technique selection and highlight the need for further high-quality trials evaluating emerging modalities, such as EFTR.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP214 Longitudinal Outcomes and Prevalence of Sessile Serrated Lesions (SSL) in an Australian population cohort

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Aims Sessile serrated lesions (SSLs) are premalignant lesions that account for 15–30% of all colorectal cancers (CRC). A rising incidence of CRC in younger adults has been noted in Australia. The contribution of SSLs in this regard is uncertain. We aimed to evaluate the prevalence and characteristics of SSLs in our population. Specifically, we assessed disease burden in the younger cohort (<50 years). Data regarding ideal surveillance strategies after initial resection of SSLs is limited. We assessed longitudinal outcomes of patients with at least 1 SSL on index colonoscopy with their follow up findings.

Methods We conducted a retrospective single-centre study of index colonoscopies performed between 2015 and 2021. The analysis included review of electronic medical records and endoscopy reports for patient demographics, number of SSLs, size, location, presence of dysplasia/cancer and serrated polyposis syndrome (SPS). We used these records to subsequently track and analyse follow up colonoscopy findings.

Results Data from 18,728 colonoscopy procedures were collected and analysed. Indications for colonoscopies included screening (49.2%), surveillance (19.3%) and symptoms (31.5%). The prevalence of SSLs was 21.5% (4029 patients). Overall, 54.4% of affected patients were female and those aged between 50–75 had the highest prevalence (63.6%). 20.6% (830 patients) had advanced SSLs (>10mm, presence of dysplasia or cancer) on index colonoscopy. 27.2% of patients with SSLs were young adults (<50) and females were affected more commonly than males in this subgroup (59.3%), particularly in those <40 years (63.5%).

A large proportion of SSLs (82.5%) were small (<10mm) and 69.5% were in the proximal colon. 58% (2,339 patients) had a follow-up colonoscopy with a mean follow up time of 2.72 years. 30.7% had >1 SSL on follow-up colonoscopy and 20.9% of these patients had advanced SSLs. Dysplasia was present in 4.1% of patients on index colonoscopy and more prevalent with larger SSLs (>10mm) and age >75. Dysplasia was infrequent on follow-up colonoscopy (3.3%) and 1 patient developed adenocarcinoma. Patients with dysplasia in the index colonoscopy had a higher risk of dysplastic SSLs (5.20%) on follow-up compared to those without dysplasia (0.80%).

Conclusions This study suggests a high prevalence of SSLs in Australia. Young adults (<50) accounted for 27.2% of the disease burden. Currently, we offer CRC screening with biennial faecal occult blood tests from the age of 45 years. Thus, a large population at risk may not currently be receiving screening. Aetiological factors and the burden of SSLs in colorectal cancer in young adults require further investigation to develop cost-effective management pathways. Our follow up data analysis, which is ongoing, suggests that those with dysplastic lesions or advanced lesions are more likely to have advanced pathology in subsequent procedures. Further data is required to determine ideal surveillance strategies in the future.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Navigating the Duodenum: Endoscopic Challenges and Advances

15/05/2026, 17:30–18:30

Sky 1

OP215 A study on the relationship between histological malignancy and mucin phenotype in superficial non-ampullary duodenal epithelial tumors and a novel endoscopic diagnosis for predicting mucin phenotype

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DOI 10.1055/s-0046-1820870

Aims In the endoscopic diagnosis of superficial non-ampullary duodenal epithelial tumors (SNADETs), distinguishing cancer from adenoma is not straightforward, unlike with other gastrointestinal tumors. Meanwhile, SNADETs are classified into gastric phenotype and intestinal phenotype as mucin phenotypes, with duodenal cancers with gastric phenotype specifically reported to have poor prognosis. We hypothesized that predicting mucin phenotype based on endoscopic findings could potentially estimate the biological malignancy of SNADETs. Focusing on this as a novel endoscopic diagnostic approach, we conducted the following study.

Methods We prospectively enrolled 500 cases suspected of SNADET at our hospital from August 2018 to April 2021. Among them, we analyzed 401 cases (401 lesions) that underwent endoscopic treatment and received a pathological diagnosis of SNADET. Two pathologists specializing in gastrointestinal pathology performed histological diagnosis using the Vienna Classification (VCL) and evaluated mucin phenotypes via immunostaining (CD10, MUC2, MUC5AC, and MUC6), with endoscopic diagnoses completely blinded. Two expert endoscopists evaluated the lesion location, size, macroscopic type, and presence of erythema using white light imaging. Furthermore, image-enhanced endoscopy with magnifying endoscopy (IEE-ME) were evaluated for superficial structure and white opaque substance (WOS). Superficial structure was classified as closed-loop structure (CLS) or open-loop structure (OLS). CLS was defined as a closed structure resembling the background duodenal villi structure. OLS was defined as a linear or open structure. WOS was classified as present or absent. All endoscopic findings were evaluated completely blinded to the SNADET pathological diagnosis. In this study, gastric phenotype, predominantly gastric phenotype, and mixed phenotype were classified as G-type, while predominantly intestinal phenotype and intestinal phenotype were classified as I-type. Each endoscopic finding was compared between the two types, and multivariate analysis was performed using a logistic regression model.

Results Mucin phenotypes were gastric phenotype in 34 cases, gastric phenotype predominant in 11 cases, mixed phenotype in 18 cases, intestinal phenotype predominant in 158 cases, and intestinal type in 180 cases. The proportions of VCL categories 4/5 were 63.6%, 54.5%, 38.9%, 36.1%, and 23.9%, respectively ($P < 0.0001$, Cochran-Armitage trend test). Additionally, VCL C5.2 was observed in 10 cases, 8 of which were gastric phenotype. Compared to I-type, G-type showed higher proportions in location (bulb to the proximal site of descending part: 68.2% vs 45.3%, $P < 0.0001$), lesion size (23.3 mm vs 18.6 mm, $P = 0.0226$), macroscopic type (Type 0-I: 49.4% vs 14.3%, $P < 0.0001$), erythema (present: 60.3% vs 32.8%, $P < 0.0001$), superficial structure (CLS: 76.2% vs 29.6%, $P < 0.0001$), and WOS (negative: 44.4% vs 11.0%, $P < 0.0001$).

Multivariate analysis showed SNADET was associated with superficial structure (CLS: OR 3.6782, 95% CI 1.8105–7.4725), WOS (negative: OR 3.2691, 95% CI 1.6232–6.5841), and macroscopic type (Type 0-I: OR 2.5117, 95% CI 1.2763–4.9429) were independently and significantly associated with being G-type.

Conclusions The higher the proportion of gastric phenotype in SNADET, the higher the proportion of histological malignancy, demonstrating the importance of mucin phenotype in SNADET. Furthermore, this study revealed that SNADET with gastric phenotype, representing a high-risk group, can be predicted based on only endoscopic findings including IEE-ME.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP216 Long-term Outcomes of Cold Snare Polypectomy for Superficial Non-Ampullary Duodenal Epithelial Tumors: A Multicenter Prospective Confirmatory Trial (D-COP Trial)

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Aims Cold snare polypectomy (CSP) minimizes the risk of adverse events and has become a standard treatment for subcentimeter-sized colorectal polyps. CSP may also be suitable for small superficial non-ampullary duodenal epithelial tumors (SNADETs). We conducted this multicenter single-arm confirmatory trial (D-COP trial) to evaluate the safety and efficacy of CSP for SNADETs (UMIN00030876).

Methods The major indication criteria were endoscopically diagnosed SNADET ≤ 10 mm and ≤ 3 target lesions. Patients with suspected submucosal invasive cancer or familial adenomatous polyposis were excluded. CSP was performed using an electrosurgical snare without electrocautery. Follow-up endoscopy was performed at 3, 12, and 36 months after CSP, and a biopsy from the CSP scar was planned at 12 months regardless of recurrent suspicion. The primary endpoint was the local recurrence rate within 12 months. The estimated sample size was 363 patients, assuming a 12-month local recurrence rate of $\leq 7\%$, based on EMR data (3.4%), with $\alpha = 5\%$ and power 80%.

Results A total of 408 patients (430 lesions) were enrolled from 86 institutions (January 2018–February 2019). CSP was attempted for 413 lesions in 395 patients. The median tumor size was 5 mm (range 2–10 mm). Approximately 84% of lesions were located in the second part of the duodenum, and the most common macroscopic type was 0-IIa (67%). Preoperative biopsy was performed in 291 lesions (70%). Thirty-seven lesions could not be resected by CSP and were removed with electrocautery (9%), and CSP was discontinued due to arrhythmia in one patient. The en-bloc resection rate was 90%, and no endoscopic residual tumor was observed after CSP. Bleeding requiring endoscopic hemostasis immediately after CSP occurred in 15 lesions (3.6%), and delayed bleeding occurred in three cases (0.7%). All bleeding events were controlled endoscopically without transfusion or surgery. There was no intraoperative or delayed perforation.

Histopathology revealed 349 adenomas, 45 cancers (43 intramucosal, 2 sub-mucosal invasion), and 17 non-neoplastic lesions. Among neoplastic lesions, horizontal margins were negative/positive/undetermined in 242/24/128 lesions, and vertical margins were 343/4/47.

At 3 months, 375 patients (389 lesions) underwent follow-up endoscopy, and four local recurrences were detected; all were completely removed with cold biopsy. At 12 months, 367 patients (381 lesions) underwent follow-up endoscopy, and 11 local recurrences were detected. All were treated endoscopically (7 cold biopsy, 1 CSP, 2 underwater EMR, 1 EMR), and none required surgery. The 12-month local recurrence rate was 3.8 % (95 % CI: 2.11 %–6.33 %), and the upper limit of the 95 % CI was lower than the predefined threshold (6.33 % < 7 %). At 36 months, endoscopic examinations were performed in 89.5 % of patients, and local recurrence was identified in 9 cases. The cumulative local recurrence rate at 3 years after CSP was 5.3 %. Metachronous SNADET lesions were detected in 11 cases (2.9 %) during the 3-year follow-up period.

Conclusions CSP was a safe and effective treatment for subcentimeter SNADETs, with favorable mid-term local control and low adverse event rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP217 Endoscopic and Long-term Outcomes of Endoscopic Submucosal Dissection (ESD) for Non-Ampullary Duodenal Neuroendocrine Tumors (NADNETs): a Western Single-Center Retrospective Cohort Study

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DOI 10.1055/s-0046-1820872

Aims Non-ampullary duodenal neuroendocrine tumors (NADNETs) optimal treatment is still debated¹. Data on performance and outcomes of endoscopic submucosal dissection (ESD) is lacking especially in Western countries. We evaluated efficacy, safety and long-term outcomes of ESD to manage NADNETs in an Italian tertiary referral center [1].

Methods Consecutive patients treated with ESD for non-functioning NADNETs between 2012 and 2025 at IRCCS Istituto Europeo di Oncologia of Milan were included. Data was obtained from hospital records and analysed retrospectively. All procedures were performed under general anaesthesia and patients were admitted for post-procedural observation.

Results Overall, 17 NADNETs in 17 patients underwent ESD. Fifteen NADNETs were localized in the duodenal bulb (88 %) and 2 in the second duodenal portion (D2). Median lesions' size was 10 mm (IQR 7-11 mm). Fourteen NADNETs (82 %) were G2 and 3 were G1.

All the lesions were resected en bloc, R0 resection was obtained in 7/17 cases (41 %). All R1 resection had positive vertical margins (VM). At histology one lymph-vascular invasion (LVI) was observed (► **Table 1**).

Mucosal defect closure was obtained with TTS clips in 16/17 cases (94 %). Median hospital stay after endoscopic treatment was of 4 days (IQR 3-5 days). No cases of intraprocedural bleeding, delayed perforation or delayed bleeding occurred. We observed 3 cases of intraprocedural perforation (18 %). All the defects were closed during the procedure and the patients managed by withholding per os feeding plus intravenous antibiotics for 3 to 5 days (► **Table 2**). At univariate analysis no baseline variables (age, sex, tumor size, location, grade or Ki67) were significantly associated with R1 resection. At univariate analysis a significant association between tumor location in D2 and intraprocedural perforation was observed (OR 48.4, 95 % CI 1.50-1554, $p = 0.028$). Median hospital stay did differ between patients with (7 days, [IQR 6–8.5]) or without intraprocedural perforation (4 days [IQR 3–4]) ($p = 0.003$).

Median follow-up time was 56 months (IQR 28-80.5 months). No local nor distant recurrence was observed. No death occurred. We observed only 1 case (6 %) of disease progression. Among the ten patients with R1 resection one

patient underwent additional surgical treatment without any residual tumor or lymph node involvement at histological analysis of the surgical specimen. The remaining nine patients underwent follow-up only. No local or distant recurrence occurred in the ten cases of R1 resection.

► **Table 1** Results of univariable logistic regression models to assess the association of demographic and clinical variables with resection status (R1 vs R0)

Variable	Level/Unit	OR (95 % CI)	p value
Age, years	+ 1 Year	1.04 (0.94-1.15)	0.485
Sex, female	Male vs Female	1.67 (0.25-10.99)	0.596
DNET size, mm	+ 1 mm	1.26 (0.88-1.80)	0.204
DNET size group	≥ 10 mm vs ≤ 10 mm	8.14 (0.89-74.77)	0.064
DNET location	D2 vs duodenal bulb	0.68 (0.05-8.11)	0.764
Grade	G2 vs G1	0.78 (0.08-7.57)	0.834
Ki67 index	+ 1 %	1.08 (0.82-1.34)	0.697

► **Table 2** Results of univariable logistic regression models to assess the association of demographic and clinical variables with intraprocedural perforation (yes vs no)

Variable	Level/Unit	OR (95 % CI)	p value
Age	+ 1 year	0.81 (0.65-1.01)	0.062
Sex	Male vs Female	0.96 (0.10-9.44)	0.976
DNET size, mm	+ 1 mm	0.93 (0.67-1.28)	0.638
DNET size group	≥ 10 mm vs ≤ 10 mm	0.71 (0.07-7.17)	0.774
DNET location	D2 vs Duodenal bulb	48.4 (1.5-1554)	0.028
Grade	G1 vs G2	0.33 (0.03-3.81)	0.376
Ki67 index	+ 1 %	1.24 (0.95-1.61)	0.117

Conclusions This study represents the largest European cohort of NADNETs treated by ESD to date. Our experience supports the careful use of ESD for non-functioning NADNETs to achieve en-bloc resection. The technique holds potential risks of AEs that can be managed conservatively. Extra caution is required when approaching lesions in D2.

In our experience R1 resection was not uncommon but it did not affect local or distant recurrence during follow-up. Further studies are needed to determine how to manage patients with R1 resection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Panzuto F, O'Toole D, Klöppel G, Knigge UP, Krejs GJ, Tsoi M, Volante M, Luong TV. Controversies in NEN: An ENETS position statement on the endoscopic management of localised gastric, duodenal and rectal neuroendocrine neoplasms. *J Neuroendocrinol* 2025; e70060. doi:10.1111/jne.70060 Epub ahead of print PMID: 40524475

OP218 Safety, technical efficacy and long-term clinical outcomes of endoscopic therapy for duodenal Neuroendocrine Tumors (NETs)

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DOI 10.1055/s-0046-1820873

Aims Current recommendations support endoscopic resection (ER) for duodenal submucosal (SM) NETs (d-NETs) measuring < 10 mm without any nodal involvement; however there is no consensus on ER for lesions measuring > 15 mm. With evolving ER & closure techniques, ER can be considered for lesions beyond D1, larger lesions &/or involving the muscularis propria (MP). Our objective was to evaluate success, techniques, outcomes & recurrence after endotherapy for d-NETs.

Methods Single centre, retrospective analysis of prospectively maintained database – undergoing ER and band ligation and leave (BLnL) strategy for histologically proven d-NETs – 13 years (January 2013 – October 2025). Prior hi-definition EGD, radial EUS & DOTATATE scan. Demography, lesion characteristics, number, resection modality, adverse events (AEs), histology recorded. Treatment protocol – single lesions – ER, multiple – ER for largest lesion followed by BLnL for remaining. Follow-up (F/u) at 1 month (m), 6 m, then annually. Recurrence & its management recorded.

Results N = 80 pts; n = 142 d-NETs, 25 pts (31.25%) had > 1 lesion; mean age (y) – 59.16 [SD 11.39], Males – 59 (73.75%). Presentation – Incidental – 69/80 (86.25%), GI bleed – 7/80 (8.75%), diarrhoea – 4/80 (5%). Macroscopic appearance – Yamada Type I/II – 140/142 (98.5%) III/IV – 2 (1.4%); Location – D1 – 119 (83.8%); D2 – 22 (15.4%); D3 – 1 (0.7%); Mean size (mm) – 11.5 [SD 5.63]; Largest – 50 mm; Size > 15mm – 32/142 (22.5%) [15–20mm – 16; > 20mm – 16]. EUS – layer of involvement – SM – 120/142 (84.5%); MP – 12/142 (8.45%); 10 – too small for EUS evaluation. DOTA positive – 64/80 (80%).

Index ER – N = 80/80 (100%), n = 80/142 (56.33%); ER type – ESD – 54/80 (67.5%), EMR – 9/80 (11.25%), freehand EFTR (f-EFTR) – 13/80 (16.25%), device assisted EFTR (d-EFTR) – 4/80 (5%). Location wise – D1 = ESD – 50/73 (68.49%), EMR – 7/73 (9.5%), f-EFTR 13/73 (17.8%), d-EFTR – 3/73 (4.1%); D2 = ESD – 4/6 (66.6%), EMR 2/6 (33.3%); D3 = d-EFTR – 1/1 respectively. Primary closure – ESD – 43/54 (79.6%), no closure – 10/54 (20.3%); f-EFTR 13/13 (100%); d-EFTR – 5/5 (100%). Location wise – D1 – closure = 63/73 (86.3%), D2 = 6/6 (100%), D3 = 1/1 (100%). Closure techniques – D1 = Endoclips – 36, Endoloop + clips – 7, Rotatable over line method (ROLM) – (n = 2), OTSC – 4, Endosuture – 1, Helix tacking system – 2, Advanced TTS clips – 6; D2 = Endoclips – 4, post EMR – No closure. Technical success (TS) – 100%; AEs – muscle defect during ESD = 7 (primary closure), delayed bleeding = 1 (hemoclip), asymptomatic GB entrapment in d-EFTR clip – 1. Resection – Enbloc = 100%; R0 – D1 = 56/73 (70%), D2 – 2 (7.5%); Histology = WHO G1 = 65/80 (82.5%), G2 = 14/80 (17.5%), G3 = 0. 2nd session – n = 62, D1 = 46, D2 = 16. ER = 14/62 (22.6%) [D1 = 12/46 (26.1%), D2 = 2/16 (12.5%)]; BLnL = 48/62 (77.4%) [D1 34/46 (73.9%), D2 = 14/16 (87.5%)]. ER type – D1 – ESD = 8, hybrid ESD = 2, EMR = 2; D2 – EMR = 2. Primary closure = 7/14 (50%). Closure techniques – endoclips – 5, endoloop + clips – 1, advanced TTS clips – 1. TS = 100%; AE – nil. Additional therapy in 1 patient – DOTA + ve periportal LN – EUS RFA. Recurrence/new lesions – 5/80 (6.25%). Median time to recurrence – 6 m (IQR 5); Surgery = 1, unresectable = 1 – PRRT; ER = 3 – in 2 of 3 = 2nd recurrence – repeat ER = 1, surgery = 1. Mean F/u (m) 6.7 ± 10.5; Max F/u – 60 m. Multivariable regression analysis – no clearly identifiable risk factors for non-R0 resection – non-significant trends for larger lesion size (p-value – 0.6) & MP invasion (p-value – 0.095); Number of lesions, location in D1 or D2, G1/G2 had no significance. Similarly for recurrence rates – unable to reach statistical significance on multivariable regression analysis due to very low overall recurrence rates.

Conclusions ER for d-NETs using ESD and / or EFTR is safe & effective with high R0 resection rates. Recurrences were rare during long term follow-up & could mostly be treated endoscopically.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP219 Endoscopic full-thickness resection (EFTR) versus endoscopic submucosal dissection (ESD) in the management of duodenal, non-metastatic and non-ampullary neuroendocrine tumours (NETs) sized between 1-2cm: a meta-analysis

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DOI 10.1055/s-0046-1820874

Aims Duodenal, non-metastatic, non-ampullary neuroendocrine tumours (DNMA-NET) measured between 1-2cm should be referred to tertiary centres for individualised management [1]. The resection techniques may include endoscopic full-thickness resection (EFTR) and endoscopic submucosal dissection (ESD). However, specific guidance on technique efficacy remains limited.

Methods We conducted a literature systematic review and meta-analysis between September 2025–October 2025 of original studies published in English language to compare the technical success rates (primary outcome) of G1-G2, DNMA-NET 1-2cm among PubMed and Cochrane databases. Technical success was defined by complete lesion resection confirmed by inspection. We included studies published after 2014, ensuring both techniques were widely available. The secondary outcomes were: en-bloc and R0 resection rates, peri-procedural adverse events and recurrence rates at 6 months. R0 resection was confirmed by histopathology. Analysis was performed using the R statistical software and the study followed the PRISMA checklist. The effect size on study outcomes was calculated using random effect model and it is shown as RR (95% CI).

Results We identified 9 studies (4 including EFTR [2–5] and 5 about ESD [6–10]) with 156 lesions (99 in EFTR and 57 in ESD). 2 EFTR studies used the full-thickness-resection device (FTRD) [4, 5]. No randomised controlled trials were identified. 3 [4, 6, 8] of the studies were multi-centre while the remainder were single-centre. EFTR had a pooled technical success of 93% (95% CI, 84–99%), and ESD had 95% (95% CI, 85–100%). There was no significant difference between groups (p = 0.27), with no heterogeneity detected (I² = 0%). En-bloc resection rates were similarly high across techniques. EFTR demonstrated a pooled en-bloc rate of 100% (95% CI, 77–100%), while ESD achieved 76% (95% CI, 48–97%). Although the common-effects model suggested a difference (p = 0.02), this was not significant under random-effects (p = 0.18). Heterogeneity within the ESD subgroup was substantial (I² = 67.7%). Pooled R0 resection was 93% (95% CI, 87–98%) for EFTR and 95% (95% CI, 85–100%) for ESD, with no significant subgroup difference (p = 0.27). Heterogeneity was minimal (I² = 0%). Adverse event rates, including perforation and major bleeding, were low overall. EFTR demonstrated a pooled adverse event rate of 1% (95% CI, 0–1%), while ESD showed 3% (95% CI, 0–46%). There was no significant subgroup difference (p = 0.40), though ESD studies displayed moderate heterogeneity (I² = 73%). Recurrence rates at 6 months following resection were similarly low. EFTR recurrence was 0% (95% CI, 0–9%), compared with 10% (95% CI, 2–22%) after ESD. The difference was not statistically significant (p = 0.27), though heterogeneity for ESD was moderate (I² = 57%).

Conclusions EFTR and ESD showed comparable performance across all outcomes. R0 resection rates were similarly high (EFTR 93%, ESD 95%) with no subgroup difference.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Li XY, Ji KY, Qu YH et al. Application of endoscopic submucosal dissection in duodenal space-occupying lesions. *World J Clin Cases* 2020; 8 (24): 6296–6305. doi:10.12998/wjcc.v8.i24.6296
- [2] Nabi Z, Ramchandani M, Asif S et al. Outcomes of Endoscopic Submucosal Dissection in Duodenal Neuroendocrine Tumors. *J Gastrointest Surg* 2022; 26 (1): 275–277. doi:10.1007/s11605-021-05133-8
- [3] Lee SW, Sung JK, Cho YS et al. Comparisons of therapeutic outcomes in patients with nonampullary duodenal neuroendocrine tumors (NADNETs): A

multicenter retrospective study. *Medicine* (Baltimore) 2019; 98 (26): e16154. doi:10.1097/MD.00000000000016154

[4] Pimentel-Nunes P, Ortigão R, Afonso LP, Bastos RP, Libânio D, Dinis-Ribeiro M. Endoscopic Resection of Gastrointestinal Neuroendocrine Tumors: Long-Term Outcomes and Comparison of Endoscopic Techniques. *GE – Port J Gastroenterol* 2023; 30 (2): 98–106. doi:10.1159/000521654

[5] Khalaf MA, Ayoub F, Keihanian T et al. Outcomes and Limitations of Duodenal Endoscopic Submucosal Dissection in the United States. *Dig Dis Sci* Published online July 31 2025. doi:10.1007/s10620-025-09238-x

[6] Dwyer S, Mok S. Endoscopic full-thickness resection of well-differentiated T2 neuroendocrine tumors in the duodenal bulb: a case series. *VideoGIE* 2022; 7 (5): 196–199. doi:10.1016/j.vgie.2021.12.013

[7] Nabi Z, Patil G, Puri R et al. Outcomes of device assisted endoscopic full thickness resection in gastroduodenal submucosal lesions: A large, multicentre study (with videos). *Dig Liver Dis* Published online October 2025 PMID: S1590865825011156. doi:10.1016/j.dld.2025.09.014

[8] Ren Z, Lin SL, Zhou PH et al. Endoscopic full-thickness resection (EFTR) without laparoscopic assistance for nonampullary duodenal subepithelial lesions: our clinical experience of 32 cases. *Surg Endosc* 2019; 33 (11): 3605–3611. doi:10.1007/s00464-018-06644-3

[9] Granata A, Martino A, Amata M, Ligresti D, Traina M. Gastrointestinal exposed endoscopic full-thickness resection in the era of endoscopic suturing: a retrospective single-center case series. *Videosurgery Miniinvasive Tech* Published online March 15 2021; 321–328. doi:10.5114/wiitm.2021.104496

[10] Panzuto F, Parodi MC, Esposito G et al. Endoscopic management of gastric, duodenal and rectal NETs: Position paper from the Italian Association for Neuroendocrine Tumors (Itanet), Italian Society of Gastroenterology (SIGE), Italian Society of Digestive Endoscopy (SIED). *Dig Liver Dis* 2024; 56 (4): 589–600. doi:10.1016/j.dld.2023.12.015

OP220 Characteristics and endoscopic diagnosis of superficial non-ampullary duodenal epithelial tumors with gastric-type phenotype: A Multicenter Study

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DOI 10.1055/s-0046-1820875

Aims Superficial non-ampullary duodenal epithelial tumors (SNADET) are rare but have been increasingly reported in recent years. Phenotypes of SNADET are classified into gastric-type, intestinal-type, and mixed-type. Among these, gastric-type is less common and remains poorly understood. It is also considered to have a higher histological malignancy, making preoperative diagnosis highly significant. The aim of this study was to clarify the histopathological features of gastric-type SNADETs and to explore the feasibility of endoscopic diagnosis for gastric-type SNADETs using endoscopy.

Methods Cases of gastric-type SNADETs resected endoscopically or surgically at four high-volume centers in Japan between Jan 1997 and Dec 2023 were retrospectively collected. Endoscopic images (white light and magnified-image enhanced endoscopy (M-IEE)) were re-evaluated by four endoscopic specialists at each institution. Histopathological evaluation involved re-performing HE and immunohistochemical staining, with central pathology review. Histological grade was made based on WHO criteria, and immunohistochemical positivity was defined as a staining rate of $\geq 10\%$.

Results From the 164 cases, we excluded recurrent lesions, non-neoplastic lesions, lesions with intestinal-type, and cases without M-IEE observation. This left 90 pure gastric-type SNADETs for analysis. The predominant cell type was pyloric-gland type in 50 cases and foveolar type in 40 cases. Histological grade was low-grade adenoma in 33 cases, high-grade adenoma in 49 cases, and carcinoma in 8 cases. Submucosal invasion was observed in 3 cases. The pyloric-gland type showed a higher proportion of males ($P=0.04$), a greater prevalence of macroscopic type 0-I ($P=0.03$), and a tendency toward lower nucle-

ar atypia ($P=0.009$). Conversely, the foveolar type had a higher proportion of macroscopic type 0-IIa ($P=0.02$) and higher tumor malignancy ($P=0.04$). Vascular visibility under M-IEE was significantly higher in the foveolar-type ($P=0.007$). No differences were observed in tumor location or tumor size. However, this study could not identify endoscopic findings predictive of tumor malignancy.

Conclusions It is difficult to diagnose the malignancy grade of gastric-type SNADET based solely on M-IEE endoscopic findings. Establishing new endoscopic diagnostic criteria, including qualitative assessment, is required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Beyond Cannulation: Next-Generation ERCP/EUS Access, Drainage and Devices

15/05/2026, 17:30–18:30

Aqua 1 + 2

OP221 CERES-BILAT Preliminary Results: A Randomized Trial Comparing CERES (ERCP + EUS-HGS) versus Bilateral ERCP in Unresectable Malignant Hilar Biliary Obstruction

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DOI 10.1055/s-0046-1820876

Aims Unresectable Malignant Hilar Biliary Obstruction (UMHBO) requires effective drainage of both liver lobes to reduce recurrent biliary obstruction (RBO). The CERES technique—ERCP for right-sided drainage combined with EUS-guided hepaticogastrostomy (EUS-HGS) for the left duct—may provide more durable drainage than bilateral ERCP alone. This preliminary analysis evaluates early outcomes of the ongoing randomized CERES-BILAT trial (► Table 1).

► Table 1 Preliminary Outcomes of CERES vs Bilateral ERCP in the CERES-BILAT Randomized Trial

Outcome	CERES (n = 9)	Bilateral ERCP (n = 10)	p-value
Clinical success at 2 weeks (%)	88.9 %	60.0 %	0.153
Total bilirubin at 2–4 weeks (mg/dL)	3.29 (2–8)	3.03 (1–18)	0.129
Procedure time (min)	127.2 ± 61.7	66.3 ± 42.1	0.021
Cholangitis (%)	12.5 %	33.3 %	0.466
Stent occlusion (%)	0 %	16.7 %	0.375
6-month RBO (%)	11.1 %	20.0 %	0.466
Time to RBO (days)	60 ± 46.9	35 ± 46.9	0.660
Hospital days	2.4 ± 0.5	4.2 ± 2.3	0.124

Methods Patients with Bismuth III–IV UMHBO were randomized 1:1 to CERES or bilateral ERCP. The primary endpoint is 6-month RBO. Secondary endpoints include technical and clinical success, bilirubin reduction, procedure time, ad-

verse events, time to RBO, and hospital stay. This interim analysis includes 19 patients (CERES n = 9; Bilateral ERCP n = 10)

Results Baseline characteristics were similar between groups. Technical success was 100% in both arms. Clinical success at 2 weeks was higher with CERES (88.9% vs 60.0%; $p = 0.153$), though not statistically significant. Procedure time was significantly longer in CERES (127.2 ± 61.7 vs 66.3 ± 42.1 min; $p = 0.021$). Adverse events were infrequent. Cholangitis occurred in 1 CERES patient versus 2 bilateral ERCP patients. Stent occlusion occurred only in the bilateral ERCP group. No severe complications (perforation, bile leak, peritonitis) were observed. RBO occurred later in CERES (mean 60 vs 35 days). Six-month RBO rate was 11.1% vs 20.0% ($p = 0.466$). CERES showed a trend toward shorter hospitalization (2.4 vs 4.2 days)

Conclusions Both CERES and bilateral ERCP demonstrated excellent technical success and acceptable safety. CERES showed favorable trends toward improved clinical success, fewer complications, longer time to RBO, and shorter hospitalization. Although not statistically significant due to limited sample size, these early findings suggest potential clinical advantages of CERES pending full trial completion

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP222 Endoscopic Ultrasound-Guided Delivery of Single-Dose Glucagon-like Peptide-1 Pancreatic Gene Therapy: Feasibility and Safety in a Porcine Model

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DOI 10.1055/s-0046-1820877

Problem to solve Ineffective glucagon-like peptide 1 (GLP-1) signaling within pancreatic islets is a root cause of β -cell dysfunction and a fundamental driver of type 2 diabetes (T2D) pathogenesis and progression. GLP-1 receptor agonists have become cornerstone therapies for the management of metabolic diseases such as T2D. However, their efficacy depends on chronic, supraphysiologic GLP-1 exposure, and systemic tolerability constraints prevent achieving therapeutically effective concentrations in the pancreas. There remains an urgent unmet need for durable, well-tolerated therapies that directly target pancreatic β -cell dysfunction and restore physiologic GLP-1 signaling.

Innovation We have developed a novel endoscopic ultrasound (EUS)-guided delivery system and single-dose adeno-associated virus (AAV) pancreatic gene therapy platform which enables durable, nutrient-responsive incretin production directly from β -cells. The delivery device includes a custom echogenic 27-gauge conical-tip needle with a lateral side port for improved EUS visualization and atraumatic fluid delivery, paired with a pressure-regulated infusion system for controlled administration. AAV9.INS.GLP1, an AAV9 gene therapy for T2D, encodes a human GLP-1 sequence driven by an engineered human insulin promoter to restrict GLP-1 expression to β -cells. We have previously shown in diabetic mice that a single intraperitoneal dose of AAV9.INS.GLP1 can durably improve fasting blood glucose to a greater extent than chronic daily administration of semaglutide. Here, we aim to evaluate the feasibility and safety of the clinical route-of-administration by targeting AAV9.INS.GLP1 directly to the pancreas via EUS-guided delivery in Yucatan pigs.

Results Animals received vehicle ($n = 2$) or AAV9.INS.GLP1 ($n = 6$) via EUS-guided intrapancreatic infusion, and histology, systemic markers of tissue toxicity, biodistribution, and transgene expression were evaluated over 6 weeks post-procedure. All procedures were successfully performed. Lipase, amylase, and troponin I levels remained in the normal range with only a transient, mild aspartate aminotransferase (AST) elevation resolving by day 3 post-procedure.

AAV9.INS.GLP1 EUS-guided targeting resulted in enriched pancreatic lobe transgene AAV9 transduction, GLP-1 transgene RNA expression and a subsequent 9.5-fold increase in active GLP-1 protein levels (0.19 pg/ μ g total protein) compared to vehicle controls (0.02 pg/ μ g total protein). Clinical, laboratory, and histologic evaluation revealed no toxicity findings. Dual pancreatic immunofluorescence analyses confirmed β -cell-restricted GLP-1 expression, with co-localization of GLP-1 and insulin in islets ($\sim 5\%$ insulin⁺/GLP-1⁺ cells across $\sim 25\%$ of islets) and no staining in exocrine tissue.

Conclusions These findings demonstrate that AAV9.INS.GLP1 can be safely and reproducibly targeted to the pancreas using a custom EUS-guided delivery system to achieve β -cell-specific GLP-1 expression without local or systemic toxicity. Single-dose GLP-1 pancreatic gene therapy represents a paradigm shift toward a durable, well-tolerated therapy that addresses β -cell dysfunction as a root cause of T2D. A first-in-human trial of AAV9.INS.GLP1 is planned for 2026.

Conflicts of Interest Jacques Bergman is a member of the Fractyl Health, Inc. Scientific and Clinical Advisory Boards, Christopher C. Thompson is a member of the Fractyl Health, Inc. Board of Directors and a stock option holder, Linda S. Lee is a consultant and clinical advisor for Fractyl Health, Inc.; Jacob Wainer, Michael Biasella, Sara Morneau, Lindsay Schulman, Nicole Picard, Jessie Von Stetina, Rebecca Reese, Lin Quek, Camila Lubaczewski, Joan Sabadell-Basallote, Suya Wang, Abdul Alhamood, Keiko Ishida, Alice Liou Fitzpatrick, Emily Cozzi, Shimyn Slomovic, Harith Rajagopalan, and Jay Caplan are employees of Fractyl Health Inc, and stock or stock option holders, Harith Rajagopalan is also a member of the Fractyl Health, Inc. Board of Directors.

OP223V EUS-guided removal of fishbone: a potentially secure and scalable approach

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DOI 10.1055/s-0046-1820878

Abstract Text A 57 years old man presented to our hospital due to abdominal pain. Computed Tomography of the abdomen revealed a linear dense shadow in the gastric antrum region and it extends to the head of the pancreas, with inflammatory exudation in the abdominal cavity, suggestive of a foreign body. After a multidisciplinary consultation, it was decided to perform endoscopic removal of the foreign body.

After the endoscope was inserted, the gastric wall was smooth and no puncture point was observed. Then, Endoscopic ultrasound (EUS) was performed to search the foreign body. Luckily, the foreign body was positioned and marked. Subsequently, the gastric wall was incised with a Dual knife and an IT knife. After thorough irrigation, A fishbone was found and removed. Finally, the incision was tightly closed with clips.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0d2828a8-b66b-404a-ac43-1f04641dc9a5/Uploads/19978_Video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP224 Impact of a dedicated advanced biliary cannulation course on difficult cannulation strategies – outcomes of a UK-wide advanced cannulation masterclass

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DOI 10.1055/s-0046-1820879

Aims Needle-knife fistulotomy (NKF) is an advanced cannulation strategy for difficult biliary access, yet formal training is inconsistent and many ERCPists report low confidence in performing and teaching it. We aimed to describe UK consultant ERCPists' baseline NKF experience, training and teaching confidence, and to evaluate the impact of a national series of advanced biliary cannulation masterclasses on NKF knowledge and intended use within a structured difficult-cannulation algorithm

Methods We delivered ten one-day advanced biliary cannulation masterclasses across the UK for 152 consultant ERCPists. Before the course, delegates completed an online questionnaire on NKF use, prior formal NKF training, and experience and comfort in training trainees (1–10 scale, 1 = not at all comfortable, 10 = very comfortable); NKF knowledge was scored on the same scale. Each masterclass combined didactic teaching, video-based discussion of varied ampullary morphology and group discussion of escalation pathways when standard cannulation fails. Core sessions covered NKF, double guidewire technique, transpancreatic septotomy and cannulation of papillae in diverticula. Using a stepwise ESGE-based framework, the technical steps of NKF were deconstructed and reinforced with hands-on model training, emphasising when to escalate and how to teach NKF within an algorithmic approach. After each course, delegates completed a post-course questionnaire capturing retrospective "before" and "after" NKF knowledge scores, intention to use NKF more frequently and to consider primary fistulotomy in selected cases. Self-rated knowledge of double guidewire, transpancreatic septotomy and diverticular cannulation were also collected. Descriptive statistics are reported (► Table 1).

► Table 1

Measure	Value
NKF knowledge before course (mean, 1–10)	5.4 (median 5)
NKF knowledge after course (mean, 1–10)	8.6 (median 9)
Will use NKF more often	94.3 % (115/122)
Will consider primary fistulotomy in select cases	79.5 % (97/122)

Results Of the 152 participants, 126 filled out the pre-course and 122 the post-course questionnaire. At baseline, 82.5 % (104/126) had used NKF for ductal access and 42.1 % (53/126) had performed primary fistulotomy; only 33.3 % (42/126) reported prior formal NKF training and 27.0 % (34/126) had ever trained trainees in NKF. Mean NKF knowledge was 5.8/10 (median 6). Comfort training trainees was 3.7/10 (median 3), with 14 % (18/126) rating their comfort $\geq 7/10$.

Post-course, mean NKF knowledge increased from 5.4 (median 5) to 8.6 (median 9) ($n = 122$), a mean gain of +3.2 points; 84 % (102/122) improved by ≥ 2 points and 66 % (81/122) by ≥ 3 points. Overall, 94.3 % (115/122) stated they would use NKF more often (68.9 % slightly more, 25.4 % significantly more), and 79.5 % (97/122) would consider primary fistulotomy in selected cases. Knowledge scores for double guidewire, transpancreatic septotomy and diverticular cannulation also improved across the series.

Conclusions Among UK consultant ERCPists, NKF is used but formal training and teaching are limited. A national series of ten focused masterclasses, incorporating video-based discussion, model training and an explicit escalation algorithm, was associated with substantial gains in NKF knowledge and a clear shift towards greater and earlier use, including primary fistulotomy in selected cases. Structured, morphology-based training that also reinforces other advanced cannulation strategies may help close the gap between everyday practice and teaching confidence, supporting safer dissemination of advanced biliary access techniques.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP225 Correlating EUS-guided Portosystemic Pressure Gradient measurement (EUS-PPG) with Shear Wave Elastography (SWE) and liver fibrosis to improve portal hypertension diagnosis

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DOI 10.1055/s-0046-1820880

Aims Aim of our study was to evaluate the correlation between EUS-guided portosystemic pressure gradient measurement (EUS-PPG) and EUS-guided shear wave elastography (EUS-SWE) with histological liver fibrosis (LF) in patients with suspected clinically significant portal hypertension (CSPH).

Methods This prospective, descriptive, single-centre cohort study included patients with suspected CSPH. Baseline assessment comprised transient elastography of the liver and spleen (FibroScan) and laboratory testing for FIB-4 score calculation. Endoscopic evaluation consisted of upper gastrointestinal endoscopy to assess signs of portal hypertension, followed by EUS using a linear echoendoscope (FujiFilm 740UT) connected to an Arietta-850 ultrasound system, under deep sedation. EUS-SWE was performed and liver stiffness recorded in kilopascals (kPa). EUS-PPG was measured using a standard 22G needle, with the gradient defined as the difference between mean portal venous and hepatic venous pressures. LF was determined histologically after EUS-guided liver biopsy with a 19G needle. The primary outcome was the correlation among EUS-PPG, EUS-SWE, and histological LF. Secondary outcomes included technical success, correlations with other clinical parameters, and adverse events. Correlation analyses were performed using Spearman's test and biserial correlation. Data are reported as mean values and percentages.

Results Nineteen patients were included (mean age 58.9 ± 11.5 years; 17 males, 85 %). Technical success was achieved in 18/19 cases (94.7 %), and no adverse events occurred. Mean PPG was 5.9 ± 4.5 mmHg (range 0–17), mean EUS-SWE was 18.6 ± 9.9 kPa (8.1–40.3), and mean liver FibroScan was 12.4 ± 11.2 kPa (4.1–54.7). Oesophageal varices were detected in 2 patients (10.5 %) and gastric varices in 1 patient (5.3 %). Histological fibrosis (METAVIR) was as follows: F0 ($n = 5$, 29.4 %), F1 ($n = 1$, 5.9 %), F2 ($n = 1$, 5.9 %), F3 ($n = 6$, 35.3 %), and F4 ($n = 4$, 23.5 %). Correlation between EUS-PPG and LF, liver FibroScan, and EUS-SWE was 0.548 ($p = 0.028$), 0.679 ($p = 0.003$), and 0.288 ($p = 0.247$), respectively. Correlation between EUS-SWE and liver FibroScan and LF was 0.579 ($p = 0.012$) and 0.699 ($p = 0.002$), respectively.

Conclusions EUS-PPG is a safe and feasible technique that correlates well with liver FibroScan and histological fibrosis. EUS-SWE appears to be a promising surrogate marker of liver fibrosis in patients with suspected portal hypertension.

Conflicts of Interest International Advisor Fujifilm: Julio Iglesias-García; José Lariño-Noia; Yessica Domínguez-Novoa; J. Enrique Domínguez-Muñoz

OP226 3D visualization enhances cannulation performance in ERCP simulation among novice trainees – simulator study

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DOI 10.1055/s-0046-1820881

Aims Selective biliary cannulation during ERCP is technically challenging, especially for beginners. Successful cannulation within 15 minutes can significantly reduce the risk of post-ERCP pancreatitis. While 3D visualization is used

in various medical fields, its role in ERCP training is unclear. This study aimed to evaluate the effect of 3D technology on cannulation performance and learning curve in novice endoscopists.

Methods Forty physicians without ERCP experience were enrolled: 20 gastroenterologists (with gastroscopy and colonoscopy experience) and 20 surgeons (with laparoscopic experience). Participants were randomized to 2D or 3D groups (wearing 3D glasses and using 3D processor, Medicaltek Taiwan) and performed biliary cannulation on ERCP simulator with haptic feedback (Accutouch, USA) replicating six different Vater papilla morphologies. Experts positioned the duodenoscope with the papilla in an en face view before each attempt. Time to successful cannulation was recorded across several trials per participant, with a limit of 15 mins. Five ERCP experts also tested the model under both conditions and provided subjective feedback.

Results Participants trained with 3D visualization demonstrated significantly faster skill acquisition compared with the 2D group. The 3D group reached the 90% competency threshold by attempts 5–6, whereas the 2D group achieved this level only around attempts 9–10, with several participants failing to reach full competency within the training window. Individual learning-curve plots showed lower variance and a steeper improvement trajectory in the 3D group, also greater heterogeneity and slower progression in the 2D group, indicating a higher cognitive load and less efficient depth perception during micro-manipulation tasks.

Conclusions This is the first randomised study to show that 3D visualization improves biliary cannulation performance and accelerates learning in novice ERCP trainees. Given its accessibility, 3D technology may be a valuable tool in early endoscopic training especially in difficult endoscopy procedures, such as ERCP or ESD. Further studies are warranted to evaluate its potential to improve real-life ERCP cannulation outcomes and reduce complication rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Outcome-Driven ESD: Precision in Action

15/05/2026, 17:30–18:30

Sky 2

OP227 Prevalence of submucosal invasion in a cohort of colonic and rectal polyps treated with endoscopic submucosal dissection: a Western retrospective multi-centre international study

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DOI 10.1055/s-0046-1820882

Aims Although ESD is preferred for rectal adenomatous lesions larger than 20 mm, there is less agreement related similar lesions located in the colon. There is current inconsistent evidence coming from both Eastern and Western centres, with different rates of submucosal invasive cancer (SMIC) in the colon and the rectum, with studies based on pEMR reporting lower rates especially in the right colon (5%), and studies based on ESD reporting higher rates (8–27%) [1–5]. We set up a European multicenter retrospective study to assess the prevalence of SMIC and high-grade dysplasia (HGD) in a cohort of colorectal LST treated by ESD.

Methods European centers were invited to fill in a database of consecutive patients. Clinical variables related to patients and procedures as well as the center's resection strategy for colorectal LST dissection (selective or universal colorectal ESD) were recorded. The prevalence of HGD and SMIC in the left colon (LC – splenic flexure to sigmoid) and right colon (RC – caecum to transverse colon) and rectum (RE) were recorded, and a logistic regression analysis was performed to test the data.

Results 19 European centers provided data on 3321 lesions, 824 in the RC, 496 in the LC and 2001 in RE. 1055 lesions were resected with an universal colorectal ESD approach, 2063 with a universal rectal – selective ESD colon approach, 205 with a selective colorectal ESD approach. There were statistically significant differences in the case mix of RC, LC and RE, with smaller lesions in the RC and LC when compared to RE (RC 40.8mm ± 16.4; LC 40.5mm ± 18.6; RE 51.3 ± 28.2mm p < 0.001). RE had higher prevalence of LST-G-M (57.0%; RC 38.2%; LC 35.7%, p < 0.001). LST-NG-FE and LST-NG-PD prevalence was higher in the colon (respectively, RC 21.1%; LC 17.1%; RE 5.6%, p < 0.001; RC 15.0%, LC 14.1%, vs RE 4.2% p < 0.001). Sessile lesions were more common in LC (16.1%) and RE (16.8%) than RC (6.9%, p < 0.001). The LC and RE had higher prevalence of SMIC when compared to the RC (RC 11.6%; LC 22.4%; RE 19.8% p ≤ 0.001). A multivariate analysis was carried out on the overall cohort and separately on the RC, LC and RE cohorts to find risk factors associated with SMIC (variables considered: age, gender, dimensions, resection strategy, nodular component, morphology – LST classification). On the overall cohort, right colon location and morphology LST-G-H are protective factors against the risk of SMIC. In RC, LST-G-M and LST-NG-PD are risk factors for SMIC. In LC, LST-NG-PD, sessile and semipedunculated lesions are risk factors for SMIC. Male gender and morphology other than LST-G-H (a part semi-pedunculated) were risk factors for increased SMIC in RE.

Conclusions Our current data suggest that ESD could be potentially adopted as universal strategy in the left colon and rectum, a selection strategy is advised on the right colon to achieve cost-effectiveness. Different odds ratio are associated with polyp morphology depending on the location. Right colon is a protective factor against the risk of SMIC, whereas left colon has similar rates to rectum.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Van der Voort V, Schaefer M, Wallenhorst T, Lepilliez V, Degand T, Le Baleur Y et al. Rectal versus colonic submucosal cancer rates and procedural outcomes in large non-pedunculated polyps: French ESD registry data. Gut 2025 gutjnl-2024-332970. doi:10.1136/gutjnl-2024-332970
- [2] Kobayashi N, Takeuchi Y, Ohata K, Igarashi M, Yamada M, Kodashima S et al. Outcomes of endoscopic submucosal dissection for colorectal neoplasms: Prospective, multicenter, cohort trial. Dig Endosc 2022; 34: 1042–51. doi:10.1111/den.14223

- [3] Ishigaki T, Kudo SE, Miyachi H, Hayashi T, Minegishi Y, Toyoshima N et al. Treatment policy for colonic laterally spreading tumors based on each clinicopathologic feature of 4 subtypes: actual status of pseudo-depressed type. *Gastrointest Endosc* 2020; 92: 1083–1094.e6. doi:10.1016/j.gie.2020.04.033
- [4] Arisha MA, Scapa E, Wishahi E, Korytny A. Impact of margin ablation after EMR of large nonpedunculated colonic polyps in routine clinical practice. *Gastrointest Endosc* 2024; 97: 559–67. doi:10.1016/j.gie.2022.10.036
- [5] Gauci JL, Whitfield A, Medas R, Kerrison C, Mandarino FV, Gibson D et al. Prevalence of Endoscopically Curable Low-Risk Cancer Among Large (≥ 20 mm) Nonpedunculated Polyps in the Right Colon. *Clin Gastroenterol Hepatol Off Clin Pract J Am Gastroenterol Assoc* 2024. doi:10.1016/j.cgh.2024.07.017

OP228 Endoscopic Submucosal Dissection vs Endoscopic Mucosal Resection in Laterally Spreading Colorectal Lesions: Short-Term Results of the “intERsection” Non-Inferiority Randomized Clinical Trial

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DOI 10.1055/s-0046-1820883

Aims The primary objective of the “intERsection” trial is to evaluate the need for surgery by comparing endoscopic submucosal dissection (ESD) and endoscopic mucosal resection (EMR) for laterally spreading colorectal lesions (LST) without signs suggestive of deep submucosal invasion. This analysis presents the histological and clinical outcomes during the first 30 days after the procedure.

Methods Multicenter, prospective, randomized non-inferiority clinical trial including LST-Non Granular Flat-Elevated lesions ≥ 20 mm and LST-G Mixed-type lesions ≥ 30 mm without signs suggestive of deep submucosal invasion. A non-inferiority margin of $<5\%$ excess surgeries for ESD versus EMR was established.

Results A total of 277 patients were considered eligible between December 2020 and February 2025. 47 patients had screening failures or met exclusion criteria. Ultimately, 121 patients (50.4%) were randomized to ESD and 119 (49.6%) to EMR.

In the ITT analysis, en-bloc resection rates were 76.7% in the ESD group vs 17% in the EMR group; RR 4.27 (95% CI 2.86 – 6.38; $p < 0.001$). Conversion from ESD to EMR occurred in 21.5% of cases vs 6% conversions from EMR to ESD; RR 3.32

(95% CI 1.57 – 7; $p < 0.001$). Among all included lesions, only 4.2% showed submucosal invasion, with no histological differences between groups. Delayed bleeding was more frequent in the EMR group: 16% vs 4%; RR 4.67 (95% CI 1.64 – 13.31; $p < 0.001$). Intraprocedural perforation was higher in the ESD arm: 13.3% vs 3.3%; RR 3.93 (95% CI 1.35 – 11.42; $p = 0.009$), with no differences in delayed perforation (2.5% in ESD vs 0% in EMR; RR 6.03 [95% CI 0.31 – 118.99; $p = 0.08$]).

The need for surgery for any cause was 4.1% (5 out of 121) in the ESD group vs 0% (0 out of 119) in the EMR group; therefore, so far, non-inferiority of ESD cannot be concluded ($\Delta = 4.1\%$; 95% CI -3.09% – 11.00%).

Conclusions For the moment, we cannot conclude that ESD is non-inferior to EMR regarding the need for surgery for any cause at 30 days after the procedure. ESD achieves a higher rate of en-bloc resection at the cost of a higher intraprocedural perforation rate and a trend towards increased need for surgery due to complications, while EMR was associated with a higher frequency of delayed bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP229 Multicenter outcomes of endoscopic intermuscular dissection for early rectal cancer: a retrospective cohort study

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Aims Early rectal cancers with features suggesting deep submucosal invasion pose a therapeutic dilemma: radical surgery provides oncologic safety but at the cost of organ loss and substantial functional impairment. Endoscopic intermuscular dissection (EID) offers a deeper plane of resection while preserving rectal wall integrity and may expand organ-preserving treatment options. However, real-world data on its effectiveness and safety remain limited, particularly outside of the Netherlands. This study provides the first multicenter Polish analysis of outcomes following EID for early rectal cancer [1].

Methods This retrospective multicenter cohort study included consecutive patients treated with EID for rectal invasive cancer across three tertiary centers in Poland. All procedures with at least partial, intentional EID performed between 2022 and 2025 were reviewed. Demographic characteristics, lesion features, procedural data, and histopathology were collected. Primary outcomes were technical success, R0 resection, and curative resection. Technical success was defined as successful intermuscular dissection with en-bloc resection. Curative resection was defined as R0 resection without histopathological high-risk features for lymph node metastasis (excluding sm2 and sm3 invasion).

Results Sixty-eight patients (mean age 66.4 years; 52.9% men) with 68 lesions were included. Median lesion size was 34 mm (IQR 20–40 mm), and the mean distance from the dentate line was 49 mm. Paris classification types were sessile (Is) in 33 lesions (48.5%), depressed (IIc/IIIs) in 32 (47.0%), and flat/elevated (IIa/IIb) in 3 (4.4%). JNET classification was 2B in 43 lesions (63.2%) and 3 in 19 (27.9%); and 6 unclassified. Ulceration was present in 20 lesions (29.4%). Mean procedure time was 54 minutes; defect closure was performed in 27 patients (39.7%). Technical success was reached in 65 of 68 cases (95.6%; 95%

CI 88.8–98.4). An R0 resection was achieved in 59 patients (86.8%; 95% CI 76.9–92.9). Final pathology showed T1 cancer in 46 patients (67.6%), T2 in 19 (27.9%), and T3 in 3 (4.4%). Histological high-risk features included lymphovascular invasion in 12 patients (17.6%), high tumor budding in 7 (10.3%), and poor differentiation in 1 (1.5%). Overall, curative resection criteria were met in 39 (57.4%; 95% CI 45.2–69.0). Adverse events occurred in 8 patients (11.8%; 95% CI 6.1–21.5%), with the highest severity graded Clavien–Dindo IV.

Outcomes by T stage

In T1 cancers (n = 46), R0 resection was achieved in 45 patients (97.8%) and curative resection in 39 patients (57.4%; 95% CI 45.2–69.0). In T2 cancers (n = 19), R0 resection was achieved in 14 patients (73.7%). Potential curative resection in T2 cancers defined as R0 resection without additional high-risk histological features (excluding depth of invasion) was achieved in 10 patients (52.6%).

Conclusions EID achieves high technical and curative resection rates in early rectal cancer and expands the potential for organ-sparing, multimodal strategies in higher-risk cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] doi:10.1136/gutjnl-2024-334612

OP230 Real-World Performance of Colorectal ESD in Europe: A Multicenter Experience Across 19 Expert Centers and Comparison with Asian Outcomes

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DOI 10.1055/s-0046-1820885

Aims Colorectal endoscopic submucosal dissection (ESD) is widely established in Eastern countries, whereas its diffusion in Western settings has been slower,

partly due to concerns regarding feasibility, safety, and reproducibility [1–4]. This study aimed to assess real-world outcomes of colorectal ESD performed in high-expertise European centers and to compare these results with existing Asian and Western data.

Methods This retrospective multicenter study included consecutive patients undergoing colorectal ESD in 19 European referral centers (2010–2025). Demographic, procedural, and histopathological variables were collected. Outcomes (en bloc, R0, perforation, bleeding, delayed bleeding, delayed perforation, surgery for complication) were analyzed and compared with available Asian and Western literature (chi-square test) [5, 6].

Results A total of 3504 colorectal ESDs were analyzed. Median age was 69 years (Male 57.2%; Female 42.8%), and median lesion size was 40 mm. Median procedure time was 100 minutes, and CO₂ was used in 90.2% of procedures. Overall procedural success was 89.6%, with en-bloc resection in 89.1% and R0 resection in 77.4%. The overall complication rate was 9.13% (perforation 4.25%, bleeding 2.57%, delayed bleeding 2.05%, delayed perforation 0.46%); surgery for complications was required in only 0.43%. Compared with recent Western data (Singh 2023) [2], en bloc resection rates (89.1% vs 84.6%) were significantly higher in our cohort ($p < 0.001$), while perforation (4.25 vs 5.5%), bleeding (2.57% vs 4.1%), and need for surgery due to complications (0.43% vs 1.8%) were significantly lower ($p < 0.01$). These findings indicate a substantial improvement over previously reported Western performance, approaching outcomes observed in Asian cohorts, although intraprocedural bleeding and perforation remained higher than in Kobayashi et al. (0.7% and 2.6%) [3, 4]. Differences in adverse-event definitions across studies must, however, be acknowledged. Importantly, the need for surgery due to complications in our series was comparable to that reported in Asian cohorts (0.43% vs 0.5%/0.8%). En bloc resection rates in our study were significantly lower than the highest rates reported in the large Japanese cohort by Kobayashi (96.9%) and in the Asian reference series by Fuccio (93%) ($p < 0.001$) [3, 4]. R0 resection rates remained significantly lower than those reported by Fuccio (85.6%; $p < 0.001$) but did not significantly differ from those in the Kobayashi cohort (77.4%; $p = 0.21$), while still aligning with the upper range of previously published Western outcomes (77%) [2].

Conclusions In high-volume European centers, colorectal ESD now achieves safety outcomes comparable to leading Asian series, with a markedly lower need for surgery than previously reported in Western cohorts. R0 resection rates mirror those of the large Japanese Kobayashi cohort, though en bloc rates remain slightly lower than long-established Asian programs. These results support wider European adoption of colorectal ESD, alongside continued development of structured training pathways. Prospective studies are needed to standardize outcome measures and enable robust international comparisons.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ghadessi M, Tang R, Zhou J, Liu R et al. A roadmap to using historical controls in clinical trials – by Drug Information Association Adaptive Design Scientific Working Group (DIA-ADSWG). *Orphanet J Rare Dis* 2020; 15 (1): 69
- [2] Sessler DI, Imrey PB. *Clinical Research Methodology 2: Observational Clinical Research*. Anesth Analg 2015; 121 (4): 1043–1051
- [3] Fuccio L, Hassan C, Ponchon T et al. Clinical outcomes after endoscopic submucosal dissection for colorectal neoplasia: a systematic review and meta-analysis. *Gastrointest Endosc* 2017; 86 (1): 74–86.e17
- [4] Kobayashi N, Takeuchi Y, Ohata K et al. Outcomes of endoscopic submucosal dissection for colorectal neoplasms: Prospective, multicenter, cohort trial. *Dig Endosc* 2022; 34 (5): 1042–1051
- [5] Singh RR, Nanavati J, Gopakumar H et al. Colorectal endoscopic submucosal dissection in the West: A systematic review and meta-analysis. *Endosc Int Open* 2023; 11 (11): E1082–E1091
- [6] Fujiya M, Tanaka K, Dokoshi T et al. Efficacy and adverse events of EMR and endoscopic submucosal dissection for the treatment of colon neoplasms: a meta-analysis of studies comparing EMR and endoscopic submucosal dissection. *Gastrointest Endosc* 2015; 81 (3): 583–95

OP231 Knife based Endoscopic resection of recurrent rectal lesion post previous endoscopic or surgical treatment – UK multicentre retrospective study

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DOI 10.1055/s-0046-1820886

Aims Recurrent rectal lesions pose a significant therapeutic challenge due to scarring and local fibrosis. These changes often necessitate endoscopic dissection at a deeper level than the submucosa to achieve complete resection. This study aims to assess whether the depth of resection for recurrent rectal lesions is dependent on the type of index therapy (endoscopic vs. surgical) and the technical success of endoscopic therapy for recurrent lesions according to the depth of resection.

Methods This multicentre retrospective study included 199 rectal recurrent lesions from eight UK centres. The primary outcome was comparison of the deepest resection level between previous endoscopic therapy (P-E) and previous transanal surgery (P-S) cases. Secondary outcomes included technical success (R0 rate), adverse events and recurrence rates according to resection depth and technique (knife assisted-EMR, ESD, and deeper dissection: intermuscular, subserosa and full thickness resection).

Results Out of the 199 cases, 133 cases (67 %) had P-E and 61 (31 %) P-S; data was not available for five cases. Deep dissection was required in 36 % of P-S recurrences compared with 20 % of P-E recurrences ($p = 0.04$). ► **Table 1**

► **Table 1**

Depth of Dissection	P-E (n = 118)	P-S (n = 45)	Total
Submucosal dissection	94 (80 %)	29 (64 %)	123
Deeper dissection – total	24 (20 %)	16 (36 %)	40
• Intermuscular	20	9	29
• Subserosa	0	1	1
• Full thickness	4	6	10
Total (available data)	118	45	163

$p = .04$

Lesions were treated with Hybrid (n = 31, mean lesion size 58.8mm, IQR = 30 – 70), ESD (n = 96, 40.2mm, IQR 21–50) or Deeper dissection (n = 41, 52.3mm, IQR 38 – 70).

R0 resection was achieved in 66 % of ESD cases and 83 % of deeper dissections. Only 2 knife-assisted EMR resections (4 %) were R0; the remaining cases were either Rx (85 %) or R1 (11 %).

Among the 141 patients with follow up data, recurrence was observed in 16/47 (34 %) knife assisted-EMR cases, 5/69 (6 %) ESD and 2/25 (8 %) deeper dissection group.

Adverse events were rare and included two cases (4.9 %) of post polypectomy syndrome (PPS), both in the deeper dissection group, and five (4.7 %) post polypectomy bleeding (PPB) cases, all post ESD.

Conclusions The recurrences from prior transanal surgery were significantly associated with the need for deeper dissection when compared with prior endoscopic therapy. Resections extending beyond the intermuscular level were associated with higher R0 rates, suggesting potential benefit in selected recurrent cases with significant fibrosis. All knife-based endoscopic approaches were safe treatment options; however, ESD and Deeper dissection achieved superior clearance of rectal recurrences, while knife-assisted EMR was associated with the highest recurrence rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Optimizing EMR for today's practice: Part 2

16/05/2026, 08:30–09:30

Aqua 1 + 2

OP232 Endoscopist Performance May be a Stronger Determinant of Recurrence than Polyp or Procedure Characteristics of Large Polyp EMR

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DOI 10.1055/s-0046-1820887

Aims The extent of variation between endoscopists and its impact on recurrence remains poorly defined. We aimed to quantify endoscopist-level variation in EMR recurrence and to identify endoscopist characteristics associated with this variation ► **Table 1**.

► Table 1

Risk factor	OR	95 % CI
Endoscopist recurrence rate		
Q4 (highest) vs Q1 (lowest)	3.05	2.05-4.53
Polyp		
Size ≥40 mm (vs 20-39 mm)	2.24	1.66-3.02
Procedure		
Cold (vs hot EMR)	2.17	1.57-2.99
Margin ablation (no/incomplete vs complete)	1.99	1.44-2.75
Intraprocedural bleeding (yes vs no)	1.59	1.06-2.37
Submucosal lift (no/partial vs complete)	1.54	1.10-2.15

Methods We analyzed data from three prospective studies enrolling patients who underwent EMR of ≥20-mm non-pedunculated colorectal polyps and subsequently completed at least one surveillance colonoscopy with identification of the resection site. Participating endoscopists completed a structured survey describing their resection practices and experience. The primary outcome was residual or recurrent neoplasia at first surveillance colonoscopy (hereafter termed recurrence). Endoscopist-specific recurrence rates were estimated using shrinkage-adjusted predictions from mixed-effects multivariable logistic regression models, incorporating endoscopist case volume and adjusting for polyp complexity and procedural factors (including size, histology, intraprocedural bleeding, and resection technique).

Results A total of 1,629 patients with 1,718 large polyps met the inclusion criteria. EMR was performed by 79 endoscopists, with corresponding survey data available for 1,450 EMRs (84.4%). Among endoscopists performing at least 20 EMRs, crude recurrence rates varied widely from 0% to 38.3% (Figure 1). After shrinkage adjustment, endoscopist-level incomplete resection rates ranged from 7.5% to 35.9% across all EMRs. Recurrence was nearly three-fold higher among endoscopists in the highest versus lowest recurrence quartile (odds ratio [OR] 2.99, 95% confidence interval [CI] 2.01–4.45), an effect that exceeded the magnitude of association observed for large polyp size (≥40 mm; OR 1.99) or resection method (cold vs hot EMR; OR 2.06, 95% CI 1.63–2.61), the next two strongest predictors. Differences across endoscopist quartiles were more pronounced for cold EMR than for hot EMR (OR 3.40, 95% CI 2.11–5.49 vs OR 4.59, 95% CI 1.84–11.41). In contrast, years since training, advanced endoscopy training, lifetime colonoscopy volume, and EMR volume (hot or cold) were not associated with recurrence after EMR.

Conclusions This first formal assessment of endoscopist effects on recurrence after large polyp EMR demonstrates substantial variation across endoscopists. The effect of variation on recurrence was greater than traditional polyp or procedure risk factors, including polyp size and resection technique (cold vs hot EMR). Prior training or procedural volume was not associated with this variation, highlighting operator skill as a critical determinant of EMR quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP233 Implementation of ESGE Recommendations on Margin Thermal Ablation After EMR: Preliminary results from the TABLE Multicentre Real-World Study

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DOI 10.1055/s-0046-1820888

Aims Margin thermal ablation (MTA) following endoscopic mucosal resection (EMR) of large non-pedunculated colorectal lesions has been shown to markedly reduce recurrence in studies conducted in tertiary referral centres after dedicated training in the ablation technique, and is now recommended by ESGE (2024). However, data on real-life implementation across centres with variable case volumes and expertise, including referral units, are limited. This study aimed to evaluate the feasibility, safety and early outcomes of MTA in a multi-centre routine-practice setting.

Methods This was a prospective multicentre observational study conducted across 14 Italian endoscopy units performing therapeutic colonoscopy. Consecutive patients undergoing EMR for colorectal lesions ≥20 mm were included. Demographic, lesion and procedural characteristics, completeness of MTA, and peri- and post-procedural adverse events were collected. Surveillance was planned according to European guidelines and local recurrence was assessed endoscopically. The primary endpoint was the feasibility of MTA in routine practice, while secondary endpoints included local recurrence and the occurrence of adverse events.

Results A total of 498 patients with 517 lesions were included (mean age 70.0 ± 10.4 years; 54.9% male). Most lesions were proximal (76.1%) and classified as level 3–4, according to the Size–Morphology–Site–Access scoring system (SMSA). Piecemeal EMR was performed in 80.1% of cases, yielding 98.2% of complete resections, while en-bloc resection was achieved in 19.9%. Overall, MTA was applied in 66.9% of lesions, including 50%, 72.6%, and 96.2% of en-bloc, piecemeal, and complete piecemeal EMR, respectively. Complete MTA was achieved in 91.4% of complete piecemeal resections. Adverse events occurred in 12.4% (intraprocedural bleeding 8.9%, intraprocedural perforation 1.0%, delayed bleeding 2.3%, delayed perforation 0.2%), consistent with expected EMR risks. Follow-up was available for 332 lesions (64.2%). Overall recurrence was 15.7%, with substantial inter-centre heterogeneity (0–35%). Recurrence after complete piecemeal EMR with complete MTA was 14.5% (0–24.2% across centres) versus 26.4% (0–45.5%) following incomplete or omitted MTA (p = 0.02). Incomplete/omitted MTA was more frequent in SMSA 4, lesions ≥40 mm, and proximal locations [1–4].

Conclusions MTA was feasible and widely adopted across centres with different procedural volumes and expertise. Nonetheless, its effectiveness varied according to lesion complexity. The marked inter-centre heterogeneity in both adoption and outcomes highlights the impact of operator experience and local workflows, reinforcing the need for harmonised protocols, competency-based training and standardised ablation techniques to ensure consistent performance and optimise recurrence reduction across different practice settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gauci JL et al. Margin thermal ablation eliminates size as a risk factor for recurrence after piecemeal endoscopic mucosal resection of large non-pedunculated colorectal polyps. *Gut*. 2025
- [2] Sidhu M et al. Outcomes of Thermal Ablation of the Mucosal Defect Margin After Endoscopic Mucosal Resection: A Prospective, International, Multi-center Trial of 1000 Large Nonpedunculated Colorectal Polyps. *Gastroenterology*. 2021
- [3] Klein A et al. Thermal Ablation of Mucosal Defect Margins Reduces Adenoma Recurrence After Colonic Endoscopic Mucosal Resection. *Gastroenterology*. 2019
- [4] Ferlitsch M et al. Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024. *Endoscopy*. 2024

OP234 Multicentre outcomes of a selective resection algorithm for Large Non-Pedunculated Rectal Polyps

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 DOI 10.1055/s-0046-1820889

Aims Endoscopic Mucosal Resection (EMR) is established as the standard of care for large (> 20mm) nonpedunculated colonic polyps. However, similar lesions in the rectum are at greater risk of submucosal invasive cancer. Therefore selective use of Endoscopic Submucosal Dissection (ESD) to achieve en bloc resection offers therapeutic advantages in the management of large (> 20mm) Non-Pedunculated Rectal Polyps (LNPRPs). A rectum-specific selective resection algorithm (SRA) has been proposed as a means of achieving cure of early cancer, but multicentre data is absent. We evaluated the effectiveness of an SRA for LNPRPs in a large, multinational, prospective cohort (► **Table 1**).

► **Table 1** Oncological outcomes

	EMR (n = 7)	ESD (n = 52)	P Value
SMIC	7	52	<0.001
No high risk features	2	10	0.622
En bloc resection	4	44	0.071
R0 resection	4	36	0.415

Table 4: Values are nLesions with no high risk features determined eligible for endoscopic cure

Methods LNPRPs at four tertiary centres were enrolled over 44 months. LNPRPs with endoscopic features of SMIC [Kudo pit pattern Vi; JNET 2B], or increased risk of covert SMIC based on morphology [Paris 0-Is or 0-Ila + Is nongranular, 0-Ila + Is granular with a dominant nodule ≥ 10 mm] underwent ESD. Remaining LNPRPs underwent EMR. Outcomes included en bloc with R0 resection rates for SMIC, detection of SMIC following EMR, and adverse events.

Results A total of 404 LNPRPs (median size 40 mm IQR 30-50mm) were referred: 234 (58%) underwent ESD, 166 (41%) EMR, and 4 (1%) were referred directly to surgery. ESD and EMR cohorts were comparable for patient age and comorbidity and lesion size. No significant adverse events occurred. In the ESD group, en bloc resection was achieved in 221 (94%) cases. Rates of SMIC (22.2% vs 4.2%, $p < 0.001$) and high-grade dysplasia (49.1% vs 28.3%, $p < 0.001$) were significantly higher in the ESD group. Among LNPRPs with low-

risk SMIC treated by ESD, 100% were cured. Two of seven SMIC in the EMR group were low risk and were removed en bloc with R0 resection.

Conclusions In a multicentre setting, a rectum specific SRA based upon optical evaluation effectively identified high-risk lesions requiring ESD, without resulting in overtreatment of benign lesions. Among polyps with SMIC, 20% were low-risk and amenable to cure by endoscopic resection. All low-risk cases in this cohort were removed en bloc with R0 resection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP235 Advances in colorectal endoscopic resection have altered incidence and risk factors for recurrence: a comparative study over two time periods

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 DOI 10.1055/s-0046-1820890

Aims EMR remains the primary therapeutic option for LNPCP in western practice, but new procedures and techniques are increasingly employed. Large published series previously defined expected rates of, and risk factors for, residual/recurrent adenoma after endoscopic resection (ER). However, these may no longer be relevant. We aimed to identify independent risk factors for recurrent/residual adenoma in a contemporary cohort of LNPCP treated by ER compared to a historical cohort.

Methods Patients with LNPCP treated by ER at a tertiary referral centre between January 2011 and September 2023 who had completed 6 month surveillance (SC1) were included. Patients were divided into contemporary (January 2018 – September 2023) and historical (January 2011 – December 2017) cohorts. Post-ER scars were examined using with magnification chromoendoscopy and NBI/BLI. Clinicopathological features significantly associated with recurrent/residual adenoma on univariate analysis were subjected to multiple logistic regression to identify independent risk factors.

Results 1517 ER were performed over the study period of which 946 met the inclusion criteria and had undergone SC1: 483 in the contemporary cohort and 463 in the historical cohort. In the contemporary cohort 313 (65%) were treated using ESD compared to 117 (25%) in the historical cohort ($p < 0.001$). En bloc resection was more frequently achieved in the contemporary cohort compared to the historical cohort (70% versus 33%, $p < 0.001$). Recurrent/residual adenoma at SC1 was detected in 2.5% in the contemporary cohort compared to 8.9% in the historical cohort ($p < 0.001$). For the historical cohort, multivariate analysis revealed that previous failed attempt at resection (OR 2.80, 95% CI 1.14-6.88, $p = 0.25$); piecemeal resection (OR 5.21, 95% CI 1.18-23.02, $p = 0.03$) and involvement of > 75% of the circumference of the lumen (OR 5.80, 95% CI 2.07-16.25, $p < 0.001$) were independently associated with recurrent/residual adenoma. However, for the contemporary cohort, only difficult access to the lesion (OR 4.24, 95% CI 1.21-14.78) was independently associated with recurrent residual adenoma at SC1.

Conclusions Significant changes have taken place in ER practice over the last decade. This study demonstrates this has led to a marked alteration in previously established expected outcomes and risk factors for recurrence. Furthermore, the increasing use of adjunctive measures and techniques such as ESD throughout the colorectum may help drive down recurrence rates with the advantage of producing high quality histopathological specimens and accurate diagnosis, leading to a reduction in surveillance requirements. These data should help define performance standards for advanced resection units as well as guide informed consent and decision making for patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP236 Risk factors for delayed perforation or sepsis following endoscopic resection of large non pedunculated colorectal polyps

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DOI 10.1055/s-0046-1820891

Aims The safety and efficacy of endoscopic resection (ER) as a first-line treatment for large non-pedunculated colorectal polyps (LNPCP) is well established. Significant complications are infrequent. Risk factors for immediate perforation have been described although it is frequently amenable to endoscopic closure and rarely results in significant deleterious sequelae. Delayed perforation or sepsis is a rare complication with potentially devastating consequences. Emergent surgery may be necessary with its attendant major complications. Risk factors for delayed perforation/sepsis after ER of LNCP are not well established. We analysed a large series of advanced ER of LNCP to identify factors associated with delayed perforation.

Methods Consecutive patients with LNCP treated by ER at a tertiary referral centre between September 2011 and September 2023 were included. Lesions were resected using EMR, piecemeal EMR and ESD. Univariate analysis was used to examine clinicopathological factors potentially associated with delayed perforation.

Results 1883 ER for LNCP were performed over the study period with a mean size of 46.4mm +/− 26.4mm (median 40mm, range 20-210mm). ESD was used for 890. Delayed perforation or sepsis occurred in 24 (1.3%) patients of which 8 (0.4%) required emergent surgery and 1 required CT guided drainage of an abscess. 3 patients developed sepsis after ESD of rectal lesions without evidence of perforation on CT with luminal contrast and required intensive care unit (ICU) management. There was no mortality. In patients who suffered a delayed perforation or sepsis, 54% of LNCP were in the right colon, 8% in the left colon and 38% in the rectum. Delayed perforation/sepsis was significantly associated with extreme size (OR 3.02, 95% CI 1.35-6.76, $p < 0.001$); difficult access (OR 2.63, 95% CI 1.16-5.97, $p = 0.02$); ESD (OR 4.08, 95% CI 1.52-10.98, $p = 0.003$) and long procedure time over 240 min (OR 5.20, 95% CI 2.02-13.36, $p < 0.001$) but not location, F2 fibrosis, or age.

Conclusions Delayed perforation/sepsis after ER of LNCP is rare, and a requirement for surgery extremely rare, but varies according to lesion and procedure characteristics. The consequences can be severe and include surgery, guided drainage or ICU admission. Delayed perforation/sepsis can affect patients with LNCP in any location including the rectum. Given the risk factors identified in this study, these data could help realistically counsel patients with LNCP of extreme size, difficult access and requiring complex prolonged procedures regarding the risks of delayed perforation and sepsis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP237 Short-Term Quality-of-Life Outcomes From the “intERsection” Non-Inferiority Randomized Clinical Trial Comparing Endoscopic Submucosal Dissection vs Endoscopic Mucosal Resection in Laterally Spreading Colorectal Lesions

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DOI 10.1055/s-0046-1820892

Aims Few studies have evaluated quality-of-life outcomes in patients undergoing endoscopic submucosal dissection (ESD) or endoscopic mucosal resection (EMR) for laterally spreading colorectal lesions (LST). We aim to compare quality of life before and after the procedure, and to assess differences in outcomes between the two techniques.

Methods Multicenter, prospective, randomized non-inferiority clinical trial included LST-Non Granular Flat-Elevated lesions ≥ 20 mm and LST-Granular mixed-type lesions ≥ 30 mm without signs of deep submucosal invasion. Quality-of-life assessment was performed using the EQ-5D questionnaire before the procedure and 30 days afterwards.

Results A total of 277 patients were considered eligible between December 2020 and February 2025. Screening failures or exclusion criteria applied in 47 patients. Ultimately, 121 patients (50.4%) were randomized to ESD and 119 (49.6%) to EMR. Both EQ-5D questionnaires were completed by 224 patients: 111 in the ESD arm and 113 in the EMR arm.

Overall, no statistically significant differences were observed in mobility ($Z = -0.94$; $p = 0.346$), self-care ($Z = -1.667$; $p = 0.09$), usual activities ($Z = -1.291$; $p = 0.297$), pain/discomfort ($Z = -1.177$; $p = 0.239$), or anxiety/depression ($Z = -0.943$; $p = 0.34$). However, the global visual analogue scale showed a significant improvement at 30 days following either procedure ($Z = -1.63$; 95% CI -3.1 to -2.42 ; $p < 0.01$).

When comparing techniques (ESD $n = 111$ vs EMR $n = 113$), no significant differences were found in mobility ($Z = -0.004$; $p = 0.99$), self-care ($Z = -0.99$; $p = 0.32$), pain ($Z = -1.04$; $p = 0.29$), anxiety/depression ($Z = -1.264$; $p = 0.206$), or in the change in visual analogue scale scores (ESD: $+1.61$ vs EMR: $+1.75$; 95% CI -3.02 to $+2.75$; $p = 0.462$). The only significant difference was observed in the perception of usual activities, which improved more in the EMR group ($Z = -2.307$; $p = 0.021$).

Conclusions Overall, patients showed improvement in the global visual analogue scale 30 days after either procedure. Between techniques, patients in the EMR arm experienced a significantly greater improvement in their perception of usual daily activities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

The art of the shortcut: EUS gastrojejunostomy and EDGE

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OP238 Outcomes of Single-Session EDGE with Clip Fixation: A large U.S. Experience

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Aims Endoscopic Ultrasound-Directed Transgastric ERCP (EDGE) has emerged as a minimally invasive alternative for patients with Roux-en-Y gastric bypass (RYGB) anatomy who require biliary or pancreatic intervention. EDGE procedure consists of EUS-guided gastrogastrostomy or jejunogastrostomy creation (step 1) followed by transgastric ERCP (step 2). The two steps can be performed during the same or separate endoscopic sessions. Single-session EDGE allows for expedited therapeutic treatment and reduces resource utilization but risks perforation with dislodgement of lumen apposing metal stent (LAMS). Here we describe our single center experience of performing single session EDGE with fixation.

Methods This is a single center retrospective study of patients with RYGB anatomy who underwent EDGE procedure at the University of California Irvine from March 2021 to November 2025. The primary outcome was stent migration. Secondary outcomes included technical and clinical success of procedure, rate of adverse events, size of LAMS, indwelling stent duration and choice of LAMS fixation.

Results A total of 37 patients (81.1 % female) were identified with RYGB anatomy who underwent EDGE procedure between 2021 to 2025. Indications for EDGE procedure included stone disease (n = 25, 67.5 %), malignancy (n = 8, 21.6 %) or bile leak (n = 4, 10.8 %). Single-session EDGE procedure was performed in 31 (83.7 %) of patients while dual-session EDGE was performed in 6 (16.2 %) with use of 20x10 mm size LAMS in 35 (94.5 %) cases. Technical success rate of EDGE procedure was 36 out of 37 cases (97.3 %), with 1 misdeployment of LAMS, salvaged with an over the scope clip. Clinical success as defined by success of ERCP for indication was 36 out of 37 cases (97.3 %). Within our initial experience of EDGE procedures during the first two years, 12 (32.4 %) cases were performed without LAMS fixation. From those cases, there was one reported case of LAMS migration in a patient who underwent single session EDGE using a 15 x 10 mm LAMS. The migration was seen following ERCP and treated with 20mm x 6 cm covered metal stent secured with an over the scope clip. For subsequent single-EDGE procedures, LAMS was fixed either with 3 clips in Tri-dent formation in 14 cases (35.1 %) or an over the scope clip in 10 cases (26.4 %) with no incidence of stent migration. Rates of adverse events were low with 1 LAMS misdeployment (2.9 %), 2 cases (5.8 %) of post-ERCP pancreatitis managed with supportive therapy and 1 case (2.9 %) of post-sphincterotomy bleeding. The median length of indwelling stent was 38 days with 12 (32.4 %) patients who did not return to follow-up for removal of LAMS. Fistula closure after LAMS removal was performed in 22 (59.4 %) of cases using over-the-scope clip while 1 case (2.9 %) closed naturally and 1 (2.9 %) case no fistula closure was performed at the request of the patient to help gain weight.

Conclusions Our single center retrospective experience demonstrates that single-session EDGE demonstrates high rates of procedural efficacy with low rates of adverse events and minimal events of stent migration, thus supporting it as a practical, safe and cost-effective alternative to two-staged approaches.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP239 Transenteric ERCP via EUS-guided anastomosis using LAMS in patients with surgically altered anatomy

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DOI 10.1055/s-0046-1820894

Aims Endoscopic ultrasound (EUS)-directed transenteric endoscopic retrograde cholangiography (ERCP, EDEE) using a lumen-apposing metal stent (LAMS) is a novel biliary drainage technique for patients with surgically altered anatomy. To evaluate the feasibility, safety and effectiveness of EDEE.

Methods A multicenter, retrospective study. We included consecutive patients with altered anatomy who underwent an EDEE. Surgical anatomy configuration, prior biliary drainage and ERCP indications were collected. The EUS-guided anastomosis technique was assessed. The primary outcome was the technical success of the EDEE. The secondary outcomes were the clinical success and the adverse events (AE).

Results Ninety-four ERCPs were performed in 55 patients (60 ± 16.2 years-old, 56.4 % male). The most frequent surgical anatomy was Roux-en-Y hepaticojejunostomy (n = 23, 41.8 %) and a prior biliary drainage was performed in 28 patients (50.9 %). Benign strictures were the most frequent indication (58.2 %). The most frequent techniques to identify the biliary limb were EUS imaging alone (n = 14, 25.5 %) and EUS-guided puncture of the biliary limb with retrograde opacification of the surgical hepaticojejunostomy (n = 14, 25.5 %). The procedure was performed using a direct freehand approach (n = 49, 89.1 %). Technical and clinical success rates of EDEE were 87.3 % and 93.8 %, respectively. The overall AE rate was 20 % (9.1 % LAMS-related). The rate of persistent fistula was 30.6 % with a median follow-up period of 3 months.

Conclusions The EDEE technique offers a new and effective approach for biliary drainage in patients with surgically altered anatomy, particularly in benign indications and/or when several ERCPs are expected.

Conflicts of Interest EPCR is consultant of Boston Scientific

OP240 Clinical Efficacy of Endoscopic Ultrasound-Guided Gastroenterostomy, Enteral Stenting, and Surgical Gastrojejunostomy for Malignant Gastric Outlet Obstruction: A Network Meta-Analysis

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DOI 10.1055/s-0046-1820895

Aims Malignant gastric outlet obstruction (MGOO) is a debilitating complication of peri-ampullary cancers. [1, 2] Treatment options include endoscopic ultrasound-guided gastroenterostomy (EUS-GE), enteral stenting (ES), and surgical gastrojejunostomy (SGJ). Recent, high quality randomized controlled trials (RCTs) [3–5] have emerged comparing these modalities. We aim to provide a comprehensive comparative assessment of EUS-GE, ES, and SGJ in MGOO.

Methods We performed a systematic review and network meta-analysis (NMA) of RCTs and observational cohort studies with causal adjustment analysis comparing EUS-GE to ES, EUS-GE to SGJ, or SGJ to ES for MGOO (PROSPERO: CRD420251133918). We searched PubMed, Embase, and Web of Science databases. The outcome measurements were rate of reintervention, rate of clinical success, rate of adverse events, post procedure length of hospitalization, and time to oral intake. Analyses were conducted in R software using the *gemtc* and *netmeta* package interfacing with JAGS for Bayesian random-effects NMA and MetaInsight. We evaluated outcomes using a Bayesian random-effects NMA model and summarized findings with network plots, surface under the cumulative ranking curve (SUCRA), and forest plots. Transitivity was assessed by comparing key effect modifiers across studies. Consistency between direct and indirect evidence was examined through Bayesian node-splitting analyses. Sensitivity analysis was also performed by restricting the modeling to only RCTs (► Table 1).

Results We included 6 RCTs and 10 causally adjusted cohort studies encompassing 1585 patients (376 EUS-GE, 726 ES, and 483 SGJ). All trials exclusively enrolled patients with MGOO, comparable tumor stage and baseline physical status. Assessment of the transitivity assumption showed comparable patient characteristics across treatment groups. EUS-GE ranked as the optimal approach in terms of lowest reintervention rate (SUCRA, 99.87 %), highest clinical success (SUCRA, 93.00 %), lowest adverse events (SUCRA, 90.13 %), shortest length of hospitalization (SUCRA, 95.00 %), and shortest time to oral intake (SUCRA, 82.99 %). Regarding the reintervention rate, EUS-GE significantly reduced the risk of reintervention compared with ES in the direct pairwise meta-analysis [risk ratio (RR) 0.19, 95 % confidence interval (CI) 0.10–0.36]. The NMA demonstrated that the reintervention rate remained significantly higher in SGJ group versus EUS-GE group [RR 4.1, 95 % credible intervals (CrI) 1.75–9.75], and in ES group versus EUS-GE group (RR 5.55, 95 % CrI 2.85–14.26). Bayesian node-splitting analyses revealed no inconsistencies. Sensitivity analyses restricted to RCTs were consistent with the primary analysis.

Conclusions Our network meta-analysis demonstrates that EUS-GE is superior to ES and SGJ in the management of MGOO. Large scale data on EUS-GE are now needed to monitor its safety as it disseminates outside expert centers.

Conflicts of Interest Jeremie Jacques is a consultant for Boston Scientific, Natalia Calo is a consultant for Boston Scientific, Marco Spadaccini is a consultant for Boston Scientific, Yen-I Chen is a consultant for Boston Scientific and ex-president of Chess Medical

References

- [1] Teoh AYB, Lakhtakia S, Tarantino I et al. Endoscopic ultrasonography-guided gastroenterostomy versus uncovered duodenal metal stenting for unresectable malignant gastric outlet obstruction (DRA-GOO): a multicentre randomised controlled trial. *Lancet Gastroenterol Hepatol* 2025; 10: e8–e16
- [2] van de Pavert YL, Kastelijns JB, Besselink MG et al. Endoscopic Ultrasonography-Guided Gastroenterostomy Versus Surgical Gastrojejunostomy for Palliation of Malignant Gastric Outlet Obstruction (Enduro. *Gastrointestinal Endoscopy* 2025; 101: S580
- [3] Bang JY, Puri R, Lakhtakia S et al. Endoscopic or surgical gastroenterostomy for malignant gastric outlet obstruction: a randomised trial. *Gut*. 2025
- [4] Kouanda A, Binmoeller K, Hamerski C, Nett A, Bernabe J, Watson R. Endoscopic ultrasound-guided gastroenterostomy versus open surgical gastrojejunostomy: clinical outcomes and cost effectiveness analysis. *Surg Endosc* 2021; 35: 7058–67
- [5] van der Merwe SW, van Wanrooij RLJ, Bronswijk M et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2022; 54: 185–205

OP241 Traffic Light System for Endoscopic Ultrasound-Directed Transgastric ERCP(EDGE) in Gastric Bypass Patients- Proof of concept of an access site classification system

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DOI 10.1055/s-0046-1820896

Aims This multicentre study assessed the Traffic Light System in routine EDGE practice, focusing on efficiency, success, and safety.

Methods Prospectively recorded registry data from three tertiary HPB centres (Jan 2023–Dec 2024) were retrospectively analysed. Adults with RYGB undergoing EDGE for biliary or pancreatic indications were included; exclusions were prior sleeve gastrectomy, incomplete records, or non-standard stents [1–3].

► Table 1

Treatment	Reintervention	Length of hospitalization	Adverse events	Time to oral intake	Clinical success
EUS-GE	99.87 % (1st)	96.91 % (1st)	90.13 % (1st)	82.99 % (1st)	93.00 % (1st)
ES	7.53 % (3rd)	52.53 % (2nd)	49.33 % (2nd)	65.34 % (2nd)	9.60 % (3rd)
SGJ	42.60 % (2nd)	0.56 % (3rd)	10.54 % (3rd)	1.67 % (3rd)	40.40 % (2nd)

Five blinded reviewers reassessed imaging and fluoroscopy to classify access sites using TLS criteria. The primary aim was to assess TLS predictive validity for technical and clinical success and adverse events (► **Table 1**).

► **Table 1**

Parameter	Green (n = 25)	Amber (n = 4)	Red (n = 2)	p-value
Age (median)	61	58	66	–
Sex	17F/8M	3F/1M	2F	–
Stent size	20 x 10 mm	20 x 10 mm	20 x 10 mm	–
Aetiology	Stones (21) Pancreatic CA (2) Indeterminate stricture (2)	Stones (2) Pancreatic CA (1)	Biliary Stones (2)	–
Two-stage procedures (n)	25	4	2	
Technical success	100 %	100 %	0	–
ERCP success 1st attempt	100	100	0	0.03
Repeat EDGE required (%)	0	0	100	<0.01
Procedure time (minutes)	48 ± 12	62 ± 15	78 ± 21	0.02
Adverse events (%) / LAMS migration (%)	0/0	0/0	0/0	–

Collected variables included demographics, indication, LAMS size, access site, procedure stage, technical and ERCP success, clinical success, procedure duration, and AEs. ANOVA was used for continuous data and Chi-square/Fisher's exact tests for categorical variables ($p < 0.05$).

Results Thirty-four EDGE procedures were performed, including 31 two-stage cases, all by highly experienced endoscopists (> 1,000 ERCPs and > 1,000 EUS). Patients were categorised as Green (n = 28), Amber (n = 4), and Red (n = 2), with similar median ages (61–66 years) and sex distribution. All received a 20 × 10 mm stent. Choledocholithiasis predominated across groups.

Two-stage procedures were used in thirty-one patients, who were appropriate for the subgroup analysis. Technical success was 100 % in Green and Amber groups but not achieved in the Red group. First-attempt ERCP success was 100 % in Green and Amber but 0 % in Red ($p = 0.03$). Repeat EDGE was required only in the Red group ($p < 0.01$). Mean procedure time increased from Green to Red (48 ± 12 vs 62 ± 15 vs 78 ± 21 min; $p = 0.02$).

No LAMS migration, adverse events, or clinical failures occurred in any group.

Conclusions The Traffic Light System (TLS) effectively predicted procedural performance during EDGE. Green and Amber sites consistently showed high technical success, shorter procedure times, and no adverse events, confirming them as safe and favourable access points. In contrast, Red Zone access was linked to technical failure, absent first-attempt ERCP success, longer procedures, and a universal need for repeat EDGE. Overall, the TLS offers a clear, practical framework for assessing technical difficulty, guiding LAMS site selection, and improving planning and outcomes in EDGE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Han S, Kolb JM, Edmundowicz SA, Attwell AR, Hammad HT, Wani S et al. The Success and Safety of Endoscopic Retrograde Cholangiopancreatography in Surgically Altered Gastrointestinal Anatomy. *Medical sciences [Internet]*. 2025;Mar 1 [cited 2025 Oct 26] 13: 18. Available from: <https://www.mdpi.com/2076-3271/13/1/18/html>
- [2] Khara HS, Parvataneni S, Park S, Choi J, Kothari TH, Kothari ST. Review of ERCP Techniques in Roux-en-Y Gastric Bypass Patients: Highlight on the Novel EUS-Directed Transgastric ERCP (EGDE) Technique. *Curr Gastroenterol Rep*. 2021; 23 (7):
- [3] Kedia P, Shah-Khan S, Tyberg A, Gaidhane M, Sarkar A, Shahid H et al. Endoscopic ultrasound-directed transgastric ERCP (EDGE): A multicenter US study on long-term follow-up and fistula closure. *Endosc Int Open* 2023; 11 (5): E529–37

OP242 Development of a Novel Anchor Device for EUS-guided Gastrojejunostomy

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DOI 10.1055/s-0046-1820897

Aims EUS-guided gastrojejunostomy (EUS-GJ) using a lumen-apposing metal stent (LAMS) has been increasingly performed; however, misdeployment and dislocation remain as major complications. Misdeployment may occur when the jejunum separates from the gastric wall after puncture, whereas dislocation may occur when either the gastric or jejunal flange becomes dislodged after stent deployment. As a preprocedural step for EUS-GJ, techniques using a 19-gauge needle to place an anchor have been reported; however, these approaches are technically complicated and time-consuming. Shortening the procedural time is essential for the success of EUS-GJ. Therefore, we developed a novel anchoring device that can be deployed in a single step using a 19G needle. Using this new device, we performed EUS-GJ in living pigs. This product is an investigational, non-approved medical device. The aim of this study is to evaluate the feasibility of a newly developed anchor device designed for EUS-GJ [1].

Methods Between May and November 2025, EUS-GJ using the novel anchor device was performed in five live pigs (30–36 kg). Necropsy was performed immediately in four pigs, whereas one pig underwent necropsy approximately one month later. First, an ENBD tube was advanced beyond the ligament of Treitz, and the jejunum was distended with saline. Using a GF-UCT 260 scope, the stomach and jejunum were fixed with a 20 mm anchor device prior to deployment of an electrocautery-enhanced metal stent. The novel anchor was preloaded at the tip of a dedicated 19G needle. After puncturing the saline-distended jejunum from the stomach, the distal flap of the anchor was deployed by pushing the stylet, and withdrawing the needle enabled fixation of the gastric and jejunal walls. We evaluated the success rate of anchor placement, the time required from 19G needle puncture to anchor deployment, and the presence of retained anchors between the stomach and jejunum at necropsy.

Results Anchor deployment was successful in all cases, and retention between the gastric and jejunal walls was confirmed at necropsy in all pigs. The mean deployment time was 57 seconds (34–85 seconds).

Conclusions The novel anchor device enabled simple and rapid wall fixation during EUS-GJ. This device may have the potential to reduce adverse events such as misdeployment or dislocation and improve the safety of EUS-GJ procedures.

Conflicts of Interest Stock ownership: KOEDA Inc.

References

- [1] Zhang K, Guo J, Sun S. Retrievable puncture anchor-assisted gallbladder drainage: Throwing the gallbladder a lifeline. *Endosc Ultrasound* 2017; 6: 355–358. doi:10.4103/eus.101_17 PMID: 29251268 PMID: PMC5752756

OP243 Unplanned Procedural Events (UPE) during EUS-guided Gastrointestinal and Enteroenteric Anastomoses (EUS-GEA) using Lumen-Apposing Metal Stents (LAMS): Treatment Approaches and Outcomes

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DOI 10.1055/s-0046-1820898

Aims UPEs during LAMS anastomoses (Teoh et al; PMID: 31367676) include stent misdeployment (SMD) and dislocation (SDL), which may or may not result in adverse events (AEs). Compared to other LAMS anastomoses, the potential for UPEs is greater with EUS-GEA. The incidence of SMD is highest during the initial 40 EUS-GEs (Ghandour et al PMID: 34352256), whereas SDL is associated with through-the-LAMS procedures. As EUS-GEA disseminates and novice operators adopt it, filling knowledge gaps about UPE management becomes paramount.

Main study aim: to describe treatment approaches and outcomes used to manage UPEs during EUS-GEA, including technical and clinical success rates. As secondary study aims, time to hospital discharge, and adverse AE rates were also analyzed.

Methods Retrospective, observational, multicenter study on consecutive patients who underwent EUS-GEA with LAMS and experienced SMD or SDL between 2015 and 2025 at 6 Spanish Hospitals. Technical success was defined as resolution of the UPE by endoscopy. Clinical success was defined as the absence of need for any subsequent reintervention to manage UPE-related AEs. The AGREE scale was used to grade AEs.

Results From a total of 860 EUS-GE performed for gastric outlet obstruction (GOO), biliary access in altered anatomy (BAAA), or lower intestinal obstruction (LIO), 73 patients (median: 52.1 % women; mean age 70.85 years; ASA III; Charlson Comorbidity Index 5) were identified with any UPE. Among the UPE cohort GOO (41.1 %) and BAAA (34.2 %) were the dominant clinical scenarios. Overall, 40% of patients had postoperative anatomy. SMD represented 79.5 % of UPEs, with Type I SMD as the most frequent (56 %). Most UPEs (91.8 %) were diagnosed intraprocedurally. Endoscopic management was attempted in 86.3 % of patients, with successful salvage of EUS-GEA achieved in 31.5 %. NOTES techniques were used in 37.1 %. Overall, technical success was 83.1 %, and clinical success 70.4 %. AEs occurred in 42.5 % of patients, with post-procedural pain as the most common AE. Five patients (6.8 %) experienced AGREE Grade V AEs (bronchoaspiration, intra-abdominal infection, and bleeding). An additional 3 patients died following surgical treatment or due to inability to tolerate oral intake. Six patients were never able to tolerate oral

diet, although most patients (78 %) achieved tolerance within < 24 hours of the UPE. Surgery was required in 13.7 % of cases, typically between 3 and 24 hours after the UPE. Intensive care unit admission occurred in 11.3 % overall. Among surgically managed patients, 50 % required ICU admission, compared with 6.6 % of those treated endoscopically ($p = 0.002$). Mean hospital stay was 10.92 days for endoscopically treated patients and 22.5 days for surgically treated patients.

Conclusions When UPEs are identified during the procedure, endoscopic intervention can salvage most instances of SMD/SDL, preventing AEs and minimizing negative clinical outcomes. Endoscopists performing EUS-GEA should be trained to promptly recognize and manage these uncommon yet potentially severe incidents

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Up against the bowel wall: ESD and beyond

16/05/2026, 08:30–09:30

Sky 2

OP244 Per-Rectal Endoscopic Myotomy (PREM) for Hirschsprung's Disease: A Multicentre Study Demonstrating Safety, Feasibility and Durable Clinical Outcomes

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DOI 10.1055/s-0046-1820899

Aims Hirschsprung's disease (HSCR) is a congenital disorder characterized by the absence of intrinsic ganglion cells and myenteric plexuses of the hindgut. Per-rectal endoscopic myotomy (PREM) is a minimally invasive third-space endoscopic procedure used in the management of Hirschsprung's disease.

To evaluate the technical outcomes and clinical success of PREM, assessed by improvement in stool frequency, reduction in laxative requirement and Wexner constipation score pre- and post-procedure.

Methods Retrospective analysis of 52 consecutive patients undergoing PREM across 12 tertiary centres (2015–2025). Demographic, procedural, postoperative recovery and functional outcome data (stool frequency, laxative requirement and Wexner score) were compared pre- and post-procedure using paired statistical testing.

Results Fifty-two patients underwent PREM with a mean age of 16.38 ± 17.9 years; 29 (55.8 %) were male. Congenital Hirschsprung disease was the indication in 82.5 % (33/52), acquired Hirschsprung in 26.9 % (14/52) and post-surgical recurrence in 9.6 % (5/52). Mean duration of symptoms was 94.80 ± 136.22 months. The recto-anal inhibitory reflex was absent in 80.8 % (42/52), a dilated colonic segment was present in all patients (100 %), and barium enema findings were confirmatory for Hirschsprung disease in 65 % (26/40) and suspicious in 32.5 % (13/40). The mean length of the aganglionic or hypo ganglionic segment was 7.38 ± 2.85 cm. Procedurally, the mean tunnel length was 13.4 ± 5.1 cm, mean myotomy length 10.9 ± 4.1 cm, and mean procedure duration 90 ± 33 minutes, with 100 % technical success. Median of first bowel sounds: 12 hours (IQR 12–12), passage of flatus: 12 hours (IQR 12–24), first bowel movement: 48 hours (IQR 24–48), and resumption of oral liquids: 24 hours (IQR 24–24). Median hospital stay was 5 days (IQR 12– 24 hours). Major adverse events occurred in 9.6 % (5/52), consisting of perforation ($n = 1$), clip dislodgement requiring surgical closure ($n = 1$), large tunnel entry defect requiring surgical repair ($n = 1$), surgical emphysema ($n = 1$), and localized perirectal collection ($n = 1$); all were managed successfully without mortality. Median follow-up was 14 months (IQR 3–46.5). Functional outcomes improved significantly with laxative usage decreasing from 4.3 ± 2.488 units to 1.6 ± 0.9 ($p < 0.0001$), stool

frequency increasing from once every 7.1 ± 4.29 days to once every 1.31 ± 0.55 days ($p < 0.0001$), Wexner constipation score decreasing from 23.76 ± 3.98 to 8.13 ± 1.19 ($p < 0.0001$).

Conclusions PREM is a safe and effective minimally invasive treatment for Hirschsprung's disease, offering sustained symptom improvement with very low complication rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP245 Real-World Practices and Barriers in ESD training: a Worldwide Comprehensive Survey

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DOI 10.1055/s-0046-1820900

Aims Endoscopic submucosal dissection (ESD) requires advanced expertise and technical skills. Japan provides the benchmark model through high case volumes and structured supervision, while Western curricula (ESGE/ASGE) emphasise supervised training and stepwise progression [1, 2]. Adherence to these frameworks and access to resources remain inconsistent globally.

Methods We aimed to explore real-world ESD training conditions, barriers, and adherence to curricula across diverse geographic and institutional contexts, from the perspectives of both trainees and trainers. A cross-sectional, anonymous web-based survey (April–July 2025) was conducted across 39 countries using a 55-item questionnaire on ESD training opportunities, barriers, and curriculum adherence. The survey was disseminated in English through national endoscopy society representatives. Trainees were defined as endoscopists proficient in basic endoscopy who had begun supervised ESD training, while trainers were experienced ESD endoscopists (> 100 procedures) involved in teaching. Institutional ESD volume was classified as low (< 50/year), medium (50–100/year), or high (> 100/year) [3].

Results Among 288 respondents from 39 countries (137 trainees, 151 trainers), most worked in academic or tertiary hospitals, with 43% from low-, 30% medium-, and 27% high-volume centres. Overall, males were predominant ($n = 226$, 78.5%). Structured training was reported by 47%, more frequently in medium and high-volume centres ($P < 0.001$), while adherence to ESGE/ASGE curricula reached 46%, ranging from 27% in low- to 70% in high-volume centres ($P < 0.001$) and varying across regions (highest in North-West Europe, lowest in South-East Europe; $P < 0.001$). Access to simulators was absent in nearly half, particularly in low-volume centres ($P < 0.001$). In vivo human training, animal models, and observerships were rated as the most valuable modalities, whereas lack of simulators, limited cases, and high costs were key barriers, without significant differences between trainees and trainers. Conversely, limited available time was perceived as a more impactful barrier for trainees compared to trainers ($P = 0.018$). Regarding training modalities, trainees rated traction ($P = 0.002$) and underwater ($P = 0.005$) techniques higher

than trainers, whereas no significant differences were found for pocket creation, closure-first strategies, or stepwise lesion difficulty. Quality indicators were tracked in 63% of institutions, with R0 and en bloc resection rates most valued, while dissection speed was de-emphasised. No substantial differences were observed between trainers and trainees. Thresholds for independent practice varied widely, with 42.7% indicating 10–25 and 32.6% 26–50 supervised cases. Geographic disparities emerged, with North-West Europe and Asia-Pacific hosting more high-volume centres, while Africa, the Middle East, and South-East Europe reported limited curriculum fulfilment, model access, and higher cost-related barriers (► Table 1).

► Table 1

Item, rating > 4	Overall (n = 288)	Trainee (n = 137)	Trainer (n = 151)	p
Impact of Hands-on simulator	74.3%	71.5%	76.8%	0.840
Barrier: Limited time for training	40.3%	35.0%	45.0%	0.018
Training modality: traction	71.2%	78.1%	64.9%	0.002
Training modality: underwater	50.7%	56.2%	45.7%	0.005
Training modality: Start with whole easy lesions	83.0%	86.9%	79.5%	0.03

Conclusions Global ESD training remains highly heterogeneous, with gaps in resources, curriculum implementation, and equitable access across regions and centre volumes. Limited trainer–trainee differences were observed; however, the marked male predominance underscores the need to address gender imbalance, together with strengthening structured programs and training resources worldwide.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Alfaroni L, Schaefer M, Wallenhorst T, Lepilliez V, Degand T, Le Baleur Y et al. Impact of Annual Case Volume on Colorectal Endoscopic Submucosal Dissection Outcomes in a Large Prospective Cohort Study. *Am J Gastroenterol* 2025; 120 (2): 370–8
- [2] Aihara H, Dacha S, Anand GS, Byrne KR, Chahal P, James T et al. Core curriculum for endoscopic submucosal dissection (ESD). *Gastrointestinal Endoscopy* 2021; 93 (6): 1215–21
- [3] Pimentel-Nunes P, Pioche M, Albéniz E, Berr F, Deprez P, Ebigbo A et al. Curriculum for endoscopic submucosal dissection training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2019; 51 (10): 980–92

OP246 Role of endoscopic enteral contrast instillation in the management of iatrogenic colonic perforations

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Aims Management of iatrogenic perforations is not yet standardized, with therapeutic options including endoscopic closure, surgery, or conservative treatment. Endoscopic therapy using conventional or OTSC clips can reduce the need for surgery, and enteral contrast instillation after closure may help confirm successful sealing on subsequent CT imaging. This study aimed to evaluate the efficacy and clinical outcomes of endoscopic closure for iatrogenic colonic perforations, and to assess the potential benefit of enteral contrast instillation in confirming defect closure and optimizing patient management

Methods A retrospective analysis was performed of all iatrogenic perforations detected during colonoscopy at our center between 2013 and 2025. Endoscopic closure was attempted whenever feasible. Clinical success was defined as complete resolution without surgical intervention. The use and effect of enteral contrast instillation were analyzed regarding its capacity to detect leaks, avoid unnecessary surgery, and shorten the time to oral diet resumption in successfully treated patients. Statistical analyses compared etiologies, techniques, and clinical variables

Results A total of 72 patients were included, 43 (59.7%) of whom were female, with a mean age of 70 ± 12 years. Endoscopic management was attempted in 60 cases (83.3%), encompassing all thermally induced perforations (44/44, 100%) and 16 of 28 traction-related perforations (57%; $p < 0.01$). Overall clinical success was achieved in 56/72 patients (77.8%), with a significantly higher rate for thermal perforations (42/44, 95.5%) compared to traction-related lesions (14/28, 50%; $p < 0.01$). Among those treated endoscopically, success was achieved in 56/60 (93.3%), with comparable outcomes between etiologies once closure was attempted (87.5% for traction-related vs. 95.5% for thermal; $p = 0.29$).

Closure was attempted using conventional clips in 48 cases (80%), OTSC clips in 11 (18.3%), and endoscopic suturing (Apollo) in 1 (1.7%). Enteral contrast was considered unnecessary in 12/60 (20%) cases due to confident complete closure with immediate discharge. Among the remaining 48 patients, contrast was instilled in 39 (81%) and omitted in 9. In one case with suspected incomplete closure, CT imaging revealed no leak, allowing conservative management and avoidance of surgery. Contrast leakage was reported in three patients (7.7%), all managed non-surgically (two minimal leakage and one retroperitoneal). Among successfully treated patients, the use of contrast instillation significantly shortened the time to diet reintroduction (2.1 ± 2.2 vs. 4.7 ± 3.5 days; $p = 0.02$), although leak detection understandably delayed refeeding (5.0 ± 3.6 vs. 1.9 ± 1.9 days; $p = 0.017$).

Conclusions Endoscopic treatment of iatrogenic colonic perforations is safe and highly effective, especially for thermic induced injuries. The adjunctive use of enteral contrast instillation appears to be a valuable tool to verify complete closure, guide management, and enable earlier and safer reintroduction of diet.

This approach may help avoid unnecessary surgical interventions and optimize recovery in selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP247 Risk factors for appendicitis recurrence after ERAT in patients with acute appendicitis: a multicenter cohort study with long-term follow-up

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DOI 10.1055/s-0046-1820902

Aims Endoscopic retrograde appendicitis therapy (ERAT) has emerged as a minimally invasive approach to treating appendicitis. This study aimed to assess the long-term safety and efficacy of ERAT and to develop a model predicting 1-year appendicitis recurrence in patients with acute appendicitis, to guide clinical decision-making (► Table 1).

Methods A retrospective analysis was conducted on clinical data from 435 patients with acute appendicitis who underwent ERAT at three hospitals between October 2017 and October 2024. 24 clinical variables were screened, and Spearman correlation analysis revealed correlation coefficients exceeding 0.6 between some variables. To address multicollinearity, LASSO regression was employed to identify key predictive factors in the training set. A predictive model was constructed using multivariate logistic regression, and a nomogram was developed.

Results All ERAT procedures were technically successful, and a clinical success rate of 92.4% was achieved. The median follow-up period was 37 months, and the overall recurrence rate was 16.1%; most recurrences (13%) were observed in the first year. Based on LASSO regression analysis, the final predictors identified were: age > 60 years (OR = 0.240, 95% CI: 0.069–0.838, $P = 0.025$), Alvarado score > 6 (OR = 6.874, 95% CI: 3.024–15.626, $P < 0.001$), appendicitis with fecalith (OR = 3.937, 95% CI: 1.749–8.866, $P = 0.001$), inexperienced operator (OR = 2.082, 95% CI: 1.089–3.982, $P = 0.027$), procedure time > 40 minutes (OR = 2.180, 95% CI: 1.067–4.456, $P = 0.033$), tapered transparent cap used (OR = 0.380, 95% CI: 0.170–0.847, $P = 0.018$), and appendix lumen distortion (OR = 12.331, 95% CI: 2.496–60.927, $P = 0.002$). Based on these seven predictive factors, a nomogram model was constructed to predict recurrence risk within one year after ERAT.

Conclusions ERAT is a safe and effective treatment for acute appendicitis. The risk of recurrence is highest within the first year. Seven independent risk factors for recurrence within one year after ERAT were identified, and a recurrence risk prediction model based on these predictive factors can assist in future clinical decision-making for ERAT.

► **Table 1** Analysis of risk factors for appendicitis recurrence after ERAT

	B	Standard error	Wald	P	OR (95%CI)
Age > 60 years old	-1.425	0.637	5.007	0.025	0.240 (0.069~0.838)
Recurrence Appendicitis	0.192	0.354	0.295	0.587	1.212 (0.606~2.426)
Alvarado score > 6	1.928	0.419	21.173	0.000	6.874 (3.024~15.626)
Anorexia	-0.691	0.364	3.605	0.058	0.501 (0.246~1.023)
RLQ tenderness	-0.772	0.427	3.272	0.070	0.462 (0.200~1.067)
Fecalith	1.371	0.414	10.951	0.001	3.937 (1.749~8.866)
Inexperience operator	0.733	0.331	4.912	0.027	2.082 (1.089~3.982)
Procedure time > 40 mins	0.779	0.365	4.568	0.033	2.180 (1.067~4.456)
Tapered transparent cap used	-0.968	0.409	5.597	0.018	0.380 (0.170~0.847)
Appendixlumen dilation	0.645	0.338	3.647	0.056	1.905 (0.983~3.693)
Appendix lumen distortion	2.512	0.815	9.498	0.002	12.331 (2.496~60.927)
Stent placement	-0.797	0.424	3.539	0.060	0.451 (0.196~1.034)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP248 Safety and efficacy of a novel traction-band-assisted endoscopic closure technique for large defects after gastric endoscopic full-thickness resection: a pilot study

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DOI 10.1055/s-0046-1820903

Aims Background and aims: Endoscopic full-thickness resection (EFTR) has gradually become the main choice for large gastric submucosal tumors. However, endoscopic closure after EFTR often leads to inversion of the mucosal layer and poor alignment of the muscularis propria, making secure closure challenging. Herein, we developed a novel “traction-band-assisted endoscopic closure (TBAEC)” technique using clips and dental floss. This study aimed to evaluate the safety and efficacy of the novel technique.

Methods From January 2025 to June 2025. 21 patients with gastric submucosal tumors (20-50mm) scheduled for EFTR were enrolled. Of which, 8 patients underwent TBAEC and purse string suture (PSS) was performed in the rest patients. The primary outcome was the technical success rate. Secondary outcomes included closure time and adverse events. TBAEC procedure is described as follows: 1) After marking the lesion, a normal saline solution was injected into the submucosa; 2) Clips and dental floss traction was fixed at the lesion edges after an incision into serosal layer around the lesion to achieve inner traction; 3) Clips were used to close the defect after five-fourth circumferential full-thickness resection; 4) Complete resection of the lesion was accompanied by complete closure of the defect; 5) Lesions were retrieved.

Results Complete closure was achieved in all of cases. The median closure time was significantly shorter in TBAEC group than PSS group (11.5 ± 3.6 vs 21.4 ± 5.3 , $P < 0.05$). Among adverse events, no patients occurred delayed perforation and bleeding in the TBAEC group and one case of delayed bleeding in the PSS group. Coagulation syndrome occurred in one individual treated with TBAEC, whereas two cases were identified in the PSS procedure. All patients were discharged safely with a median length of postprocedural hospital stay for the two groups were 3, 4 days respectively.

Conclusions This study demonstrated the feasibility, safety and efficiency of TBAEC for closing large defects following gastric EFTR. TBAEC is a simple, safe and easy-to-use technique for endoscopic closure. Further large studies are needed to evaluate its efficiency and safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP249 Efficacy of Artificial Dermis for Protecting Gastrointestinal Mucosal Defects

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DOI 10.1055/s-0046-1820904

Problem to solve Endoscopic submucosal dissection (ESD) for gastrointestinal tumors is widely adopted as a minimally invasive endoscopic treatment with high curative potential. However, serious complications such as delayed bleeding and perforation after ESD remain major concerns. To prevent these complications, several methods, including clip-based suturing techniques, endoscopic hand suturing, and polyglycolic acid (PGA) sheets, have been developed to protect mucosal defects. However, these approaches often face challenges such as technical difficulty for extensive ulcers, cumbersome procedures, and high costs.

Innovation To achieve reliable, simple, and cost-effective protection, we propose using an artificial dermis (Teldermis®) to cover gastrointestinal mucosal defects. This material consists of a 3-mm atelocollagen sponge with or without a 0.2-mm silicone layer. Through heat-induced cross-linking, the inherent biocompatibility of atelocollagen is preserved. When applied to mucosal or skin defects, the collagen layer facilitates dermis-like tissue formation via cellular infiltration from the wound bed. This artificial dermis has been successfully used for repairing severe skin and mucosal defects in burns, trauma, surgical wounds, and cleft palate surgery. In the endoscopic setting, it retains flexibility and sufficient thickness, offering excellent maneuverability, stable adhesion, and high protective potential.

Results We conducted ex vivo experiments using excised porcine stomach and rectum. In the first experiment, we investigated whether artificial dermis could be applied without damage using endoscopic clips. We successfully attached artificial dermis manually to four mucosal defects on the excised organs using clips without causing damage. In the second experiment, we investigated whether artificial dermis could be applied during actual endoscopic procedures. Using an endoscopic scope, four approximately 2 cm ESD ulcers were created inside unopened porcine stomachs and rectums. Subsequently, artificial dermis sheets (2.5cm) were delivered to the mucosal defects using grasping forceps, positioned to cover the defects, and fixed with clips. Delivery and clip fixation of the artificial dermis were successful in all mucosal defects. Fur-

thermore, we also conducted in vivo experiments in a live pig. Under general anesthesia, ESD ulcers approximately 2 cm in size were created at eight sites in the stomach (four in the body and four in the antrum) and two in the esophagus. In the stomach, two ulcers were left uncovered, two were covered with artificial dermis alone, two had collagen monolayer sheets clipped in place, and two had collagen-silicone bilayer sheets clipped in place. In the esophagus, one ulcer was left uncovered, while another had a collagen monolayer sheet clipped in place. Clip fixation was successfully achieved at all designated sites. Follow-up endoscopy after three days showed that only the collagen-silicone sheets in the stomach and the collagen monolayer sheet in the esophagus remained attached, while the others had detached. After two weeks, all ulcers had healed and scarred, and no major adverse events occurred during the observation period. Histopathologically, no increased inflammatory response or signs of infection were observed in the sites where artificial dermis was fixed compared to unfixed sites, suggesting a normal healing process.

Conclusions Collagen-based artificial dermis can be feasibly applied endoscopically to protect gastrointestinal mucosal defects. It can be easily fixed using only endoscopic clips, and the type with a silicone layer may offer longer retention and better protection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

CRC incidence detected through screening was slightly higher in the 70–74 group compared with the 50–69 group. The detection rate was 22.6 per 1,000 colonoscopies in the 50–69 group and 22.8 per 1,000 in the 70–74 group. The number needed to treat (NNT) was 44.3 in the 50–69 group versus 35.5 in the 70–74 group, indicating higher screening efficiency among older participants. Similarly, the incidence of advanced lesions was higher in the older cohort (34.7 % vs. 32.7 %).

Conclusions The extension of CRC screening to individuals aged 70–74 yields a similar cancer detection rate but a greater diagnostic efficiency, requiring fewer colonoscopies per cancer detected. Although preliminary, these results support the inclusion of this age group in population-based screening programs. However, the short follow-up period (9 months) limits definitive conclusions, and further studies are needed to assess long-term outcomes and the risk–benefit balance of endoscopic follow-up in elderly patients with advanced neoplasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Sustainability in Endoscopy Practice – Where are we in 2026?

WEO Joint Session: Quality in colonoscopy

16/05/2026, 10:00–11:00

Ocean 3 + 4

OP250 Colorectal cancer screening in patients aged 70–74: experience from a tertiary hospital

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DOI 10.1055/s-0046-1820905

Aims Colorectal cancer (CRC) is the third most prevalent cancer worldwide, with age being one of its main risk factors. The aim of fecal immunochemical test (FIT)-based screening programs is the early detection of neoplastic and preneoplastic lesions to reduce morbidity and mortality. In Spain, the national screening program traditionally includes individuals aged 50–69 years. Since October 2024, the Basque Autonomous Community has extended up to 74 years of age.

The aim is to analyze and compare the incidence of colorectal cancer and advanced lesions between the 50–69 and 70–74 age groups following the expansion of the screening program.

Methods A retrospective analysis was conducted at a tertiary hospital between November 2024 and July 2025, comparing both age groups. Advanced lesions were defined as those ≥ 10 mm, with a villous component and/or high-grade dysplasia. Participation rates, FIT positivity, colonoscopy completion, and detection rates were analyzed.

Results In the 50–69-year group (target population: 31,647), participation was 62.0 % (19,633). FIT was positive in 3.67 % (721), and colonoscopy was performed in 73.8 % (532). Among these, 12 cases of CRC (2.27 %) and 175 advanced lesions (32.7 %) were detected.

In the 70–74-year group (target population: 5,436), participation increased to 73.3 % (3,986). FIT was positive in 6.47 % (258), and colonoscopy was performed in 82.6 % (213). This group showed 6 cases of CRC (2.82 %) and 74 advanced lesions (34.7 %).

16/05/2026, 10:00–11:00

Aqua 1 + 2

OP251 Expired endoscopic devices remain sterile and functional: findings from an international multicentre study

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DOI 10.1055/s-0046-1820906

Aims The presence of expired medical devices represents both an environmental concern and a waste of healthcare resources. However, the magnitude of this problem has not been previously assessed. This study aimed to quantify the volume and cost of expired endoscopic devices and to evaluate their microbiological sterility, physicomachanical integrity, and ex vivo technical performance beyond the labelled shelf life.

Methods We conducted an investigator-initiated, prospective study between December 1, 2023, and May 30, 2025, across 25 endoscopy units from Europe, the UK, Canada and the USA. Expired endoscopic devices were inventoried during a one-week audit period at each centre. An institutional questionnaire was conducted to assess storage practices. Microbiological sterility and ex vivo functional simulation were assessed in randomly selected samples. Physicomachanical engineering tests were performed on selected devices, including a matched case–control study comparing expired devices with non-expired counterparts.

This study was funded by a research grant from the Spanish Society of Digestive Endoscopy (SEED).

Results A total of 1,448 expired devices were identified (median per centre 42, range 3–262), with an estimated total economic cost of €192,141.7 (average per centre €7,685.67). Of these, 273 were analysed for microbiological testing, 210 for ex vivo functional assessment, and 57 for physicomachanical evaluation. All tested devices were sterile (100%, 95% CI 98.6–100%). Except for one overtube, all devices retained functionality in ex vivo simulation (99.5%, 95% CI 97.4–99.9%). Physicomachanical testing showed no clinically relevant differences compared with non-expired devices. Only 6 centres (24%) reported having a written protocol to minimise the accumulation of expired endoscopic accessories, and just 3 centres (12%) had an electronic system in place for tracking expiration dates.

Conclusions The presence of expired endoscopic consumables is common and associated with substantial economic costs. Our findings indicate that these devices retain sterility and functionality beyond their labelled expiration dates, suggesting the need for a critical re-evaluation of current shelf-life criteria by both industry and regulatory bodies.

Conflicts of Interest Enrique Rodríguez de Santiago declares educational and advisory activities for Olympus, educational activities for Apollo Endosurgery and Erbe, congress fees from Norgine and Casen Recordati, speaker's fees from Izaa and 3-D Matrix, research grant from 3-D Matrix, and advisory work for Adacety Therapeutics and AstraZeneca. Christoph Römmele declares consultancy fees from Ambu Innovations, Ambu GmbH, and Boston Scientific. João A. Cunha Neves declares consultancy fees from Boston Scientific

OP252 The environmental footprint of biliary drainage: a prospective multicentre comparison of ERCP, EUS-guided and percutaneous approaches

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DOI 10.1055/s-0046-1820907

Aims Biliary drainage procedures generate substantial medical waste, yet their comparative environmental footprint is poorly characterised. We prospectively quantified waste generation and recyclability of endoscopic retrograde cholangiopancreatography (ERCP), endoscopic ultrasound-guided biliary drainage (EUS-BD) and percutaneous transhepatic biliary drainage (PTCD) in routine clinical practice.

Methods In a multicentre observational study at three German tertiary-care endoscopy units, we included all procedures with biliary access (ERCP, EUS-BD, PTCD primary placement and scheduled PTCD exchanges) performed between

July and October 2025. For each procedure, all procedure-related waste from the endoscopy room and adjacent areas was collected immediately after the intervention and categorised into devices, personal protective equipment (PPE), plastic, paper/cardboard and residual waste. Waste was weighed per category and procedure; uncontaminated plastic and paper were classified as potentially recyclable. Total waste, category-specific waste and recyclable fractions were compared between modalities using non-parametric tests.

Results EUS-BD generated the lowest mean total waste per procedure (1155.7 g) compared with ERCP (1743.2 g), PTCD exchange (2622.4 g) and PTCD primary placement (3253.2 g). Residual (non-recyclable) waste was lowest for EUS-BD (251.0 g) and highest for PTCD (1708.6 g for exchange; 1849.5 g for primary placement), with ERCP in between (828.7 g). EUS-BD showed the most favourable recyclability profile: potentially recyclable waste accounted for 612.3 g (53.0% of total) versus 491.7 g (28.2%) for ERCP, 450.1 g (17.2%) for PTCD exchange and 698.9 g (21.5%) for PTCD primary placement.

Conclusions Among biliary drainage procedures, EUS-BD combines the lowest overall waste generation with the highest proportion of potentially recyclable material, whereas PTCD is associated with the greatest burden of non-recyclable waste. These ecological data complement existing clinical evidence and support preferential use of EUS-BD over PTCD where expertise is available and outcomes are comparable.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP253 Efficacy and Sustainability of a Novel Pre-Cleaning Device for Endoscope Reprocessing: A Multicenter Randomized Controlled Trial

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DOI 10.1055/s-0046-1820908

Aims Flexible gastrointestinal endoscopes carry a small but persistent infection risk, requiring stringent reprocessing. Variability in manual cleaning practices and environmental concerns highlight the need for more sustainable approaches. The AquaTYPHOON (Pentax Medical, Hamburg, Germany), a novel automated brushless pre-cleaning device, may provide a safe, effective, and resource-efficient alternative; however, comparative data with manual methods remain limited [1–11].

We conducted a multicenter randomized trial to compare this automated pre-cleaning device with standard manual reprocessing regarding efficacy, safety, environmental impact, and healthcare professional satisfaction.

Methods Between June 2024 and October 2025, 434 routine-use endoscopes at two centers [Hospital Pedro Hispano (HPH) and an ambulatory gastroenterology unit (Unilabs Porto | Fluvial)] were randomized 1:1 to automated or manual pre-cleaning. Before study initiation, a standardized training program was implemented at both centers to ensure protocol adherence and uniform execution of all procedures. Endoscopes were evaluated for microbiological contamination and residual protein (Pyromol-Test), including upper endoscopes, duodenoscopes, colonoscopes, and linear echoendoscopes. All microbiological samples were centralized and processed at the same certified Microbiology Laboratory, and all samples were systematically collected and analyzed.

Results A total of 434 endoscopes were analyzed. Residual protein testing showed no differences between groups, with all samples testing negative across all endoscope types. Microbiological testing revealed endoscopic contamination in 5 of 171 gastroscope/colonoscopy samples (2.9%) following manual

pre-cleaning (0/72 at HPH and 5/99 at Unilabs), compared with 12 of 204 samples (5.9%) after automated pre-cleaning (4/94 at HPH and 8/110 at Unilabs). Contamination rates were consistent across centers. Chi-square testing showed no significant difference between manual and automated pre-cleaning ($p=0.17$). Among duodenoscopes/echoendoscopes (HPH only), contamination occurred in 2/28 (7.1%) manually pre-cleaned endoscopes and 2/31 (6.5%) automatically pre-cleaned endoscopes, with Fisher's exact test showing no significant difference ($p>0.99$). The risk difference for gastroscopes/colonoscopes was +3.0% (automated versus manual) and -0.7% for duodenoscopes/echoendoscopes.

Overall, these findings demonstrate that the automated brushless pre-cleaning device is non-inferior to manual pre-cleaning.

No adverse events or device-related complications were reported.

The automated pre-cleaning device saved 2,097 minutes of labor (≈ 35 hours), 8,225 L of water, 15.1 L of detergent, and 6.8 kg of plastic. Healthcare professional satisfaction was higher, with 33/40 responses indicating partial or full satisfaction for the automated device versus 11/29 for manual cleaning.

Conclusions The automated brushless pre-cleaning device is non-inferior to manual pre-cleaning, with identical residual protein results and consistently lower microbiological contamination, including in complex endoscopes such as duodenoscopes and echoendoscopes. Its performance was consistent across centers with different workflows, supporting the reproducibility and generalizability of the findings. It also offers substantial resource savings, higher user satisfaction, and maintains a high safety profile, supporting its use as a reliable, efficient, and sustainable alternative in endoscope reprocessing.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kenters N et al. Worldwide practices on flexible endoscope reprocessing. *Antimicrob Resist Infect Control* 7: 153 2018. doi:10.1186/s13756-018-0446-6
- [2] World Gastroenterology Organisation Endoscope disinfection update: a guide to resource-sensitive reprocessing. 2019
- [3] Grandval P et al. Evaluation of a storage cabinet for heat-sensitive endoscopes in a clinical setting. *The Journal of hospital infection* vol. 84: 1 2013; 71–6. doi:10.1016/j.jhin.2013.01.013
- [4] Centers for Disease Control and Prevention Duodenoscope surveillance sampling and culturing protocols. Atlanta, GA: CDC; 2018 Available at: <https://www.fda.gov/media/111081/download> [last accessed December 2023]
- [5] Benowitz I et al. "The Centers for Disease Control and Prevention Guidance on Flexible Gastrointestinal Endoscopes: Lessons Learned from Outbreaks, Infection Control." *Gastrointestinal endoscopy clinics of North America* vol. 30: 4 2020; 723–733. doi:10.1016/j.giec.2020.06.009
- [6] Casini B et al. Microbiological surveillance post-reprocessing of flexible endoscopes used in digestive endoscopy: a national study. *The Journal of hospital infection* vol. 131: 2023; 139–147. doi:10.1016/j.jhin.2022.09.024
- [7] Donnelly L "Green endoscopy: practical implementation." *Frontline gastroenterology* vol. 13: e1 e7–e12 2022. doi:10.1136/flgastro-2022-102116
- [8] Lacroute J et al. The carbon footprint of ambulatory gastrointestinal Endoscopy". *Endoscopy* 2023; 55: 918–26. doi:10.1055/a-2088-4062
- [9] Rodríguez de Santiago E et al. "Reducing the environmental footprint of gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement." *Endoscopy* vol. 54: 8 2022; 797–826. doi:10.1055/a-1859-3726
- [10] Beilenhoff U et al. "Reprocessing of flexible endoscopes and endoscopic accessories used in gastrointestinal endoscopy: Position Statement of the European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology Nurses and Associates (ESGENA) – Update 2018." *Endoscopy* vol. 50 (12): 2018; 1205–1234. doi:10.1055/a-0759-1629
- [11] Rauwers AW et al. Endoscope-associated infections: A brief summary of the current state and views toward the future". *Techniques in Gastrointestinal Endoscopy* Vol. 21: 2019. doi:10.1016/j.tgie.2019.04.006

OP254 Sustaining ERCP Capacity in the NHS: Long-Term Safety and Efficacy of a Regional Treat-and-Transfer Pathway

Authors baig D¹, Lekharaju V², Iqbal J², Korani M³, Maclean J¹, Joanna T¹, Mahmood S²

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Aims Over recent years, many hospitals in the UK have found it harder to keep up with ERCP demand. There are fewer specialist endoscopists, the number of referrals keeps rising, and the work itself has become more complex. Cholangioscopy is used more often and EUS now plays a regular part in biliary care. All of this has placed extra pressure on units that were already tight on staff and time.

Because of this, many centres now turn to tertiary teams when a case is difficult or when a first attempt has not worked. The Treat and Transfer model has grown from this need. Patients are sent quickly to a tertiary HPB service for ERCP and then return to their local hospital once the procedure is finished. It has become a steady, practical way to keep care timely for hospitals that do not have the capacity to manage everything themselves.

To review the safety, efficiency and technical performance of an eight year regional Treat and Transfer ERCP service delivered through a UK tertiary HPB centre. This represents one of the few long term reviews of this type of model.

Methods We reviewed all ERCP procedures carried out between 2017 and 2025 for patients referred through the Treat and Transfer pathway. The information collected included age, indication, type of anaesthesia, any local ERCP attempts, technical success, need for further procedures and recorded reasons for failed therapy. The data was analysed descriptively and subgroups were compared.

Results In total, 1,230 patients were managed through the pathway. The median age was 69. Most referrals were for choledocholithiasis at 74%, followed by stent problems at 6 percent, malignant obstruction at 3% and bile leak at 3%. Only 1.6% of patients had a local ERCP attempt before transfer. Of this group, 85% were successfully treated when the procedure was repeated at the tertiary centre. This highlights the value of central expertise for more challenging cases.

The first attempt technical success rate at the tertiary centre was 98% at 1205 of 1230. In the 25 unsuccessful cases, the main reasons were difficult cannulation at 55%, duodenal pathology at 18%, patient intolerance at 18 percent and poor preparation at 9%. A second ERCP was successful in 57% of patients who needed it. A third attempt was successful in a further 6%. Overall, most patients eventually received effective treatment.

Most procedures were done under conscious sedation at 96.8%. General anaesthesia was used in 3.2% of cases where the situation was more complex. Success rates were very similar for both sedation and general anaesthesia at 97.9% and 97.3%.

Conclusions This long review shows that the Treat and Transfer model is a safe and reliable way to deliver ERCP despite pressures on staff and rising case complexity. The strong outcomes in patients with failed local attempts show the importance of a central HPB service. As one of the few long running UK datasets, this model provides a practical and scalable approach for ERCP delivery that supports patient flow, reduces dependence on general anaesthesia and improves timely access to specialist care across a wider region.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP255 Environmental impact of single-use versus reusable duodenoscopes for ERCP: an ISO-compliant life-cycle assessment from Germany

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DOI 10.1055/s-0046-1820910

Aims To compare the environmental impacts of a single-use duodenoscope (SUD) versus a reusable duodenoscope (RUD) for endoscopic retrograde cholangiopancreatography (ERCP) in Germany and to identify key emission drivers and mitigation levers.

Methods We performed a cradle-to-grave life-cycle assessment (LCA) aligned with ISO 14040/44. The functional unit was one ERCP in one patient in Germany. Devices assessed were aScope Duodeno2 (Ambu) and TJF-Q190 (Olympus). Primary data covered RUD reprocessing at Klinikum Hanau (2024); RUD production relied on secondary sources. Modeling used “LCA for Experts” with Sphera MLC 2024.2; impacts were characterized with the Environmental Footprint (EF) 3.1 method across 16 categories. Assumptions included a RUD lifespan of 625 procedures; repairs and maintenance were excluded. Sensitivity analyses examined bioplastics content and sterilization changes; the study underwent external critical review.

Results Per procedure, SUD exhibited a 66 % higher carbon footprint than RUD (6.61 vs. 3.98 kg CO₂-eq). Freshwater ecotoxicity was nearly doubled (47.1 vs. 26.2 CTUe). Resource use was higher for SUD for fossils (99.2 vs. 63.1 MJ, + 57 %) and for minerals/metals (1.24×10^{-4} vs. 6.36×10^{-6} kg Sb-eq, $\sim 20 \times$). Water use was slightly higher for SUD (1.39 vs. 1.26 m³). For SUD, dominant contributors were raw material extraction/production, packaging, and sterilization; for RUD, 97 % of emissions arose from reprocessing (electricity and water). Replacing bio-based ABS with fossil-based ABS increased SUD climate impacts by ~ 5.8 %.

Conclusions In the German context, reusable duodenoscopes remain environmentally preferable for routine ERCP, with impacts largely driven by reprocessing energy and water. Single-use performance is mainly driven by materials, packaging, and sterilization; material innovation (e.g., bioplastics) and improved recycling offer incremental gains but do not close the gap. Service-level decarbonization—especially low-carbon electricity for reprocessing and efficiency measures—can further strengthen the environmental advantage of reuse.

Conflicts of Interest LW: Speaker fees from Ambu A/S and Falk Foundation

OP256 A Material Flow Analysis of an endoscopy department to identify environmental hotspots

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DOI 10.1055/s-0046-1820911

Aims In the Netherlands, healthcare accounts for 7 % of national greenhouse gas emissions and 13 % of raw material extraction. Endoscopy services, which rely heavily on single-use items and material-intensive workflows, contribute substantially to this footprint. Understanding material flows within an endos-

copy department is therefore essential to support a transition toward circular endoscopic care. This study aimed to conduct a comprehensive material flow analysis (MFA) of an academic endoscopy department by quantifying the material composition of products and packaging and identifying hotspots for targeted sustainability interventions.

Methods We performed an MFA using 2023 procurement data to map all materials and medication inflows and outflows in an academic endoscopy unit. Products, packaging, and information leaflets were weighted on a precision scale, and material composition was determined through manufacturer contact and desk research. Mass and material contributions were analyzed to identify products and material types with the highest mass contribution. Outflows were quantified across the department's established waste streams (► **Table 1**).

► **Table 1**

Product	Total mass, kg	Product mass, kg (%)	Packaging mass, kg (%)
Irrigation solutions	3,774	3,336 (78)	438 (12)
Intravenous solutions	1,063	752 (71)	311 (29)
Gloves	948	843 (89)	105 (11)
Tubing	784	677 (86)	107 (14)
Absorption pads	734	734 (100)	0
Biopsy jars	419	419 (100)	0
Kidney dishes	390	390 (100)	0
Aprons	380	372 (98)	8 (2)
Total MFA	13,927	11,294 (81)	2,633 (19)

Results In total, 416 products and 55 medications were included. In 2023, the department processed 13,927 kg of material, with medications and related packaging accounting for 47 % of total mass. Packaging and information leaflets accounted for 19 % of total mass; 73 % consisted of synthetic plastics and rubbers, 24 % of biobased materials, and 3 % of glass. Across all inflows, synthetic plastics and rubbers dominated (60 %), followed by biobased materials (24 %). Outflows comprised general hospital waste (8,041 kg, 65 %), hazardous waste (3,340 kg, 27 %), and recycled paper (990 kg, 8 %). An additional 1557 kg consisted of materials directly used in patients, such as medications and intravenous fluids. Eight products accounted for 61 % of total annual material mass and were identified as hotspots: irrigation and intravenous solutions, gloves, tubing (suction/irrigation/insufflation), absorption pads, biopsy jars, kidney dishes, and aprons.

Conclusions This MFA of an academic endoscopy department shows that material use is dominated by a small number of high-impact products. Identifying these hotspots provides targets to support a shift towards more circular endoscopy services. Future research should translate material flows into environmental impacts, such as carbon emissions and resource depletion, to guide comprehensive sustainability strategies in endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

To Close or Not to Close: Navigating Endoscopic Decisions

16/05/2026, 10:00–11:00

Sky 1

OP257 Prophylactic Clipping After Endoscopic Resection of Large Colorectal Polyps: Systematic Review and Meta-analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1820912

Aims Endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) are effective for large non-pedunculated colorectal polyps but delayed adverse events (AEs) such as bleeding (DB), perforation (DP), and post-electrocoagulation syndrome (PECS) remain common. Prophylactic clipping may prevent these complications, though its efficacy, especially across different techniques, remains uncertain. We conducted a meta-analysis of randomized controlled trials (RCTs) to evaluate the preventive effect of prophylactic clipping after endoscopic resection.

Methods Following PRISMA guidelines, we searched MEDLINE, Embase, and SCOPUS through September 2025 for RCTs comparing prophylactic clipping vs. no clipping after ESD or EMR for non-pedunculated large (> 20 mm) colorectal polyps in adults. The primary outcome was clinically significant DB; secondary outcomes included DP, PECS and surgery due to AEs as well as sub-analysis by endoscopic technique. Random-effects models were used to compute risk ratios (RRs) and 95 % confidence intervals (CIs).

Results Twelve RCTs including 3770 patients were analyzed (1862 with clipping, 1908 controls). Prophylactic clipping significantly reduced clinically significant DB (RR 0.5; 95 % CI 0.38–0.88), and DP (RR 0.53; 95 % CI 0.31–0.92) risk. The impact of clipping remains significant after subgrouping by technique showing a decreased risk of DB across ESD studies (RR 0.32; 95 % CI 0.31–0.92), and a protective effect on DP after EMR (RR 0.48; 95 % CI 0.26–0.90). No significant difference was found in terms of risk of PECS (RR 1.01; 95 % CI 0.78–1.55) and surgery due to AEs (RR 0.55; 95 % CI 0.22–1.38).

Conclusions Prophylactic clipping after resection of large colorectal polyps significantly reduces the risk of DB and DP, with the greatest benefit observed after ESD for bleeding prevention and after EMR for perforation prevention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP258V Feasibility and Safety of Strategic In-Defect Clipping (iCLIP study) After Colonic EMR/ESD to Prevent Delayed Bleeding: A Prospective Cohort Study

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DOI 10.1055/s-0046-1820913

Problem to solve Post-polypectomy bleeding remains a significant adverse event following endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD) in the colon, particularly for large polyps in the right colon. While complete defect closure either with clips or with specialized suturing devices reduces bleeding risk, it can be technically demanding and resource-intensive.

Innovation This study investigates a novel approach of placing 2–4 endoclips inside the resection defect, targeting visible vessels or central ulcer areas, without attempting complete closure.

Results We conducted a prospective feasibility cohort study of patients undergoing EMR or ESD in the colon with strategic in-defect clipping protocol (iCLIP) with 2–4 clips, between 2023 and 2025. Data were collected on patient, lesion and procedural characteristics, clip placement and adverse events. The primary endpoint was feasibility, defined as successful in-defect clip deployment in ≥ 90 % of cases. Secondary endpoints included delayed bleeding within 30 days of the procedure, intraprocedural and delayed perforation, clinically significant clip migration and post-polypectomy syndrome (PPS) or abdominal pain. A total of 100 cases (63 males/37 females) were included in the study. The most common location was the ascending colon (42/100) and the median polyp size was 35.5 mm. For the clipping procedure, a transparent tip hood was attached to the endoscope and reopenable through-the-scope clips (TTSCs) were used in all included cases. In this method, clips are placed within the resection ulcer, directly onto the submucosal or muscle layer, targeting visible vessels or the central zone of the defect. First, the clip is gently applied to the submucosa, vertically to the resection defect, without grasping the ulcer margins. Next, sufficient suction is applied to draw the submucosa into the clip and cause the muscle layer to fold before grasping it. It is crucial not to press the clip toward the submucosa, to avoid potential muscle layer injury and subsequent perforation. Additional clips are placed next to the first one using the same procedure, without attempting complete closure. Strategic in-defect clipping (iCLIP) was successfully performed in 100 % of cases. Delayed bleeding occurred in 0 % of patients and no perforations or clinically significant clip migrations were observed except for a single case of muscle layer injury without true perforation. None of the patients demonstrated post-polypectomy syndrome or abdominal pain. All patients underwent follow-up endoscopy at six months post-resection. None had local recurrence. Remaining clip was observed in seven cases (7 %) and was successfully removed with grasping forceps. In three cases (3 %), granulomatous tissue—confirmed histopathologically—was observed in the resection scar, compatible with clip artifact. A possible explanation for the success of this technique is that large vessels are usually located in the center of the defect and not in the periphery, minimizing the necessity of complete defect closure. Moreover, folding of the muscle layer into the clips prevents tension on the submucosa and subsequently to the large vessels, caused by luminal distention from gas or fecal passage.

Conclusions Strategic in-defect clipping (iCLIP) using 2–4 clips is a feasible, safe and potentially effective method to reduce delayed bleeding following colonic EMR or ESD. This technique offers a practical alternative to full defect closure, especially in large lesions or right-sided resections. Compared to historical bleeding rates of 6–10 % after unclosed EMR/ESD, this targeted approach appears to reduce bleeding risk with fewer clips and without the need for specialized suturing devices requiring specific expertise.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/cc387dfb-7086-4c10-b036-d1aed653b10a/Uploads/19990_iCLIP_VIDEO%20.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP259 Technical and clinical success rates of endoscopic hand-suturing with SutuArt: A European Multicenter Study

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DOI 10.1055/s-0046-1820914

Aims Endoscopic closure techniques are essential for the management of defects in therapeutic endoscopy and may also help prevent delayed bleeding and perforation. The SuturArt endoscopic hand-suturing system (Olympus) is an innovative, minimally invasive method for defect closure, but clinical data on its use remain limited. This study aimed to evaluate technical and clinical success rates, complication rates, and procedure times for endoscopic hand-suturing with SuturArt.

Methods In a multicenter European registry study, procedures using endoscopic hand-suturing from fourteen centers were extracted from a prospective database. The primary endpoint was technical success, defined as complete defect closure without the need for additional closure techniques. Secondary endpoints included clinical success, defined as the absence of post-interventional complications during the index hospital stay or complications linked to the index procedure; the overall defect closure rate (closure achieved by suturing alone or combined with additional devices such as clips); and procedure time.

Results Between February 2023 and November 2025, 204 procedures were included. Indications comprised 111 ESD defects (stomach, duodenum, colon, rectum), 31 EID-related rectal defects, 34 G-POEM procedures, 9 fistulas, 4 EMR defects, two anastomotic leaks, and one perforation. Technical success was achieved in 94.1 % (192/204) of cases. 5.9 % (n = 12) required additional closure methods, resulting in an overall defect closure rate of 95.5 % (195/204). The median defect size was 26.5 mm (4–60 mm), and the median suturing time was 25 minutes (5–71). Clinical success was 95.6 % (195/204). Over time, the median procedure duration for the entire cohort decreased from 30 (10–65) minutes in 2023 to 25 (10–62) minutes in 2025, indicating a learning curve effect. No suture-related complications occurred.

Conclusions In this multicenter cohort, the SuturArt system demonstrated high technical and clinical success rates with an excellent safety profile. The observed reduction in procedure time over the study period suggests a learning curve. Further studies are needed to assess the performance of this system for complex defects such as fistulas or perforations and to better define its clinical utility within advanced endoscopic practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP260 Usefulness of a novel reopenable clip with anchor prongs for mucosal defect closure after colorectal endoscopic submucosal dissection: A multicenter randomized controlled trial

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DOI 10.1055/s-0046-1820915

Aims Prophylactic clip closure after colorectal endoscopic submucosal dissection (ESD) is increasingly performed to prevent postoperative adverse events (AEs), such as delayed bleeding and perforation. However, complete closure of large mucosal defects after ESD using conventional clips remains technically demanding. The MANTIS clip (Boston Scientific, Marlborough, Massachusetts, USA) is a novel reopenable clip that enables a hold-and-drag maneuver by grasping the tissue with its anchor prongs, facilitating defect approximation. This study aimed to evaluate the efficacy and safety of MANTIS clip-assisted closure compared with closure using conventional clips alone for mucosal defects after colorectal ESD.

Methods This was a prospective, multicenter, open-label, randomized controlled trial conducted at ten institutions in Japan. Patients undergoing colorectal ESD were randomly assigned (1:1) to either the MANTIS group or the conventional group. In the MANTIS group, MANTIS clips were used until closure with conventional clips became feasible, after which the remaining defect was closed using conventional clips. In the conventional group, the defect was closed using only conventional clips. The primary endpoint was the complete closure rate, defined as the absence of visible submucosa or muscularis propria in ≥90 % of the defect base. Secondary endpoints included closure time, closure speed, the need for operator change, intraoperative AEs during closure, and post-ESD AEs (delayed bleeding, delayed perforation, and post-ESD coagulation syndrome [PECS]).

Results Between June 2024 and June 2025, 250 patients were enrolled. After excluding seven patients from each group, 236 patients were included in the analysis (MANTIS group, n = 120; conventional group, n = 116). The median longest diameter of the resected specimens was 33 mm (interquartile range [IQR], 30–40 mm) in the MANTIS group and 30 mm (IQR, 30–44.5 mm) in the conventional group. In the MANTIS group, a median of one MANTIS clip (IQR, 1–2) and seven conventional clips (IQR, 5–9) were used, whereas the conventional group used a median of 10 conventional clips (IQR, 8–12). The complete closure rate was significantly higher in the MANTIS group (98.3 %, 118/120) compared with the conventional group (88.8 %, 103/116; absolute difference, 9.5 %; 95 % confidence interval [CI], 3.5–12.0; $P < 0.01$). Median closure time, closure speed, and operator change rate during the closure did not differ significantly between the MANTIS and conventional groups (540 seconds vs. 585 seconds, $P = 0.14$; 90.3 mm²/min vs. 87.1 mm²/min, $P = 0.91$; 3.3 % vs. 1.7 %, $P = 0.68$). No intraoperative AEs occurred during closure in either group. Regarding post-ESD AEs, no significant differences were observed between the groups. Delayed bleeding did not occur in the MANTIS group, whereas one case (0.9 %) occurred in the conventional group in a patient with partial closure ($P = 0.99$). No delayed perforation was observed in either group. PECS occurred in 14 patients (11.7 %) in the MANTIS group and in 10 patients (8.6 %) in the conventional group ($P = 0.52$). In the multivariate analysis, use of the MANTIS clip was identified as an independent predictor of complete closure (odds ratio, 9.70; 95 % CI, 2.02–46.70; $P < 0.01$).

Conclusions The use of the MANTIS clip resulted in a significantly higher complete closure rate, indicating that it offers a more efficient and reliable approach for achieving mucosal defect closure after colorectal ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP261 Combining Prophylactic Vessel Coagulation with Complete Defect Closure to Prevent Delayed Bleeding After Colorectal Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1820916

Aims The optimal strategy to prevent delayed bleeding after colorectal ESD remains unsettled, especially for large defects with exposed submucosal vessels and muscular layer intact. This study evaluated whether integrating prophylactic vessel coagulation with complete defect closure mitigates delayed adverse events (DAE) and unplanned readmissions [1].

Methods In this multicenter study, we analyzed consecutive colorectal ESD performed across two tertiary referral centers. Cases treated with both prophylactic vessel coagulation and complete defect closure (using standard clips or advanced systems such as Mantis clip or X-Tack suturing device) were propensity score-matched 1:1 with controls receiving coagulation alone. Matching variables included age, ASA score, antithrombotic therapy, defect size and location. Cases with intraprocedural perforation, incomplete closure, or use of hemostatic gels/powders were excluded. The primary endpoint was delayed bleeding; secondary endpoints were composite DAE rate (bleeding, perforation, PECS) and hospital readmission (► **Table 1**).

► **Table 1**

Covariates	Coagulation + Complete Closure (n = 87)	Coagulation Only (n = 87)	p value
Patient and Defect Characteristics			
▪ Age ≥ 75 years	25.3 %	25.3 %	n.s.
▪ ASA III–IV	14.9 %	14.9 %	n.s.
▪ Antithrombotics	10.3 %	10.3 %	n.s.
▪ Large defects	75.9 %	75.9 %	n.s.
▪ Rectal defects	47.1 %	47.1 %	n.s.
Main Endpoints			
▪ Delayed bleeding	1.2 %	6.9 %	<0.05
– Composite DAE	3.5 %	12.7 %	<0.05
▪ Delayed perforation	0 %	2.3 %	n.s.
▪ PECS	2.3 %	3.5 %	n.s.
▪ Unplanned readmission	4.6 %	16.1 %	<0.05
▪ Hospital stays, days (mean ± SD)	2.2 ± 0.4	3.4 ± 1.4	<0.05
▪ Complete closure time, min (mean ± SD)	26.3 ± 7.4		
▪ Number of clips used, mean ± SD	9.1 ± 1.7		
▪ Advanced closure systems used	32.2 %		

Results A total of 174 procedures were analyzed after matching (87 per group) with comparable baseline characteristics (25.3 % ≥ 75 years; 14.9 % ASA III–IV; 10.3 % on antithrombotic therapy; 75.9 % large defects; 47.1 % rectal; p = n.s.). The combined strategy significantly reduced delayed bleeding (1.2 % vs 6.9 %; p < 0.05) and composite DAEs (3.5 % vs 12.7 %; p < 0.05) with comparable delayed perforations (0 % vs 2.3 %; p = n.s.) and PECS (2.3 % vs 3.5 %; p = n.s.). All bleeding and PECS episodes were managed endoscopically or conservatively, whereas delayed perforations required surgery. Readmissions were fewer in the closure group (4.6 % vs 16.1 %; p < 0.05), with shorter mean hospital stays (2.2 ± 0.4 vs 3.4 ± 1.4 days; p < 0.05). Complete closure required a mean of 9.1 ± 1.7 clips, and advanced closure systems were used in 32.2 % of cases (closure time 26.3 ± 7.4 min).

Conclusions Combining prophylactic vessel coagulation with complete defect closure after colorectal ESD significantly reduces the risk of delayed bleeding. By decreasing DAE by 73 %, this dual approach represents an effective strategy to enhance post-ESD safety and minimize unplanned readmissions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Miyakawa A, Tamaru Y, Mizumoto T, Kanazawa N, Uchiyama S, Maehara K, Sumida Y, Nakamura A, Itobayashi E, Shimura H, Suzuki Y, Akita T, Shimura K, Kuwai T. Prophylactic clip closure after endoscopic submucosal dissection of large flat and sessile colorectal polyps: a multicentre randomised controlled trial (EPOC trial). Gut 2025; 74 (11): 1814–1820. doi:10.1136/gut-jnl-2024-334463

OP262 Which Closure Technique is Superior? A Comparative Analysis of No-closure, Hemoclips, Endoscopic Hand-Suturing, OverStitch Following Colorectal Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1820917

Aims Endoscopic submucosal dissection (ESD) carries risks of delayed bleeding, perforation and stricture formation as it is not easily performed. While prophylactic closure is increasingly performed, comparative analysis between varying closure techniques and optimal closure strategy remain limited. We evaluated outcomes of different closure techniques including endoscopic hand-suturing (EHS) suturing, OverStitch, Hemoclips and no-closure.

Methods We retrospectively analyzed 1267 consecutive colorectal ESD procedures. Closure methods as follows: no-closure (n = 819, 64.6 %), hemoclips (n = 319, 25.2 %), EHS (n = 70, 5.5 %), OverStitch (n = 59, 4.7 %), and Endoloop (n = 2, 0.2 %; excluded due to small sample size). Primary outcomes included composite adverse events (perforation, delayed bleeding, and stricture), status. Multivariable logistic regression and propensity score matching (3:1, caliper 0.05) adjusted for confounders. Subgroup analyses included lesion size stratification (< 10cm vs > 10cm) and anticoagulation status

Results Overall adverse event rate was 2.8 % (n = 35), including delayed bleeding 0.5 % (n = 6), perforation 1.5 % (n = 19), and stricture 0.8 % (n = 10). Closure significantly reduced adverse events compared to no closure (0.89 % vs 3.79 %, p = 0.002; relative risk (RR) 0.24, 95 % CI: 0.08-0.68; absolute risk reduction (ARR) 2.9 %; number needed to treat (NNT) 35). Among closure devices, EHS achieved the lowest adverse event rate (n = 0, p = 0.003). In multivariable adjusted regression analysis, mucosal closure (OR 0.30, 95 % CI: 0.09-0.93, p = 0.037) and rectal location (OR 0.33, 95 % CI: 0.12-0.88, p = 0.027) remained protective. Propensity score matching (650 patients, AUC: 0.806) showed a trend toward benefit with closure (ATET -1.38 %, 95 % CI: -3.44 % to 0.67 %, p = 0.187). Lesions > 10cm (n = 150), closure reduced adverse events from 9.52 % to 2.22 %, (ARR 7.3 %, NNT 14, p = 0.009). Lesions < 10cm (n = 1,117), closure reduced adverse events from 2.94 % to 0.74 % (ARR 2.2 %, NNT 46, p = 0.015). Among anticoagulated patients (n = 172), closure eliminated all adverse events compared to no-closure (0 % vs 7.58, p = 0.008, NNT 13). Hospital stay was significantly shorter with closure (median 1 vs 2 days, p < 0.001).

Post-polypectomy syndrome was present in 4.18 % of all procedures. The incidence varied significantly by closure method ($p = 0.001$): no closure 4.52 %, hemoclips 1.58 %, EHS 4.29 % and OverStitch 13.56 %. The higher PPS rate with OverStitch stems from the reservation of the devices for complex resections (lesion size mean: 98.9 ± 73.8 mm).

Conclusions Closure following colorectal ESD reduces adverse events, with greatest benefit in larger lesions (> 10 cm), and anticoagulated patients. No adverse events were experienced with EHS, though larger comparative studies are needed. The NNT of 14 for lesions > 10 cm and NNT 13 for anticoagulated patients support routine closure in such high-risk patients.

Conflicts of Interest Fatih Aslan has received grants and honoraria from Olympus.

Breaking the Mold: Novel Ideas and Techniques in Endoscopy

16/05/2026, 10:00–11:00

Sky 2

OP263 Real-time Hypoxia Assessment in Colorectal Polyps Using Oxygen Saturation Imaging: A Novel Physiological Endoscopy Approach

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DOI 10.1055/s-0046-1820918

Aims Hypoxia occurs when tissues receive insufficient oxygen due to pathological conditions (e.g., cancer, inflammation, diabetes) or non-pathological factors (e.g., high altitude). It is a hallmark of the tumor microenvironment and contributes to carcinogenesis and treatment resistance in many solid tumors. Oxygen saturation imaging (OSI) endoscopy is a non-invasive modality that enables real-time visualization of oxygen saturation on the gastrointestinal mucosal surface [1]. This study aimed to objectively assess oxygen saturation (StO₂) in colorectal polyps—including adenomas (ADs), hyperplastic polyps (HPs), and sessile serrated lesions (SSLs)—in comparison with the surrounding mucosa using OSI endoscopy, and to investigate the association between StO₂ and hypoxia-inducible factor 1 α (HIF1 α) expression.

Methods This retrospective pilot study included consecutive colorectal lesions endoscopically resected at Juntendo University Hospital (Tokyo, Japan) between November 2021 and October 2022 using an OSI-equipped system. All lesions were evaluated using white-light imaging and OSI prior to resection. Lesions with unavailable or poor-quality OSI images and those pathologically diagnosed as adenocarcinoma were excluded. A total of 133 lesions from 30 patients were analyzed: 78 ADs, 35 HPs, and 20 SSLs. Five regions of interest were randomly selected from each lesion and corresponding mucosa to obtain mean StO₂ values; Δ StO₂ was calculated as [lesion StO₂] – [surrounding mucosa StO₂]. Immunohistochemistry for HIF1 α (≥ 10 % nuclear or cytoplasmic staining defined as positive) was performed on resected specimens. Clinicopathologic characteristics were reviewed, and statistical analyses were conducted using the Mann–Whitney U test, Yates-corrected chi-square test, or Fisher's exact test, with significance set at $P < 0.05$. Institutional ethical approval was obtained.

Results Among the 133 lesions, ADs, HPs, and SSLs did not differ significantly in patient age, sex, or macroscopic type. HPs were predominantly located in the distal colon, whereas SSLs were significantly larger than the other lesion types. Across all groups, mean StO₂ in lesions was significantly lower than in surrounding mucosa (ADs: $P < 0.001$; HPs: $P = 0.005$; SSLs: $P = 0.049$). ADs

demonstrated significantly lower StO₂ than HPs and SSLs (ADs vs. HPs: $P < 0.001$; ADs vs. SSLs: $P = 0.038$).

Mean Δ StO₂ was -9.2 ± 7.7 for ADs, -3.5 ± 3.8 for HPs, and -4.7 ± 5.0 for SSLs. Absolute Δ StO₂ was significantly greater in ADs than in HPs ($P < 0.001$) and SSLs ($P = 0.011$), indicating that hypoxia was most pronounced in ADs. No significant difference in Δ StO₂ was observed between HPs and SSLs.

HIF1 α expression was positive in 28/78 ADs (39.7 %), 0/35 HPs, and 2/20 SSLs (10.0 %). HIF1 α positivity was significantly more frequent in ADs than in HPs ($P < 0.001$) and SSLs ($P = 0.016$). Among ADs, StO₂ values were significantly lower in HIF1 α -positive lesions than in HIF1 α -negative lesions (41.5 ± 4.3 vs. 48.2 ± 4.7 , $P < 0.001$). This inverse relationship indicates that reduced StO₂ on OSI corresponds to molecular hypoxia within precancerous lesions.

Conclusions This study is the first to quantify StO₂ in colorectal polyps using OSI and demonstrates that ADs exhibit significantly lower StO₂ and greater Δ StO₂ than HPs, SSLs, and adjacent mucosa. These findings indicate that ADs harbor a hypoxic microenvironment despite being non-malignant, supporting the concept that hypoxia emerges early during colorectal neoplastic progression. The strong association between low StO₂ and high HIF1 α expression further supports OSI as a functional imaging modality capable of detecting physiologically meaningful hypoxia.

OSI endoscopy provides real-time, non-invasive visualization of mucosal oxygenation and may complement morphological imaging by offering physiological biomarkers for risk stratification. Although this was a single-center pilot study with a limited sample size, the results suggest that OSI may help identify biologically aggressive precursor lesions. Larger prospective studies—including evaluation of additional hypoxia-related markers and deeper tissue oxygenation—are warranted to validate the clinical utility of StO₂ assessment in colorectal tumorigenesis and its potential role in early detection and management strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kaneko K, Yamaguchi H, Saito T, Yano T, Oono Y, Ikematsu H, Oka S, Tanaka S, Shimoda R, Fujimori T, Igarashi M, Saito Y 2014; Hypoxia imaging endoscopy equipped with laser light source: from preclinical live animal study to first-in-human subject research. *PLoS One* 9 (6): e99055

OP264 A Randomised, Single-blind, Sham Controlled Trial on Prophylactic Endoscopic Clipping of Colonic Diverticula

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DOI 10.1055/s-0046-1820919

Aims Diverticular disease (DD) affects approximately 70 % of the Western population by the age of 80 and is associated with significant morbidity and mortality. Chronic gastrointestinal symptoms are common (reported in up to 25 %), termed symptomatic uncomplicated diverticular disease (SUDD). Although surgical treatment is well-established, management options for chronic symptoms are limited and there are currently no prophylactic options. A pilot study described prophylactic endoscopic clipping of diverticula, demonstrating a closure rate of 87 % [1]. This RCT aims to establish whether elective endoscopic clipping leads to lasting closure of diverticula and improvement in associated symptoms.

Methods Eligible patients were recruited from dedicated diverticular clinics. Patients were randomised and blinded to either colonoscopy with endoscopic

clipping of diverticula or colonoscopy with 'sham' intervention. Symptoms were assessed prior to intervention using the Irritable Bowel Syndrome Symptom Severity Score (IBS-SSS). Follow-up with repeat endoscopic assessment and mapping of diverticula occurred at 3 and 12 months and repeat questionnaires at 3, 6 and 12 months.

Results Eighty-four patients (mean age 57 ± 9.4 ; 51F) with symptomatic DD were included and randomised and blinded to receive either a sham procedure or clip-closure of all visible diverticula. At index colonoscopy there was a median of 22 (5-155) diverticula per patient. At 3 and 12 months, there was a statistically significant increase in closure rate (47% vs -3%, $p < 0.0001$; 34% vs 9%, $p = 0.032$) and in symptom scores (41% vs 12%, $p = 0.0036$; 48% vs 23%, $p = 0.012$). At 12 months, the number of patients achieving symptom response ($> 50\%$ reduction in symptom score) was 60% vs 29%, $p < 0.008$ (number needed to treat (NNT) = 3.2) and symptom remission (SSS < 75) was 40% vs 10%, $p = 0.002$ (NNT = 3.3). Endoscopic clipping was shown to be an independent predictor of response at 12 months on multivariate analysis, with a 3-fold increase in responders in the treatment group (OR 3.146, CI 1.179-87.80). There were fewer reported episodes of diverticulitis in the treatment group compared with sham ($p = 0.03$).

Conclusions This trial demonstrates that prophylactic endoscopic clipping of DD leads to safe and lasting closure of diverticula with a statistically significant improvement in associated symptoms. These results support endoscopic clipping as a novel therapeutic intervention in select patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Haji A., Plastiras A., Ortenzi M., Gulati S., Emmanuel A., Hayee B. 'Elective endoscopic clipping for the treatment of symptomatic diverticular disease: A potential for "cure"'. Gut p. gutjnl-2017-315509 2018. doi:10.1136/gutjnl-2017-315509

OP265 Intraluminal pressure assessment using the endoscopic pressure study integrated system (EPSIS) during colonoscopy

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DOI 10.1055/s-0046-1820920

Aims The endoscopic pressure study integrated system (EPSIS) is a system that continuously measures intraluminal pressure in the digestive tract while delivering carbon dioxide (CO₂) insufflation from the endoscope. It enables simultaneous assessment of endoscopic findings and intraluminal pressure. While we have previously validated EPSIS for assessing the lower esophageal sphincter and anorectal function, data on colonic pressure profiles remain limited. We aimed to evaluate the feasibility of colonic EPSIS during colonoscopy and investigate the impact of clinical and local factors on segmental pressure dynamics.

Methods In this single-center retrospective study, we analyzed 50 consecutive patients who underwent colonoscopy with EPSIS between October and November 2025. Pressure measurements were obtained during scope withdrawal. CO₂ was insufflated into six colonic segments (cecum; ascending, transverse, descending, and sigmoid colon; rectum) until pressure equilibrium was reached or patient movement occurred. For each segment, initial pressure, maximum pressure, and the EPSIS waveform gradient were calculated. Associations with age, body mass index (BMI), elderly status (≥ 75 years), hyoscine butylbromide administration, and the presence of diverticula were evaluated.

Results Procedural sedation was used in 47 patients (94%), and the median pain visual analogue scale (VAS) score was 0 (interquartile range 0-0). Median maximum pressures ranged from 15.6 to 17.4 mmHg across all segments. Age and BMI showed no clear associations with maximum pressure or gradient in

any segment. Comparing elderly and non-elderly patients, only the descending colon showed slightly lower maximum pressure and gradient in the elderly, while other segments showed no significant differences. Hyoscine butylbromide use did not affect maximum pressure, but gradients in the ascending and transverse colon were significantly higher in patients not receiving the drug (0.60 vs. 0.35 mmHg/s, $P < 0.01$), with a similar trend in the descending colon. While ascending colon diverticula had no impact, sigmoid diverticula were associated with a significantly steeper gradient (0.92 vs. 0.28 mmHg/s, $P < 0.001$) without a significant difference in maximum pressure.

Conclusions Colonic EPSIS during routine colonoscopy is feasible and allows for segmental assessment of intraluminal pressure and pressure-rise gradients. Age and BMI had minimal influence on colonic pressure profiles, whereas hyoscine butylbromide and sigmoid diverticula selectively modified the gradient rather than the maximum pressure. Together with previous rectal EPSIS data, these findings provide fundamental data on colonic pressure dynamics during colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP266 Racial and Gender Disparities in Eosinophilic Colitis: A Nationwide HCUP Analysis (2019–2023)

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DOI 10.1055/s-0046-1820921

Aims This study uses HCUP data (2019–2023) to examine racial and gender disparities in eosinophilic colitis among 2.7 million adult admissions. Findings aim to clarify how these factors influence incidence and guide improved diagnosis and management strategies.

Methods We analyzed data from the Healthcare Cost and Utilization Project (HCUP) National Database, covering 2,748,576 adult hospital admissions from 2019 to 2023 with a primary diagnosis of Eosinophilic colitis. The initial analysis involved reviewing the dataset's structure, focusing on race, gender, and indicators of eosinophilic colitis. We summarized incidence rates by demographic factors and conducted chi-square tests to detect significant differences in incidence across various racial and gender groups. This involved using contingency tables to provide statistics and calculate p-values. Subsequently, logistic regression was employed to examine the relationships between race and gender as predictors and eosinophilic colitis as the dependent variable.

Results From 2019 to 2023, among the 2,748,576 patients admitted, we focused on 10,211 patients with Eosinophilic colitis after performing propensity score matching. The logistic regression analysis revealed significant disparities in the incidence of Eosinophilic colitis based on race and gender. Whites were found to have the highest likelihood of developing the condition (coefficient: 2.2411, $p < 0.0001$), followed by Blacks (coefficient: 1.0911, $p < 0.0001$), while Other Races showed a decreased likelihood (coefficient: -1.0702, $p < 0.0001$). There was no significant difference for Hispanics (coefficient: -0.0102, $p = 0.9742$). Additionally, males were less likely than females to develop the condition (coefficient: -0.1760, $p < 0.0001$), highlighting the significant impact of race and gender on the prevalence of the disease.

Conclusions Analysis of the HCUP National Database revealed racial and gender disparities in eosinophilic colitis incidence, highlighting the interplay of genetics, environment, and healthcare access. Higher rates among white and Black populations suggest potential genetic or environmental influences, while lower incidence in males and Hispanics calls for further investigation. These findings emphasize the need for targeted interventions and tailored healthcare strategies to better manage eosinophilic colitis in diverse populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP267 Cryobiopsy compared to forceps biopsy in the colorectum, a prospective open-label proof of concept study

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DOI 10.1055/s-0046-1820922

Aims Reliable histological confirmation of colorectal cancer is essential for staging and treatment planning. Conventional forceps biopsy (FB) often provides specimens that are too small or too superficial. This study examined whether a novel endoscopic cryobiopsy (CB) technique improves diagnostic adequacy.

Methods In this prospective study, fresh surgical colorectal cancer specimens larger than 2 cm were longitudinally opened and sampled before fixation. Sampling was performed by an endoscopist directly on the intact mucosal surface. Two FB samples were obtained using disposable oval-spoon forceps (Ø 2.3 mm, 180 mm, [Radial Jaw 4, large capacity, Boston Scientific, Marlborough, USA]). Four CB samples were obtained using a flexible 1.7-mm CB probe (length 115 mm) powered by the ERBECRYO 2 console (Erbe Elektromedizin GmbH, Tübingen, Germany). The probe tip was placed on the target tissue, freezing was activated via foot pedal, and the sample was released by rapid traction at pre-defined freezing times of 1, 2, 3, and 4 seconds (CB1-4). Healthy mucosa was sampled before tumor tissue to avoid contamination. Primary endpoint was specimen length. Secondary endpoints included perforation, deepest histological layer reached in healthy tissue, tumor histology classification, and biopsy quality rated on a 0–3 Likert scale.

Results Across six specimens, 48 CB samples and 24 FB samples were collected. Mean specimen length was 3.63 mm ± 1.25 for FB; 3.33 ± 0.89 for CB1; 4.00 ± 0.95 for CB2; 5.17 ± 0.84 for CB3; and 4.75 ± 1.60 mm for CB4 ($p < 0.001$). Depth analysis of healthy mucosa showed that FB reached lamina propria in 67 percent and lamina muscularis mucosae in 33 percent. CB reached deeper layers more consistently. Submucosa was attained in 50 percent of CB1, 83 percent of CB2, 83 percent of CB3, and 50 percent of CB4 samples; one CB4 sample reached superficial muscularis propria ($p = 0.013$). No perforations were observed. Tumor biopsies revealed high-grade dysplasia (HGD) in 75 percent of FB samples and HGD suggestive of invasive cancer (HGD-SIC) in 25 percent. CB provided comparable or improved diagnostic granularity. CB3 identified one definitive adenocarcinoma, which was not detected by FB. Biopsy quality (Likert > 1) was achieved in 63 percent of FB samples, 92 percent of CB1 and CB2 samples, 100 percent of CB3 samples, and 92 percent of CB4 samples ($p = 0.032$).

Conclusions This novel cryobiopsy technique, using a flexible 1.7-mm probe, consistently produced larger, deeper, and higher-quality tissue specimens than standard forceps biopsy. A freezing time of 3 seconds offered the most favorable balance of size, depth, and diagnostic yield. Cryobiopsy may provide a meaningful diagnostic advantage in colorectal lesions where depth of invasion remains uncertain and could support more precise therapeutic decision-making.

Conflicts of Interest Erbe Elektromedizin GmbH, Tübingen, Germany provided the probes used for the cryobiopsy. No funding by the company was offered.

OP268 Mechanism-based protein biomarkers for early detection of colorectal cancer and advanced adenomas

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DOI 10.1055/s-0046-1820923

Aims Colorectal Cancer (CRC) is the second-leading cause of cancer-related mortality in Europe and the United States, but early detection boosts the 5-year relative survival rate to 91 %. While colonoscopy remains the goldstandard for screening, its invasive nature reduces adherence. Although lessinvasive stool-based and emerging blood-based biomarker tests have greatlyadvanced screening efforts, new biomarker combination strategies areneeded to enhance accuracy, particularly for detecting early-stage CRC andadvanced adenomas (AA). In this study, part of the Horizon Europe-fundedDIOPTRA project for Mission Cancer, a mechanism-based protein biomarkerapproach to improve early detection was investigated.

Methods A discovery clinical study was conducted involving 260 individuals undergoing colonoscopy to collect blood samples for biomarker analysis. Based on colonoscopy findings and subsequent histopathological evaluation, participants were classified into four groups: Negative (no findings orhyperplastic polyps), Non-advanced adenoma (NAA), Advanced adenoma(AA), and Colorectal cancer (CRC). Each sample was analyzed using Olink'snext-generation proteomics platform, which employs proximity extensionassay (PEA) technology to quantify 3,072 plasma proteins. In parallel, bead-based multiplex assays (LuminexxMAP technology) were used to measure26 cancer-specific autoantibodies, providing complementary insights intoimmune responses. Integrated bioinformatic analyses combining protein and autoantibody data were performed to identify potential biomarker signaturesassociated with CRC and AA.

Results The Olink proteomic analysis identified a 12-protein signature capable of accurately discriminating between the four study groups. Using a 5-fold cross-validation scheme, the linear combination of these proteins achieved a sensitivity of 98.1 % (95 % CI: 90.1–100.0 %) for colorectal cancer (CRC) detection and a specificity of 93.1 % (95 % CI: 77.2–99.2 %) for advancedneoplasia (calculated by combining the Healthy and NAA groups). Importantly, the model demonstrated a 100.0 % sensitivity (95 % CI: 85.8–100.0 %) for stage I/II CRC and 50.0 % sensitivity (95 % CI: 37.0–63.0 %) for advanced adenomas (AA), highlighting the potential of circulating proteinsignatures for detecting both early-stage cancer and advanced precancerouslesions. In parallel, autoantibody profiling revealed eight autoantibodiesexhibiting markedly elevated fluorescence signals (Net MFI > mean + 6 SD) in 3 CRC and 8 AA cases compared to the overall study population. Theinclusion of these autoantibody markers enhanced the overall specificity of theproteomic signature, particularly for the AA group.

Conclusions The combination of highly cancer-specific autoantibodies with sensitiveprotein biomarker panels in blood can substantially improve early detectionperformance. Ongoing work focuses on developing multiplex immunoassaysfor these biomarkers to independently validate the findings and to assessanalytical and clinical performance in a larger validation cohort from theDIOPTRA studies (N = 1,600 participants). This integrated protein biomarkersignature has the potential to enable more accurate, minimally invasive-colorectal cancer screening, facilitating detection of both malignant andpre-cancerous lesions at earlier and more treatable stages.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

WEO Joint Session: How to reduce colonoscopy burden while effectively preventing mortality from CRC

16/05/2026, 11:30–12:30

Ocean 3 + 4

OP269 Safety and Efficacy of Extended Surveillance Intervals Following Colorectal ESD : An International Multicenter Study

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DOI 10.1055/s-0046-1820924

Aims Post-ESD surveillance guidelines remain heterogeneous, with many centers favoring early surveillance colonoscopy (SC) despite low recurrence rates after curative resection. This study aimed to evaluate the safety and outcomes of delayed SC after R0 colorectal ESD for benign lesions and to identify risk factors for metachronous advanced neoplasia.

Methods We retrospectively analyzed 1,097 patients who underwent colorectal ESD between 2013 and 2021. Clinical, procedural, and histological characteristics were recorded. Among 778 patients with available surveillance data, outcomes were compared between those who had early SC (< 12 months) and those with delayed SC (> 24 months). Rates of recurrence, advanced neoplasia, and colorectal cancer were assessed. Risk factors for metachronous advanced neoplasia were evaluated via univariate and multivariate analysis.

Results Mean patient age was 74.3 ± 10.8 years; 54.1 % were male. En bloc and R0 resection rates were 95.8 % and 83.3 %, respectively. Among patients with surveillance data, 82.6 % underwent early SC, and 17.4 % had late-only SC. The rate of advanced adenoma at first SC was low and comparable between early and late groups (3.9 % vs. 6.7 %, $p = 0.167$). The overall rate of metachronous advanced adenoma was 6.5 %, with no significant difference between early and late strategies (6.1 % vs. 8.9 %, $p = 0.25$). All four colorectal cancers were detected in the early group; none occurred in the late-only group. Recurrence on the ESD scar was rare (1.5 % overall), and no late recurrences occurred after a normal SC1. The only significant predictor of metachronous advanced neoplasia was the number of synchronous lesions at index colonoscopy (OR 1.16, 95 % CI 1.07–1.27; $p < 0.01$).

Conclusions Delayed surveillance colonoscopy 3 years after R0 colorectal ESD for benign lesions appears safe and effective in selected patients. The multiplicity of synchronous lesions could guide risk stratification. These findings support extending SC intervals after curative ESD, with potential to reduce unnecessary procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Navigating through complex biliopancreatic diseases: Innovation, prevention and long-term outcomes

16/05/2026, 11:30–12:30

Aqua 1 + 2

OP270 Endoscopic Transpapillary Gallbladder Drainage as a Preventive Strategy in Surgically Unfit Patients With Concomitant CBD and Gallbladder Stones

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DOI 10.1055/s-0046-1820925

Aims In patients with concomitant common bile duct (CBD) and gallbladder stones who are at high surgical risk, cholecystectomy is often unfeasible. Endoscopic transpapillary gallbladder drainage (ETGBD) has been increasingly adopted as a less invasive alternative, but evidence regarding its preventive effect on recurrent biliary events remains limited. We aimed to evaluate the long-term preventive effect of ETGBD compared with observation in surgically unfit patients with both CBD and gallbladder stones.

Methods This single-center, retrospective cohort study included consecutive high-risk surgical patients who had both common bile duct (CBD) stones and gallbladder stones and underwent endoscopic CBD stone removal between January 2010 and July 2024. High surgical risk was defined as American Society of Anesthesiologists (ASA) class ≥ III, significant cardiopulmonary comorbidity, or age ≥ 80 years. Patients who underwent successful ETGBD with maintained gallbladder drainage were compared with those managed by observation. The primary outcome was the occurrence of overall biliary events, including acute cholecystitis, acute cholangitis, and recurrent CBD stones. Propensity score-based overlap weighting was applied to adjust for confounding.

Results Among 220 eligible patients, 41 underwent ETGBD and 179 were managed with observation. Overall biliary events occurred significantly less frequently in the ETGBD group. ETGBD was associated with a markedly lower risk of overall biliary events in both univariable and multivariable analyses (multivariable HR 0.166, 95 % CI 0.039–0.695; $p = 0.014$). This association remained robust after overlap weighting (HR 0.182, 95 % CI 0.043–0.759; $p = 0.019$). In event-specific analyses, ETGBD significantly reduced the risk of recurrent CBD stones (multivariable HR 0.100, 95 % CI 0.013–0.748; $p = 0.025$), while the risks of acute cholangitis and acute cholecystitis were comparable between groups. ETGBD did not increase ERCP-related adverse events.

Conclusions ETGBD significantly reduced recurrent biliary events and demonstrated a clear protective effect against recurrent CBD stones in high-risk surgical patients with concomitant CBD and gallbladder stones. ETGBD may serve as a practical, durable, and clinically meaningful alternative therapy for patients who are unsuitable for cholecystectomy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP272 Long-term Outcomes of EDEE in a Tertiary Referral Center: A Prospective Cohort Evaluation

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Aims Endoscopic ultrasound (EUS)-directed transenteric/trangastric endoscopic retrograde cholangiography (EDEE) using lumen-apposing metal stents (LAMS) has emerged as a minimally invasive alternative for selected benign and malignant gastrointestinal conditions. Although short-term technical and clinical success rates are high, long-term durability, stent-related complications, and need for reintervention remain incompletely defined.

The aim of the present study is to evaluate long-term clinical, endoscopic, and technical outcomes of EDEE performed in a high-volume tertiary referral center to treat benign adverse events of bilio-digestive anastomosis.

Methods We conducted a prospective observational study including consecutive patients undergoing EDEE between 2018 and 2020 with minimum follow-up of 5 years. Clinical indications, type of surgery, technical details, and early adverse events were recorded. Primary endpoints were long-term clinical success and anastomotic patency. Secondary endpoints included late adverse events (LAMS obstruction, migration, erosions), recurrence rate, need for endoscopic or surgical reintervention, and predictors of long-term failure. Statistical analysis was performed including multivariate tests [1–3].

Results A total of 40 patients were included, with a median follow-up of 63 months. All the patients underwent hepaticojejunostomy on Roux-en-Y loop due to iatrogenic biliary damage in 14 patients and due to oncological resection in 36 patients. Technical and early clinical success were achieved in 100% and 97.5%, respectively. One patient had a recurrence of neoplastic stricture. Anastomotic patency at final follow-up was 97.5%. LAMS for EDEE was still in place in 10 patients uneventfully. Late adverse events occurred in 2.5% of cases (recurrent cholangitis without recurrent anastomotic stricture due to HCC), managed conservatively. Recurrence of the stricture occurred in 4.6% and was re-treated endoscopically in all the cases. Recurrence occurred in case of ischemic cholangiopathy involving the intrabiliary ducts (p 0.01) in all cases during the first 12 months of follow-up.

Conclusions In a tertiary referral setting, EDEE demonstrates excellent long-term durability, high anastomotic patency, and manageable late adverse events. The correct rationale in treating biliary adverse events is crucial to obtain long-term favorable outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mutignani M, Forti E, Pugliese F, Cintolo M, Bonato G, Bravo M, Dioscoridi L. Endoscopic entero-enteral bypass to treat postsurgical benign complications of hepatico-jejunostomy: Update of a 7-year single-center experience. *Endosc Int Open* 2023; 11: E394–E400. doi:10.1055/a-2032-3077 PMID: 37102184 PMID: PMC10125775
- [2] Cintolo M, Forti E, Bonato G, Puricelli M, Dioscoridi L, Bravo M, Gallo C, Pugliese F, Palermo A, La Mantia A, Mutignani M. Role of the EUS in the Treatment of Biliopancreatic Disease in Patients with Surgically Altered Anatomy. *Diagnostics (Basel)* 2025; 15: 2707. doi:10.3390/diagnostics15212707 PMID: 41226000 PMID: PMC12609963
- [3] Mutignani M, Forti E, Larghi A, Pugliese F, Cintolo M, Massad M, Italia A, Tringali A, Ferrari GC, De Gasperi A, Rampoldi A, De Carlis L, Chiara O, Paparozzi C, Dioscoridi L. Endoscopic entero-enteral bypass: an effective new approach to the treatment of postsurgical complications of hepaticojejunostomy. *Endoscopy* 2019; 51: 1146–1150. doi:10.1055/a-0914-2855 Epub 2019 Jun 4 PMID: 31163496

OP273 Long terms outcomes after endoscopic papillary large-balloon dilation compared to non-large balloon dilation for common bile duct stones: the WIDE-2 multicenter propensity score-matched cohort study

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DOI 10.1055/s-0046-1820928

Aims To evaluate whether endoscopic papillary large-balloon dilation (EPLBD) increases the risk of late cholangitis compared with standard dilation (EPBD) due to potential long-term impairment of the sphincter of Oddi, in patients treated for common bile duct (CBD) stones, using propensity score matching to reduce the effect of baseline confounding factors [1–7].

Methods This multicenter retrospective cohort study included adults undergoing ERCP with balloon dilation for choledocholithiasis at 33 Italian centers (2014–2023). Patients treated with EPLBD (≥ 12 mm) or EPBD (< 12 mm) were eligible if complete duct clearance was achieved. The primary outcome was late cholangitis, defined as cholangitis occurring more than 30 days after ERCP. A propensity score was computed from main clinical and anatomical variables to create comparable EPLBD and EPBD groups, minimizing the influence of baseline imbalances (► Table 1).

► **Table 1** Baseline characteristics of patients undergoing EPLBD vs EPBD before and after propensity score matching

Variable	EPLBD Unmatched (n = 752)	EPBD Unmatched (n = 173)	SMD (%)	EPLBD Matched (n = 173)	EPBD Matched (n = 173)	SMD (%)
Age, years (mean)	74.4	72.5	14.8	72.2	72.5	−2.3
Male sex, %	48.7	63.1	−29.2	64.2	63.0	2.5
CBD diameter, mm (mean)	15.8	12.0	102.8	11.9	12.0	−3.0
Largest stone diameter, mm	13.8	9.7	97.5	9.6	9.7	−3.5
No. of stones = 1, %	29.2	32.4	−6.8	35.5	32.4	6.5
No. of stones = 2, %	15.2	11.4	11.3	11.6	11.4	0.5
No. of stones ≥ 3, %	55.6	56.3	−1.4	52.9	56.3	−7.0
Periampullary diverticulum, %	23.4	34.1	−23.7	33.0	34.1	−2.0
Previous cholecystectomy, %	44.6	36.4	16.8	36.4	36.4	0.0
Previous ERCP, %	46.4	41.5	10.0	44.5	41.5	6.0

Results A total of 990 patients were included, of whom 342 were successfully matched (171 per group). Procedural outcomes and early adverse events were similar between techniques (CBD clearance at index ERCP: EPLBD 87.3 % vs EPBD 80.3 %, $p = 0.08$; mechanical lithotripsy: 12.1 % vs 11.0 %, $p = 0.74$; cholangioscopy-assisted lithotripsy: 2.3 % vs 4.6 %, $p = 0.24$; PEP: 2.3 % vs 4.0 %, $p = 0.34$; bleeding: 5.8 % vs 6.4 %, $p = 0.82$; perforation: 2.3 % vs 0.6 %, $p = 0.12$; early cholangitis: 2.9 % vs 5.8 %, $p = 0.19$). Over a mean follow-up of approximately three years, late cholangitis occurred in 7.9 % of matched patients (EPLBD 6.4 % vs EPBD 9.4 %, $p = 0.32$), with no significant difference between EPLBD and EPBD, consistent with findings in the unmatched cohort (9.8 % vs 9.4 %, $p = 0.85$). Recurrent choledocholithiasis was the main driver of late cholangitis, but a substantial proportion (about one-third) occurred without stones. Overall long-term biliary events (late cholangitis and/or stone recurrence) occurred in 15.2 % of matched patients, with identical rates between EPLBD and EPBD.

Conclusions In this large, balanced cohort, large and standard dilation demonstrated comparable long-term safety, with no evidence that EPLBD increases the risk of late cholangitis. Late biliary events were primarily driven by stone recurrence. These findings suggest that the choice between large and standard dilation should be guided mainly by stone characteristics and technical feasibility rather than concerns about long-term complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Li T, Hao LX, Lv C, Li XJ, Ji XD, Chen M et al. Long-term outcomes of endoscopic papillary large-balloon dilation (12–15 mm) with or without limited sphincterotomy for removal of bile duct stones. *Hepatobiliary Pancreat Dis Int* 2023; 22 (4): 392–8
- [2] Austin PC. An Introduction to Propensity Score Methods for Reducing the Effects of Confounding in Observational Studies. *Multivar Behav Res* 2011; 46 (3): 399–424
- [3] Sheng-Chen, Qing-Hua Wu, Qian-Yi Li. Clinical Effects of Endoscopic Papillary Balloon Dilation with Different Size Balloons on Sphincter of Oddi Function for Removing Common Bile Duct Stones. *Clin Surg*. 2022; 7 (3459):
- [4] Konstantakis C, Triantos C, Theopistos V, Theocharis G, Maroulis I, Diamantopoulou G et al. Recurrence of choledocholithiasis following endoscopic bile duct clearance: Long term results and factors associated with recurrent bile duct stones. *World J Gastrointest Endosc* 2017; 9 (1): 26
- [5] Fu K, Yang YY, Chen H, Zhang GX, Wang Y, Yin Z. Effect of endoscopic sphincterotomy and endoscopic papillary balloon dilation endoscopic retro-grade cholangiopancreatographies on the sphincter of Oddi. *World J Gastrointest Surg* 2024; 16 (6): 1726–33
- [6] Wang J, Cao L, Cong Y, Huang Y, Wang L, Wang W et al. Comparative efficacy and safety of 3 endoscopic techniques for the treatment of large com-

mon bile duct stones (≥ 15 mm): long-term follow-up. *Gastrointest Endosc* 2025; 102: 47–55.e1

[7] Cheon YK, Lee TY, Kim SN, Shim CS. Impact of endoscopic papillary large-balloon dilation on sphincter of Oddi function: a prospective randomized study. *Gastrointest Endosc* 2017; 85: 782–790.e1

OP274 Treatment of obstructive chronic pancreatitis in clinical practice: An international expert survey and case vignette study

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DOI 10.1055/s-0046-1820929

Aims: Current international guidelines regarding the treatment of obstructive chronic pancreatitis (CP) differ in their recommendations and reserve a minimal role for advanced endoscopic interventional therapy utilizing pancreatoscopy-guided intraductal lithotripsy. The aim of this multidisciplinary international survey is to provide an overview of current expert opinion of pancreatologists pertaining the role of advanced endoscopic treatment in painful obstructive CP.

Methods: An international online survey was conducted among expert pancreatologists that were systematically selected by being affiliated with member associations specializing in pancreatic diseases (European Pancreatic club and Dutch Pancreatitis study group) or the European Cholangioscopy group and identified through a literature search. For the literature search experts were selected based on publication record from the past 5 years. The survey consisted of five different domains: demographics, endoscopic equipment and technique, clinical practice, case vignettes and statements.

Results: Among the 95 pancreatologists who participated in the survey, 59 (62 %) were gastroenterologists and 36 (38 %) were surgeons with a median clinical experience of 15 years (IQR 16). 78 % of the pancreatologists were based in Europe. Overall, 70 % of pancreatologists reported adherence to the ESGE guideline and the majority (61 %) did not support the most recent ASGE recommendation favoring primary surgical management. Based on the statements, nearly all gastroenterologist (98 %) and most surgeons (89 %) agreed

that a subset of patients with CP is initially best managed with endoscopic therapy. Regarding endoscopic interventions, 86 % of gastroenterologist reported performing pancreatoscopy- guided intraductal lithotripsy, either occasionally or routinely, in the management of CP. Based on responses to case vignettes, 78 % of pancreatologists identified the presence of pancreatic duct stones in the head measuring > 5 mm with upstream ductal dilatation > 5 mm as key finding favoring endoscopic therapy. In contrast, surgery is favored in patients with an enlarged pancreatic head (> 4 cm), stones in the pancreatic tail, or intraparenchymal calcifications by 54 %, 68 % and 57 % of the respondents, respectively.

Conclusions: This international expert survey showed that despite some guideline recommendations most pancreatologists preferentially employ endoscopic therapy including pancreatoscopy- guided intraductal lithotripsy rather than primary surgery in selected patients with painful obstructive CP. Further research into optimal treatment selection criteria based on individual patient characteristics is warranted.

Conflicts of Interest Marco J. Bruno reports research grants from Boston Scientific, Cook Medical, Pentax Medical, InterScope, 3M, and Mylan, and performed as a consultant for Boston Scientific, Cook Medical, and Pentax Medical. Pieter Jan F. de Jonge reported consultancy and speaker fee for Boston Scientific, Cook Medical and Fujifilm.

OP275 Bile leak after cholecystectomy: is there an optimal timing to endoscopy?

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DOI 10.1055/s-0046-1820930

Aims Bile leak is a common complication after cholecystectomy, requiring timely management to prevent life-threatening outcomes. Endoscopic retrograde cholangiopancreatography (ERCP) is essential in treatment, but large data concerning optimal timing and technique selection are unavailable. This study evaluates whether the timing of ERCP influences healing and if different bile duct injuries affect outcomes.

Methods Data from a prospectively maintained database over 25 years (2001–2025) included 143 patients (M/F:51.5%/48.5 %, mean age 63 ± 17) undergoing ERCP for bile leaks after cholecystectomy.

Results Most leaks followed laparoscopic cholecystectomy (n = 87, %) while 53 followed open procedure and 3 initially lap procedures that were converted to open. The median time from leak to ERCP was 7 days (min: 1 – max: 72). Strasberg classification was; Strasberg A in 87/140 (62.15), C in 7/140 (5.0%), D in 38/140 (27.1 %), E in 8/140 (5.7 %) while in 3/143 identification of the exact bile leak site was not possible. When excluding patients with Strasberg E leaks necessitating surgery (n = 135) bile leak healing was observed in 121/130 (93.1 %) (data concerning healing rates not available in 5/135 patients). Stent placement improved healing rates (104/109, 95.4 % vs. 17/21, 81.0 %, p = 0.037), with no difference between pig-tail and (Amsterdam) straight plastic stents (92.3 % vs 97.7 %, p = 0.348). Retained CBD Stones (17/19, 89.5 % vs 104/111, 93.7 % if no stones, p = 0.389) or CBD strictures (17/18, 94.4 % vs 104/112, 92.9 % if no stricture, p = 0.638) did not affect outcomes. Patients with Strasberg A bile duct injury showed greater, numerically, healing rates but not in a statistically significant way, when compared with patients with Strasberg C or D injuries (83/87, 95.4 % vs 38/43, 88.4 %, p = 0.133) Leaks from the cystic duct stump had a 96.8 % (n = 61/63) resolution rate, whereas gallbladder bed leaks healed in 88 % (n = 22/25). The median healing time was 2 days (min: 1 – max: 25), unaffected by stent placement or ES alone (p = 0.925), but later ERCP correlated with longer healing (RR: 0.317, p = 0.002). Post right aberrant bile leak, time for healing was longer than leaks from other sites (median: 11 days (min : 7

– max: 32) vs 2 days (min: 1 – max: 25), p = 0.001). Submitting the patients to ERCP during the first week from the operation was correlated with quicker resolution (p = 0.003) while tended but was not correlated with higher healing rates (98.5 % vs 92.2 % if submitted to ERCP after the 7th day, p = 0.106).

Conclusions ERCP with stenting remains the first-line approach for minor bile leaks after cholecystectomy. Early ERCP accelerates healing, emphasizing the importance of prompt intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

New frontiers in imaging and prediction in esophageal disease

16/05/2026, 11:30–12:30

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OP276 Risk of upper gastrointestinal cancer after a positive fecal immunochemical test in the Danish national colorectal cancer screening program

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DOI 10.1055/s-0046-1820931

Aims The Danish national colorectal cancer screening program was introduced in 2014 and includes a fecal immunochemical test (FIT) followed by a colonoscopy in case of a positive FIT ($\geq 20 \mu\text{g}$ fecal hemoglobin/g feces). Following positive FITs, however, colonoscopy will not detect advanced neoplasia (AN) in most cases. Previous studies indicate that positive FITs in these cases might stem from prevalent cancer in the upper gastrointestinal tract or precursors hereof. We investigated the relative risk of upper gastrointestinal cancer after a positive FIT in the Danish national colorectal cancer screening program to elucidate whether FIT-positive participants without AN might benefit from follow-up esophagogastroduodenoscopy.

Methods We performed a population-based cohort study utilizing existing Danish health registries. We identified all participants who underwent FIT as part of the screening program during 2014–2019 and grouped them according to their FIT and colonoscopy result into: 1) FIT-positives with AN (FIT + /AN +), 2) FIT-positives without AN (FIT + /AN -), and 3) FIT-negatives (FIT -). We then followed all groups separately from six months after the first-time FIT until first occurrence of esophageal, gastric, or duodenal (EGD)-cancer, death, or 3.5 years. We used Cox proportional-hazards regression analyses to calculate crude and adjusted hazard ratios (HRs) as a measure of the relative risk of EGD-cancer after a positive FIT. FIT- participants served as the reference. We included sex, age, and Charlson Comorbidity Index score in the adjusted model.

Results We included 1.399.566 participants with a first-time FIT. Of them, 29,462 (2.1 %) were FIT + /AN +, 54,028 (3.8 %) were FIT + /AN -, and 1.316.076 (94.0 %) were FIT -. We observed 86 EGD-cancers among FIT + /AN +, 132 among FIT + /AN -, and 1,574 among FIT -. The corresponding adjusted HRs were 1.63 (95 % confidence interval [CI]: 1.26–2.11) when comparing FIT + /AN + with FIT - and 1.65 (95 % CI: 1.35–2.01) when comparing FIT + /AN - with FIT -. The relative risks were particularly increased for esophageal cancers (HR: 1.76 [95 % CI: 1.20–2.58] when comparing FIT + /AN + with FIT - and 1.83 [95 % CI: 1.37–2.46]) when comparing FIT + /AN - with FIT -.

Conclusions In the Danish colorectal cancer screening program, subjects with a positive FIT had an increased relative risk of EGD-cancer regardless of the detection of AN at colonoscopy, as compared with subjects with a negative FIT. Absolute risk measures are needed for final clinical recommendations to be made.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP277 The Endoscopic Functional Study Integrated System (EFSIS) as a Provocative Test: Dynamic Assessment of the Anti-Reflux Barrier Function

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DOI 10.1055/s-0046-1820932

Problem to solve Current diagnostic standards, such as multichannel intraluminal impedance-pH (MII-pH) monitoring, excel at quantifying esophageal reflux burden. However, dynamic, functional evaluation of the anti-reflux barrier is currently lacking. Standard methods do not visualize the mechanical integrity of the barrier in real time. Therefore, a modality capable of simultaneously evaluating structural anatomy and functional physiology is needed to fill this diagnostic gap.

Innovation We recently proposed the Phase Concept as a dynamic functional evaluation method for the anti-reflux barrier (Digestive Endoscopy 2024). To evaluate this concept clinically, we developed the Endoscopic Functional Study Integrated System (EFSIS), which integrates endoscopic pressure assessment (EPSIS) with high-resolution manometry (HRM). EFSIS enables the simultaneous evaluation of endoscopic findings, intragastric pressure, and esophageal motility on a single screen during gastric insufflation. This "provocative test" visualizes the four-phase mechanism: Phase 1 (cardia closure), Phase 2 (LES contraction), Phase 3A (UES contraction), and Phase 3B (esophageal peristalsis). Following our technical report (Endoscopy E-Videos 2025), this study assessed the feasibility and clinical utility of EFSIS in a consecutive patient series.

Results We retrospectively analyzed 28 patients who underwent EFSIS between August 2024 and September 2025. Median age was 56 years (18 males); median BMI was 22.8. All procedures were completed without adverse events (median time: 7 minutes).

Phase interpretability was high: Phase 1 (100%), Phase 2 (100%), Phase 3A (92.9%), and Phase 3B (89.3%). The three non-assessable cases showed strong Phase 2 LES contraction preventing reflux, indicating a physiological block rather than technical failure.

In a subgroup of 14 patients with MII-pH data, mean EFSIS scores (scale 0–8; higher indicates better integrity) showed varying trends across phenotypes: GERD 4.8, reflux hypersensitivity 6.4 (bimodal), and functional heartburn 7.5. These preliminary observations suggest potential phenotype-dependent patterns of the anti-reflux barrier.

Conclusions EFSIS provides a novel, phase-based visualization of the anti-reflux barrier by integrating real-time endoscopic and manometric physiology. This feasibility study demonstrated high interpretability and procedural safety. The results suggest the potential of EFSIS to identify functional variations among GERD, reflux hypersensitivity, and functional heartburn, warranting further evaluation in larger prospective cohorts.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP278 A Randomised Controlled Trial to Evaluate the Utility of an Ultrathin Endoscope with Blue Light Imaging for Detecting Pharyngeal and Oesophageal Neoplasms — Ultrathin vs. Magnifying Endoscopy

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DOI 10.1055/s-0046-1820933

Aims Adding magnification observation to image-enhanced endoscopy has been shown to provide high diagnostic accuracy for oesophageal carcinoma. Although magnifying endoscopy is mainly used in pre-treatment evaluation for superficial oesophageal cancer, its adoption in daily practice remains limited. Recently, a high-resolution ultrathin transnasal endoscope (with a 5.8 mm

distal end diameter) has become available, allowing approximate visualisation of microvascular patterns at close range. However, no prospective study has directly compared the diagnostic accuracy of magnifying and ultrathin endoscopes for pharyngeal and oesophageal squamous cell carcinoma (SCC). Thus, the diagnostic performance of ultrathin endoscopy remains to be elucidated.

Methods This was a multicentre, prospective, randomised, non-inferiority trial conducted between August 2023 and March 2025. Eligible participants were patients with current or previous SCC in the head and neck or oesophagus. Patients were randomly assigned to either the magnifying endoscope group (EG-760Z, Fujifilm) or the ultrathin endoscope group (EG-840N). Both endoscopes were fitted with a distal attachment and inserted orally under sedation. The pharynx and oesophagus were examined using Blue Light Imaging (BLI). When a lesion suspected to be SCC was identified, close-up observation was performed with the ultrathin endoscope, and magnified observation with the magnifying endoscope. Endoscopic diagnosis (SCC or non-SCC) and diagnostic confidence (high or low) were recorded based on microvascular changes. After the first endoscopy, the other endoscope was used for a second examination in the same manner. Iodine staining and biopsy were subsequently performed for all SCC suspected lesions, and histopathology served as the gold standard. The primary endpoint was the detection rate of superficial pharyngeal and oesophageal SCC. Secondary endpoints included the diagnostic accuracy and diagnostic confidence level of magnifying and ultrathin endoscopy (► Table 1).

► Table 1

	Ultrathin	Magnifying
Pharynx		
SCC suspected lesions,	19	10
Histological SCC, n	10	6
Diameter, median (range), mm	10 (8-40)	10 (10-60)
Macroscopic type, 0-I / 0-IIa, 0-IIb, 0-IIc, n	4 / 2, 3, 1	2 / 3, 1, 0
Location, Oropharynx / Hypopharynx	1 / 9	3 / 3
Treatment, Local resection/ CRT, n	7 / 3	2 / 4
Oesophagus		
SCC suspected lesions, n	44	39
Histological SCC, n	20	18
Location of the SCCs, Ce/Ut/Mt/Lt, n	1 / 8 / 10 / 1	0 / 8 / 8 / 2
Diameter, median (range), mm	10 (5 – 40)	10 (5 – 50)
Macroscopic type, 0-I/0-IIa, 0-IIb, 0-IIc/0-III, n	1/1, 12, 5/1	1/2, 8, 7/0
Treatment, ESD/SR/CRT/Observation	10/1/7/2	12/2/4/0
Depth of invasion, EP/LPM/MM/SM1/SM2-3	2/8/0/1/0	2/9/1/1/1

Results A total of 148 patients were enrolled, and eight expert endoscopists participated in the study. The detection rates of superficial pharyngeal and oesophageal SCC were 93.3% (28/30) for the ultrathin endoscope and 87.5% (21/24) for the magnifying endoscope. The lower bound of the 90% confidence interval for the difference exceeded the predefined non-inferiority margin of –10%. Sensitivity and specificity (Ultrathin vs. Magnifying) were 80.0% vs 79.2% and 74.6% vs 74.0%, respectively, showing no statistically significant difference. The proportion of high-confidence diagnoses was 42.9% with the ultrathin endoscope and 57.1% with the magnifying endoscope, with no significant difference.

Conclusions BLI using the novel ultrathin endoscope demonstrated diagnostic performance equivalent to that of magnifying endoscopy for detecting and diagnosing superficial pharyngeal and oesophageal SCC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP279 Flip-Derived EGJ Distensibility and Diameter as Predictors of Post-POEM GERD

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DOI 10.1055/s-0046-1820934

Aims Gastroesophageal reflux disease (GERD) is a well-recognized complication following peroral endoscopic myotomy (POEM), yet reliable predictive factors remain limited. Identifying patients at higher risk of post-POEM GERD continues to be a clinical challenge. The functional lumen imaging probe (FLIP) assesses esophagogastric junction (EGJ) distensibility, diameter, and contractile response, offering a potential tool for predicting post-procedure outcomes. This study aims to evaluate the predictive value of peri-procedural FLIP metrics obtained pre-POEM and at 3-month follow-up and examine their utility in identifying patients at risk for post-POEM GERD.

Methods This prospective cohort study included patients with primary achalasia who underwent POEM at a tertiary care center between March 2020 and June 2025 and completed 3-month follow-up endoscopy and FLIP assessment. GERD was defined as the presence of LA Grade B–D erosive esophagitis, peptic stricture, or biopsy-proven Barrett's esophagus. In the absence of endoscopic evidence of GERD, patients underwent wireless pH monitoring; GERD was diagnosed if acid exposure time (AET; % time pH < 4) was ≥ 6%. FLIP measurements included EGJ distensibility index (DI) at 60 mL and maximum EGJ diameter at 60–70 mL. Contractile response (CR) was categorized using established criteria (► Table 1).

► Table 1

	Total cohort	No GERD	GERD	p-value
N	153	74 (48.4%)	79 (51.6%)	
FLIP Distensibility (mm ² /mmHg) at 60mL Pre-POEM (median + IQR)	1.3 (0.8 – 2.1)	1.2 (0.8 – 1.9)	1.3 (0.6 – 2.5)	0.773
FLIP Diameter (mm) at 70mL Pre-POEM (median + IQR)	9.1 (6.8 – 12.0)	8.2 (6.4 – 11.6)	10.0 (7.0 – 12.2)	0.111
FLIP Distensibility (mm ² /mmHg) at 60mL Post-POEM (median + IQR)	5.4 (4.1 – 6.9)	5.0 (3.7 – 6.6)	6.0 (4.5 – 7.2)	0.040*
FLIP Diameter (mm) at 70mL Post-POEM (median + IQR)	17.2 (15.1 – 18.8)	16.8 (14.6 – 18.1)	17.8 (16.0 – 19.0)	0.028*

Results A total of 153 patients were included (45.1% female; median age 61.5 years [IQR 44.6–73.4]). Achalasia subtypes included type I (9.2%), type II (75.1%), and type III (15.6%). Median myotomy length was 6.0 cm (IQR 6.0–8.0), and clinical success (Eckardt score ≤ 3) was achieved in 92.8%. Objective GERD was identified in 79 patients (51.6%). GERD was significantly associated with older age and type III achalasia. Patients with GERD had a higher post-POEM EGJ diameter at 70 mL (median 17.8 mm [IQR 16.0–19.0] vs 16.8 mm [IQR 14.6–18.1]; $p = 0.028$) and higher EGJ-DI at 60 mL (6.0 mm²/mmHg [IQR 4.5–7.2] vs 5.0 mm²/mmHg [IQR 3.7–6.6]; $p = 0.040$). Thresholds of EGJ diameter > 16.75 mm and EGJ-DI > 5.45 mm²/mmHg discriminated patients who developed GERD. Age and type III achalasia were independent predictors.

Conclusions Higher post-POEM EGJ diameter and distensibility on FLIP are significantly associated with the development of GERD. These findings support the use of post-procedure FLIP metrics to identify patients at increased risk for reflux after POEM.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP280 Epithelial–Mesenchymal Transition–Associated Gene Activation Promotes Esophageal Stricture Following Circumferential Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1820935

Aims Postoperative esophageal stricture is the most common complication following circumferential endoscopic submucosal dissection (ESD) for esophageal neoplasia. It significantly impairs nutrition and quality of life. While the main predictors are the circumferential and longitudinal extent of the mucosal defect and fibrosis, the underlying mechanisms remain unclear. This pilot study aimed to explore the fibrotic molecular signature associated with post-ESD stricture by evaluating the expression of fibrosis- and EMT-related genes.

Methods Among 19 patients who underwent circumferential ESD, 12 (63.2%) developed post-ESD strictures. The cohort included six patients with Barrett's-related adenocarcinoma (pT1a) and six with squamous neoplasia (four pT1b SCCs and two pTis). Steroid prophylaxis was applied in 58.3% of cases. RT-qPCR was used to quantify gene expression ($2^{-\Delta\Delta C_t}$) in post-resection tissues, and findings were compared between stenotic and non-stenotic patients.

Results Stricture tissues showed increased expression of several EMT- and fibrosis-related genes, including TWIST1, ZEB1, FAP, TGF- β , FN1, COL3A1, and COL5A1. When stratified by lesion type, Barrett's-related cases exhibited distinct expression profiles. Notably, ACTA2 expression was lower in stenotic patients (mean $\pm$ SD: 0.044 ± 0.033) compared to non-stenotic controls (0.118 ± 0.036), $p = 0.11$; 95% CI [–0.171, 0.023]. PDGFRB was modestly elevated in stenotic tissues (0.139 ± 0.058 vs. 0.095 ± 0.088), though not statistically significant ($p = 0.53$; CI [–0.155, 0.244]). Immunohistochemistry confirmed elevated expression of TWIST1, FAP, and α -SMA, along with marked collagen deposition.

Conclusions Although a pilot study, our findings provide novel evidence that EMT activation and fibroblast-driven remodeling are key drivers of post-ESD esophageal strictures. Distinct molecular signatures in Barrett's versus squamous neoplasia suggest lesion-specific fibrotic pathways beyond the extent of mucosal injury. If confirmed, these preliminary insights highlight potential targets for developing strategies to prevent or treat esophageal strictures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP281 Evolution of endoscopic assessment of eosinophilic esophagitis in Europe and its effects on diagnostic delay: data from the EUREOS EoE CON-NECT registry

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DOI 10.1055/s-0046-1820936

Aims Endoscopy with histopathological assessment of esophageal biopsies is the cornerstone of eosinophilic esophagitis (EoE) diagnosis and characterization. This study aimed to evaluate temporal changes in endoscopic practice for EoE using data from the European EoE CONNECT registry, and to assess its influence on diagnostic delay (DD).

Methods A cross-sectional analysis of the EoE CONNECT registry included EoE patients from 50 hospitals across four European countries, registered up to 6th of October 2025. EoE was defined according to international diagnostic criteria, requiring symptoms of esophageal dysfunction and a peak eosinophil count ≥ 15 eosinophils per high-power field, in at least one esophageal biopsy. Hospitals were classified as high-volume if they had enrolled ≥ 200 patients. Data distribution was tested using the Shapiro–Wilk test. Categorical variables were compared using χ^2 or Fisher's exact tests. Temporal correlations between diagnostic delay and year of diagnosis were examined using simple linear re-

gression analysis. Pairwise comparisons of diagnostic sensitivity among esophageal segments and their combinations were analyzed with McNemar's test.

Results A total of 3,298 EoE patients (mean age 35.2 ± 15.2 years; 74.4% male; 82.0% adults) were included. The EREFS score was reported in 95.5% of endoscopic examinations at the time of diagnosis, increasing from 88–90% in 2014–2015 to 98–99% in 2024–2025 ($p < 0.001$). Following the 2017 EoE guidelines, EREFS reporting improved significantly (90.5% vs 96.9%, $p < 0.001$), both in low-volume (from 91.4% to 97.0%, $p < 0.001$) and high-volume centers (from 87.3% to 96.7%, $p < 0.001$). The proportion of patients with biopsies from ≥ 2 esophageal segments increased after 2017 (57.2% vs 66.3%, $p < 0.001$), while single-segment sampling decreased (19.9% vs 9.6%, $p < 0.001$). High-volume hospitals showed greater adherence to recommendations, obtaining multiple site biopsies in 90.2% of cases compared with 82.4% in low-volume centers ($p < 0.001$). The distal esophagus was the most frequently sampled site (93.2%), followed by the proximal (81.8%) and middle segments (36.2%). Among patients with biopsies from all three segments ($n = 785$), diagnostic sensitivity progressively decreased from distal (91.9%) to middle (85.5%) and proximal (74.9%) sites, confirming a distal-to-proximal gradient ($p < 0.001$ for all pairwise comparisons). Combinations including the distal segment (distal + middle or distal + proximal) showed the highest diagnostic performance, exceeding 97% sensitivity and significantly outperforming the middle + proximal combination (91%; $p < 0.001$). The overall median DD was 2.0 years (IQR 0–6). Across the study period, DD decreased by approximately 8.5 months per year ($B = -0.714$, $p < 0.001$). When comparing phenotypes, patients with a mixed/stricturing phenotype showed a longer DD [median 3.0 years (IQR 1–10)] and a greater annual reduction of 9.34 months. In contrast, the inflammatory phenotype had a median DD of 2.0 years (IQR 1–5), with a yearly reduction of 8.03 months.

Conclusions Endoscopic assessment of EoE has markedly improved over time, with progressive standardization of reporting and biopsy practices across Europe, which accompanied by a progressive reduction in diagnostic delay

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Hemostasis in Action: Advances in Bleeding Management

16/05/2026, 11:30–12:30

Sky 2

OP282 EUS-guided coil and glue injection and beta-blockers versus b-blockers alone for primary prophylaxis of gastric varices among cirrhotic patients – a retrospective multicentre analysis

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DOI 10.1055/s-0046-1820937

Aims Gastric variceal bleeding (GVB) is associated with high morbidity and mortality. EUS-guided coil and cyanoacrylate injection (EUS-CG) has been shown to be an effective therapy for bleeding gastric varices and secondary prophylaxis,

however, there is a paucity of data on primary prophylaxis of gastric varices. We compared the efficacy of addition of EUS-CG to Beta-blockers against Beta-blockers alone for primary prophylaxis of gastric variceal bleeding [1].

Methods This multi-centre observational study included patients across 8 tertiary care centres in India. Adult patients with cirrhosis and large gastric varices (F2 or F3) without prior bleeding were included. Baseline demographics, prior non-bleeding decompensating events and clinical outcomes including bleeding, hepatic decompensation and mortality were reviewed. Patients undergoing EUS-CG and initiated on beta-blockers (EUS-CG + β -blocker arm) were compared with patients on beta-blockers alone (β -blocker arm) after adjusting for confounding variables including age, sex, Child-Pugh score and form of gastric varix (F2/F3). Competing risk analysis was performed to assess the risk of bleeding and hepatic decompensation, with mortality and liver transplantation as competing events. The primary outcome was to compare the incidence of first gastric variceal (GV) bleeding (► **Table 1**).

► **Table 1**

Outcomes	EUS-coil and glue + β -blockers (n = 135)	β -blockers alone (n = 78)	p-value
Overall bleeding	21 (15.6%)	37 (47.4%)	<0.001
GV-related bleeding	10 (7.4%)	28 (35.9%)	0.03
EV-related bleeding	5 (23.8%)	7 (18.9%)	0.66
Decompensation (bleeding, ascites or HE)	47 (34.8%)	59 (75.6%)	<0.001
All-cause mortality	21 (15.6%)	19 (24.4%)	0.11
Bleed related mortality	8 (38.1%)	9 (47.4%)	0.55

Results Of 213 patients, 135 (male = 83, 61.5%; mean age- 56 ± 12.4 years) underwent EUS-CG and received beta-blockers, while with 78 patients (male = 56, 71.7%; mean age- 56 ± 11.2 years) received beta-blockers alone. Of 135 patients in the EUS-CG + β -blocker arm with a median follow up of 13.2 months, 10 (7.4%) patients had GV bleeding, while among 78 patients in β -blocker arm with a median follow-up of 25.9 months, 28 (35.9%) patients had GV bleeding. Compared to the β -blocker arm, patients in the EUS-CG + β -blocker arm had significantly lower incidence of GV bleeding (sHR: 0.39, 95% CI: 0.19-0.82; $p = 0.12$), lower all-cause upper GI bleeding (sHR: 0.57, 95% CI: 0.34-0.98; $p = 0.042$), and lower incidence of hepatic decompensation (sHR: 0.64, 95% CI: 0.44-0.94; $p = 0.024$). There were no difference in the incidence of non-bleed related hepatic decompensation (sHR: 0.66, 95% CI: 0.39-1.13; $p = 0.123$), or mortality (sHR: 1.36, 95% CI: 0.69-2.66; $p = 0.37$), between the 2 groups. On multivariate regression analysis, use of β -blockers alone as primary prophylaxis (sHR: 3.39, 95% CI: 1.60-7.20; $p = 0.001$) and MELD score (sHR: 1.09, 95% CI: 1.03-1.15; $p = 0.006$) and were significant predictors of bleeding.

Conclusions In patients with cirrhosis and large gastric varices, a combination of EUS-coil and glue injection and β -blockers is more effective than β -blocker alone therapy for the prevention of first gastric variceal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kouanda A et al. Safety and efficacy of EUS-guided coil and glue injection for the primary prophylaxis of gastric variceal hemorrhage. *Gastrointestinal Endoscopy*. Volume 94 (Issue 2): 291–296

OP284 Endoscopic Ultrasound Directed Gastric Variceal Obliteration: The Early Experience of a New Service at a Large Australian Quaternary Referral Centre

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DOI 10.1055/s-0046-1820938

Aims Gastric varices (GV) have higher rebleeding and mortality rates than oesophageal varices (OV), requiring definitive haemostatic techniques such as balloon-occluded retrograde transvenous obliteration (BRTO) [1]. Endoscopic ultrasound directed gastric variceal obliteration (EUS-GVO) is a newer modality for definitive treatment by directly accessing varices to obliterate feeding vessel(s). Both BRTO and EUS-GVO have demonstrated superiority over other endoscopic modalities [2, 3]. EUS-GVO was introduced at the Royal Brisbane and Women's Hospital (RBWH) in August 2024. The aim of this study is to present the outcomes of our early experience with EUS-GVO at our quaternary centre.

Methods Consecutive patients with documented gastric variceal bleeding referred for EUS-GVO between August 2024 and November 2025 were included. Baseline patient characteristics, details of vascular anatomy, technique for EUS-GVO, technical success (defined as uncomplicated injection of coils and CYA) and immediate clinical success (cessation of doppler flow) were recorded (Table 1). During EUS-GVO, targeting the feeder was preferred over directly accessing the submucosal variceal nest. This was accessed with a 19G FNA needle. 0.035" Coils of varying lengths were used as a scaffold prior to undiluted cyanoacrylate (CYA) injection. As a rule, the diameter of the first coil deployed was >20-40% of the diameter of the feeder vessel. The number of coils deployed was based on degree of reduction in flow and residual space after the placement of the first coil. All procedures were performed under general anaesthesia and prophylactic antibiotic cover. All patients underwent a repeat EUS in 4 weeks to document clinical success in the form of complete variceal obliteration and were reviewed in clinic for signs of rebleed or decompensation.

Results Eleven patients were referred for consideration of EUS-GVO over the 15-month period (6 male, mean age 53.3 years) with mean clinical follow up of 204 ± 156 days. Two patients underwent elective EUS-GVO as outpatients (cases 6 and 7) whereas, all others were acute inpatients. Mean time to EUS-GVO for acute inpatients was 1.75 days. Technical success was achieved in 10 patients (90.9%). One patient did not undergo EUS-GVO due to unfavourable anatomy (feeder too large, >45mm) and was referred for BRTO. Nine patients underwent coil and CYA embolization and one patient had coil alone to achieve immediate clinical success. Mean number of coils and CYA used per EUS-GVO were 2.3 ± 1.34 and 1.29 ± 0.68 ml respectively. Two patients had post EUS-GVO pain (one requiring opioid analgesia, second managed with simple analgesia). None had fever or systemic embolization. Eight patients had a follow up endoscopy and EUS at a mean of 46.13 ± 11.4 days, all of which showed complete variceal obliteration. One patient was lost to follow-up, and one is yet to have their follow up EUS. None had worsening of oesophageal varices. One patient had a rebleed at 6-months and underwent repeat EUS-GVO for a new gastric varix (case 8). There were no recorded hospital admissions with decompensation events (worsening ascites or hepatic encephalopathy). All patients are still alive.

Conclusions EUS-GVO is safe and efficacious for definitive management of bleeding gastric varices. The introduction of this service at our centre allowed for quick access to definitive therapy with high technical and clinical success rates with low complication rates. Patient factors, particularly their vascular anatomy, needs to be taken into consideration during management planning, and a multidisciplinary approach is key. Frequently utilising doppler flow during EUS-GVO allows tailoring of the technique to achieve complete obliteration. Future studies should compare safety and efficacy of EUS-GVO to that of BRTO

and address their cost-effectivity particularly when it comes to the ease of access and length of stay parameters.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Florencio de Mesquita C et al. EUS-guided coiling plus glue injection compared with endoscopic glue injection alone in endoscopic treatment for gastric varices: a systematic review and meta-analysis. *Gastrointest Endosc* 2025; 101: 331–340.e8
- [2] Giri S et al. Comparison of efficacy and safety of endoscopic and radiological interventions for gastric varices: A systematic review and network meta-analysis. *Clin Exp Hepatol* 2023; 9 (1): 57–70
- [3] Henry Z et al. AGA Clinical Practice Update on Management of Bleeding Gastric Varices: Expert Review. *Clin Gastroenterol Hepatol* 2021; 19: 1098–1107.e1

OP285 Efficacy and Safety of a Novel Self-Assembling Peptide Hemostatic Gel for Hemorrhagic Duodenal Ulcer: A Retrospective Comparative Study

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DOI 10.1055/s-0046-1820939

Aims Endoscopic hemostasis for hemorrhagic duodenal ulcer (HDU) remains challenging, with well-known complications such as perforation and delayed rebleeding associated with conventional methods (e.g., thermal coagulation, clipping, ethanol injection). We have previously encountered adverse events, including delayed perforation after repeated coagulation and incomplete hemostasis requiring rescue intervention. This study aimed to evaluate the ease of use, safety, and efficacy of a novel self-assembling peptide hemostatic gel (PuraStat) in controlling bleeding duodenal ulcers compared to conventional endoscopic techniques [1–3].

Methods This was a retrospective review of patients with endoscopically confirmed HDU who underwent endoscopic hemostasis at our hospital between April 2015 and September 2025. Patients were divided into two groups: those who received PuraStat as part of their endoscopic treatment (n = 52, PuraStat group), 31 of whom received PuraStat as monotherapy, and those who underwent conventional hemostasis without the gel (n = 76, Conventional group). Short-term outcomes were compared. Rebleeding was defined as hematemesis or melena with a decrease in hemoglobin of ≥ 2 g/dL or evidence of active bleeding upon subsequent endoscopy following successful primary hemostasis. Difficult hemostasis was defined as requiring three or more endoscopic sessions for final bleeding control.

Results Baseline demographic and clinical characteristics—including mean age, sex, presence of dialysis-dependent renal failure or liver cirrhosis, use of antithrombotics or NSAIDs, and initial bleeding severity based on the Glasgow-Blatchford Score—were comparable between the two groups, with no significant differences in any baseline factor.

For treatment efficacy, primary hemostasis was achieved in 100 % of patients in the PuraStat group and in 94.7 % of those in the Conventional group. This difference was not statistically significant (p = 0.151). In contrast, significant differences were observed in the durability of hemostasis. The overall rebleeding rate was significantly lower in the PuraStat group (3.8 %) compared with the Conventional group (20.8 %) (p = 0.002). Moreover, no rebleeding occurred among the 31 patients who received PuraStat monotherapy. Difficult hemostasis occurred in 0 % of the PuraStat group versus 13.9 % of the Conventional group, representing another significant difference (p = 0.0245).

Safety outcomes also demonstrated significant group differences. No PuraStat-related adverse events were observed. Importantly, there were no cases of delayed perforation or need for emergency IVR in the PuraStat group. In contrast, the Conventional group experienced four cases of delayed perforation, all following repeated coagulative therapy. Thus, while the two groups did not differ at baseline or in initial hemostasis rates, the PuraStat group showed sig-

nificantly superior outcomes in sustained bleeding control, difficulty of hemostasis, and safety.

Conclusions PuraStat provides a compelling new strategy for HDU management, simultaneously improving hemostasis while significantly minimizing the reliance on aggressive techniques that lead to complications. This is supported by the extremely low rebleeding rate and the absence of severe adverse events like delayed perforation in the PuraStat group, suggesting that the gel's action promotes safer and more stable ulcer healing. Our findings support the integration of PuraStat into the standard endoscopic protocol to achieve superior and safer patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Subramaniam S, Kandiah K, Thayalasekaran S. et al. Hemostasis and prevention of bleeding related to ER: the role of a novel self-assembling peptide. *United European Gastroenterol J* 2019; 7: 155–162
- [2] Elmunzer BJ, Young SD, Inadomi JM. et al. Systematic review of predictors of recurrent hemorrhage after endoscopic hemostatic therapy for bleeding peptic ulcers. *Am J Gastroenterol* 2008; 103: 2625–2632
- [3] Fukuchi T, Hirasawa K, Kondo S, Iwase S, Maeda S. Utility of a self-assembling peptide in the management of refractory hemorrhagic duodenal ulcers. *Endoscopy*. 2024; 56: E825–E826

OP286 Impact of On-Site Emergency Endoscopy for Non-Transportable Patients with Gastrointestinal Bleeding in Resource-Limited and Remote Settings

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DOI 10.1055/s-0046-1820940

Aims Gastrointestinal (GI) bleeding remains a major cause of emergency hospitalizations worldwide, demanding rapid endoscopic intervention for diagnosis and hemostasis. However, in countries with vast geographic distances and limited healthcare infrastructure such as Mongolia, timely endoscopy is often unavailable for non-transportable patients in rural areas. This study evaluates the clinical outcomes and feasibility of mobile, on-site emergency endoscopy in such patients, highlighting its potential to reduce mortality and improve accessibility.

Methods Between 2019 and 2024, a mobile endoscopy team conducted **928 emergency visits** across **15 provinces** and **6 districts** in Mongolia. Of these, **796 cases** involved gastrointestinal bleeding. All procedures were performed using portable endoscopy systems in accordance with international emergency protocols. Data on the source of bleeding, hemostasis success, mortality, and regional distribution were retrospectively analyzed [1–5].

Results Among 796 GI bleeding cases, 82 % were upper GI, 7 % were lower GI, and 11 % had mixed or unidentified sources. The leading etiologies were esophageal varices (64 %), fundal varices (11 %), and gastric ulcers (21 %). Endoscopic hemostasis was achieved in 98 % of cases. Despite the severity of presentation, the overall mortality rate was 1.9 % (n = 19) — all deaths occurred in patients with variceal bleeding (p = 0.015). Notably, 79 % of deaths occurred in urban patients, whereas rural cases had significantly better outcomes (p = 0.0012).

Timely intervention within 12–24 hours was associated with improved hemodynamic stability and reduced transfusion requirements.

Conclusions Mobile, on-site emergency endoscopy is a **feasible and life-saving strategy** for managing GI bleeding in non-transportable patients within resource-limited and remote regions. Early intervention substantially decreases mortality and eliminates the need for high-risk transfers. Establishing a **national emergency endoscopy network**, supported by public investment,

mobile infrastructure, and standardized clinical criteria, could ensure equitable access to critical care across Mongolia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Barkun AN, Almadi M, Kuipers EJ et al. Management of nonvariceal upper gastrointestinal bleeding: guideline recommendations from the International Consensus Group. *Ann Intern Med* 2019; 171 (11): 805–822
- [2] Lau JYW, Yu Y, Tang RSY et al. Timing of Endoscopy for Acute Upper Gastrointestinal Bleeding. *N Engl J Med* 2020; 382 (14): 1299–1308
- [3] Sung JJY, Chiu PWY, Chan FKL et al. Asia-Pacific Working Group consensus on non-variceal upper gastrointestinal bleeding. *Gut*. 2011; 60 (9): 1170–1177
- [4] WHO Strengthening health systems to improve health outcomes. Geneva: World Health Organization; 2007
- [5] Mongolian Ministry of Health Health indicators 2022. Ulaanbaatar: MoH; 2023

OP287 Usage of Novel Blood-Sensing Capsule in Emergency Department to Triage Patients with Suspected Upper Gastrointestinal Bleeding: Interim Results of a Randomised Controlled Trial

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DOI 10.1055/s-0046-1820941

Aims Upper gastrointestinal bleeding (UGIB) represents a significant global healthcare burden due to high incidence and healthcare costs. Successful triage of patients and avoidance of unnecessary hospital admission would be a great advantage. PillSense utilises an ingestible capsule designed to detect the presence of blood in stomach, assisting with triage and disposition of these patients in the Emergency Department (ED) setting [1].

This study seeks to compare two key outcomes—ED discharge rates and subsequent complications—between patients utilizing PillSense and those receiving standard treatment. We hypothesize that the use of PillSense will lead to a significant reduction in the rate of hospital admissions by facilitating more confident discharge decisions from the ED, without adversely affecting clinical outcomes.

Methods We are conducting an ongoing multi-centre, prospective randomized controlled trial in Singapore since October 2024. We recruited hemodynamically stable patients (aged ≥ 21 years) presenting to the ED with symptoms of UGIB. Patients were randomized into either PillSense (P-group) or standard treatment (ST-group). ST-group patients were triaged based on existing protocols and clinical assessment of the attending ED physician. P-group patients ingested the PillSense capsule; those with positive blood detection were admitted for further care, while those negative for blood were discharged if they remained stable. All patients were scheduled for a follow up Oesophagogastroduodenoscopy (OGD) within 96 hours of presentation and a clinic review within 30 days. P-group patients also had an abdominal X-ray (AXR) scheduled within 10–18 days to confirm pill passage. Data on adverse out-

comes, readmissions, and OGD findings of active bleeding were documented (► Table 1).

► Table 1 Baseline Demographics and Clinical Characteristics

	PillSense Group (N = 10)	Standard Treatment Group (N = 10)
Demographics		
Age, years (Median, min-max)	52.5 (31 – 71)	33.0 (22 – 80)
Presenting Symptom, n (%)		
Melena	7 (70)	6 (60)
Coffee Ground Vomitus	2 (20)	2 (20)
Haematemesis (small amount)	1 (10)	2 (20)
Bleed detected on Pillsense, n (%)		
Positive	1 (10)	–
Negative	9 (90)	–
Disposition, n (%)		
Admitted	2 (20)	5 (50)
Discharged	8 (80)	5 (50)
Incidence of complications 30-day review, n (%)		
Complications	0 (0)	0 (0)
No complications	8 (80)	10 (10)
Did not attend	2 (20)	0 (0)

Results This ongoing trial has 20 eligible patients (median age 45.5 years) enrolled to date. The P-group achieved an 80 % discharge rate compared to 50 % in the ST-group. There were no adverse outcomes documented in either group. In P-group (n = 10), 1 patient with positive result was admitted and found to have severe oesophagitis. Of the remaining 9 patients with negative result, 1 was admitted for further observation. 8 patients attended follow-up OGD (mean 65 hours) and the review (mean 29 days) after ED visit. In the ST-group (n = 10), 5 patients were admitted. 7 patients attended follow-up OGD (mean 54 hours), and all 10 patients participated in the post ED visit review (mean 30 days). Across both groups, none exhibited evidence of active bleeding on OGD, and no adverse events occurred between the ED visit and the follow-up review. In the P-group, 8 patients attended interval AXR (mean 16 days) post-capsule ingestion, and none showed any evidence of capsule retention.

Conclusions PillSense usage demonstrates promising results in reducing hospital admission rates for patients with acute UGIB without significant adverse clinical outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Akiki K, Mahmoud T. A novel blood-sensing capsule for rapid detection of upper GI bleeding: a prospective clinical trial. *Gastrointest Endosc*. 2024

OP288 Long-Term Effect of Colonoscopy Screening on Colorectal Cancer Incidence and Mortality: a randomised, controlled trial (NordICC trial)

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DOI 10.1055/s-0046-1822897

Aims Although colonoscopy is widely used as a screening test to detect colorectal cancer, its effect on the risks of colorectal cancer and related death is unclear. We previously reported 10-year effect of colonoscopy screening on colorectal cancer (CRC) incidence and mortality. Here, we report effect after 13 years of follow-up.

Methods Our analyses include 84,583 men and women 55 to 64 years at enrolment from Norway, Poland and Sweden randomised in a one-to-two ratio to colonoscopy screening or no-screening. We report intention-to-screen and per-protocol effects of colonoscopy screening on CRC incidence and mortality for all participants, in men versus women and for proximal versus distal CRC.

Results During 13-years follow-up, CRC incidence was 1.46% (375 colorectal cancers) in the screening group and 1.80% (912 colorectal cancers) in the no-screening group. The risk ratio (RR) was 0.81 (95% confidence interval [CI] 0.71 to 0.90) in intention-to-screen analyses, and 0.55 (95%CI 0.33-0.81) in per-protocol analyses. Risk for proximal CRC was 0.51% in the screening group and 0.56% in the no-screening group (RR 0.91; 95% CI 0.71 to 1.09), while risk for distal CRC was 0.87% versus 1.11% (RR 0.79; 95% CI 0.65 to 0.89). In men, CRC risk was 1.69% in the screening group and 2.19% in the no-screening group (RR 0.77; 95% CI 0.64 to 0.88); in women, risks were 1.24% versus 1.43% (RR 0.87; 95% CI 0.70 to 1.02). CRC mortality was 0.41% in the screening group and 0.47% in the no-screening group; intention-to-screen RR 0.88 (95% CI 0.68 to 1.08) and per-protocol RR 0.70 (95%CI 0.26 to 1.25). The observed CRC mortality in the non-screening group (0.47%). was significantly lower than expected at the time of designing the trial (0.82%).

Conclusions In this randomised trial, one colonoscopy significantly reduced CRC incidence but not mortality over 13 years. CRC mortality is lower in both study groups than when the trial was designed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP289 Prophylactic self-assembling haemostatic gel after colorectal endoscopic submucosal dissection in high bleeding-risk patients: the PURASTOP randomised controlled trial

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DOI 10.1055/s-0046-1822898

Aims Delayed bleeding is a major complication after colorectal endoscopic submucosal dissection (ESD), especially in patients receiving antithrombotic therapy, at high risk of delayed bleeding according to DEBE score. The efficacy of prophylactic haemostatic gel application in this high-risk setting remains uncertain.

Methods It was a prospective multicentre randomised controlled trial. Adult patients with a single colorectal neoplastic lesion ≥ 3 cm undergoing ESD and receiving therapeutic anticoagulant and/or antiplatelet therapy were randomised (1:1) to prophylactic gel application or no gel. Randomization was done at the end of the ESD procedure after prophylactic hemostasis. The primary endpoint was the delayed clinical significant bleeding within 30 days. Analyses were performed on an intention-to-treat basis.

Results A total of 296 patients were randomized between February 2022 and January 2025 (146 in the control arm, 150 in the PuraStat arm). Baseline characteristics were comparable between groups, with a mean age of 75.8 years and 80.4% of patients on anticoagulant therapy. All lesions were resected en bloc by ESD.

The overall delayed bleeding rate was 24.1% (69/286 evaluable patients), with 22.5% in the control group and 25.7% in the PuraStat group. After accounting for the worst-case bias related to missing data, the rates were 21.9% and 28.7%, respectively.

Adjusted analysis for stratification factors (DEBE score, location, type of treatment) did not show a significant difference between groups ($p = 0.1686$), whereas treatment type (antiplatelet (except aspirin < 300 mg/j) vs anticoagulant $\pm$ antiplatelet) appeared to be associated with the primary endpoint in the adjusted model ($p = 0.0343$).

Conclusions In this high-risk population for bleeding after ESD of colorectal lesions ≥ 3 cm, prophylactic application of PuraStat did not significantly reduce the incidence of delayed bleeding. These results suggest that routine use of hemostatic gel after ESD in patients receiving antithrombotic therapy does not provide a demonstrated clinical benefit, and that targeted prevention strategies should be explored.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP290 Long-term oncological outcomes after en bloc resection of colorectal neoplasia by Endoscopic Submucosal Dissection

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Aims Colorectal endoscopic submucosal dissection (ESD) achieves high rates of en bloc resection, enabling complete removal and accurate histopathological assessment. Short-term outcomes demonstrate low rates of local recurrence following ESD. Long-term outcomes after en bloc resection of large and/or superficially invasive colorectal neoplasia by ESD have not been well characterized. In the current study, we aimed to evaluate the 10-year clinical and oncological outcomes after colorectal ESD.

Methods Between August 2010 and January 2012, 1,564 cases who underwent ESD for large or recurrent colorectal epithelial neoplasms at 69 Japanese institutions were identified, and ten-year outcomes were evaluated in 527 cases. The primary outcome of this study was to evaluate long-term outcomes after colorectal ESD, including rates of local and distant recurrence and prognosis measures such as 10-years overall survival (OS) and disease-specific survival (DSS). Secondary included OS and DSS were analyzed according to age (<80 vs ≥80 years), lesion type (T1 cancers vs non-T1 lesions), lesion location (rectum vs colon), and resection status (complete vs non-complete resection). Additionally, metachronous advanced neoplasms (AN) were also assessed.

Results Among the 527 patients, the follow-up duration was median 10 years (IQR: 9–10) and 4,825 patient-years. The 10-year OS and DSS were 93.7% (95%CI: 91.6–95.9%) and 99.8% (95%CI: 99.3–100.0). OS was lower in patients aged ≥80 years than in those <80 years (10 years: 61.1% vs. 95.0%, $p < 0.001$). DSS was lower in patients with T1 cancer than in those with non-T1 lesions (10 years: 98.5% vs. 100.0%, $p = 0.016$) and in patients with rectal lesions than in those with colonic lesions (10 years: 98.5% vs. 100.0%, $p = 0.017$). Local recurrence (median 22 months; IQR: 13–44 months) occurred in 7 of 505 patients (1.4%). Five recurrent lesions were treated endoscopically (cold polypectomy, EMR and ESD). Regarding the other two cases, one underwent surgery, and the other received chemotherapy. Distant recurrence occurred in 2 of 527 patients (0.4%). Regarding metachronous AN, 412 patients underwent surveillance colonoscopy; 76 developed AN and 336 did not. There were no differences about antithrombotics ($p = 0.055$), ESD lesion location ($p = 0.056$), and ESD lesion size ($p = 0.048$). The cumulative incidence of it was 10.0%, 14.4%, 20.9%, and 34.7% at 3, 5, 8, and 10 years after ESD.

Conclusions Favorable long-term prognosis and low recurrence rates support en bloc resection by ESD as a standard treatment for large colorectal neoplasms. Long-term risk of metachronous AN over 10 years suggests the need for scheduled surveillance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP291 Artificial intelligence-assisted colonoscopy for detection and differentiation of colorectal lesions in Lynch syndrome: results from the international multicentre randomised CADLY2 trial

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Aims Use of artificial intelligence (AI)-based computer-aided detection (CADE) systems improves adenoma detection in average-risk colorectal cancer screening. In Lynch syndrome (LS) surveillance, however, evidence is limited and inconsistent, and the incremental benefit in expert settings remains uncertain. Moreover, computer-aided diagnosis (CADx) for optical differentiation of colorectal lesions has not been systematically evaluated in LS. We aimed to assess AI-assisted polyp detection and characterization during routine LS colonoscopy surveillance.

Methods In this international multicentre, open-label, randomized controlled superiority trial (DRKS00030695), individuals with genetically confirmed LS undergoing surveillance colonoscopy at nine European academic LS expert centres were randomly (1:1) assigned to high-definition white-light (HD-WL) colonoscopy or AI-assisted colonoscopy (CAD EYE, Fujifilm). Randomization was stratified by centre, sex, pathogenic germline variant, previous colorectal cancer (CRC), and surveillance interval. The primary endpoint was the adenoma detection rate (ADR). Secondary outcomes included adenomas per colonoscopy (APC), the polyp detection rate, and detection rates of advanced adenomas, sessile serrated lesions (SSLs), and CRC. CADx performance in terms of optical differentiation (neoplastic vs. non-neoplastic) was assessed at lesion level, with histopathology serving as the blinded reference standard.

Results Between May 2023 and November 2025, 757 patients were randomised (WLE, $n = 377$; CADE, $n = 380$); 733 were included in the full analysis set. The ADR was 30.9% with HD-WL versus 33.8% with CADE (odds ratio [OR] 1.14, 95%CI 0.83–1.57; $p = 0.409$). No significant differences were observed for APC (0.6 vs 0.5; rate ratio 1.00; $p = 0.979$), advanced ADR detection (9.2% vs. 10.2%), SSL detection (10.8% vs. 9.6%), or CRC detection (1.9% vs. 1.4%). CADx performance in terms of sensitivity and specificity (84.4% and 90.9%) was comparable to optical diagnosis by expert endoscopists (NICE: 89.2%/91.6%; JNET: 90.5%/91.8%). Adverse events were similar between groups.

Conclusions In this largest to date randomized trial, AI-assisted colonoscopy did not improve adenoma detection over HD-WL colonoscopy in LS surveillance. CADx performance was similar to expert optical diagnosis, indicating limited incremental benefit of current AI systems for LS surveillance in expert settings at this point.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP292 Computer-aided detection in surveillance colonoscopy: a population-based randomized trial

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DOI 10.1055/s-0046-1822901

Aims Computer-aided detection (CADE) increases adenoma detection in colonoscopy, but its effectiveness in post-polypectomy surveillance remains uncertain.

Methods We conducted a population-based, randomized controlled trial in the Galician colorectal cancer screening program. Individuals scheduled for surveillance colonoscopy after resection of ≥ 1 advanced adenoma or ≥ 3 adenomas within the screening program were eligible. Colonoscopy days were randomized in a 1:1 ratio to high-definition colonoscopy with or without CADE. The primary endpoint was adenoma detection rate (ADR). Secondary outcomes included serrated lesion (SLDR) and advanced adenoma detection (AADR). Prespecified subgroup analyses evaluated surveillance round, bowel preparation quality, and endoscopist baseline performance (median ADR). Effect estimates are reported as adjusted risk ratios (aRR) and confidence interval (CI) [1].

Results Of 5,309 randomized surveillance colonoscopies, 4,824 surveillance colonoscopies were included in the final analysis (2,469 standard; 2,355 CADE-assisted) after exclusion of incomplete examinations. ADR did not differ between groups (57.4% vs 58.8%; aRR 1.02, 95% CI 0.97–1.07). AADR (6.8% vs 7.0%; aRR 1.00, 99.9% CI 0.70–1.41) and SLDR (25.8% vs 26.1%; aRR 1.00, 99.9% CI 0.85–1.17) were similar. CADE increased ADR among low-performing (ADR < 54.5%) endoscopists (45.5% vs 52.1%; aRR 1.15, 95% CI 1.06–1.26), but not among high-performing endoscopists (65.9% vs 63.5%; aRR 0.97, 95% CI 0.90–1.05) with a significant interaction between intervention and endoscopist performance ($p = 0.0004$).

Conclusions In a high-performing, population-based screening program, CADE did not increase ADR in surveillance colonoscopy. The potential benefit of CADE may depend on baseline endoscopist performance.

Trial registration: UMIN Clinical Trials Registry, UMIN000044748.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Mori Y, Bretthauer M. Artificial Intelligence in Colonoscopy for Cancer Prevention - a Randomized Health Service Implementation Project. *Im Internet*: https://center6.umin.ac.jp/cgi-open-bin/icdr_e/ctr_view.cgi?recptno=R000051108 Stand: 03.03.2026

OP299 Deep-Margin (MRS) and Surface Optical Diagnosis (JNET) are Complementary in the Detection of Deep Invasion during Endoscopic Resection of Early Rectal Cancer

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DOI 10.1055/s-0046-1823221

Aims The muscle-retracting sign (MRS) [1], visualised using the pocket-detection method (PDM) [2] during endoscopic resection of early rectal cancer (ERC), may enable real-time diagnosis of deep submucosal invasion (SMI). We evaluated MRS performance amongst experienced endoscopists, the effect of structured video training, and combined diagnostic performance of deep-margin (MRS) and surface (JNET) optical diagnosis in the detection of deep SMI.

Methods Experienced endoscopists reviewed 15 random PDM videos (pool of 38) per phase (pre/post-intervention), rating MRS presence, confidence and surface optical diagnosis. The 15 videos included 6 deeply invasive cancers (pT1 sm3 or pT2) and 9 other (pT1 sm1/2 or dysplastic) lesions. The sm3/T2 threshold was chosen because conventional ESD is unlikely to achieve an R0 vertical margin at this depth. No ground truth was provided between phases; a structured video tutorial was delivered after phase 1. Training effects were modelled using GLMM with crossed random intercepts for rater and video. Post-intervention ratings with contemporaneous JNET classification enabled combined rule analyses.

Results Thirty-six endoscopists from 15 countries (median ESDs 150 [IQR 50–550]; median rectal ESDs 64 [IQR 24–300]) participated. 835 complete rating events were analysed (458 pre-intervention and 377 post-intervention). Overall MRS sensitivity for sm3/T2 was 68.8% (95% confidence interval [CI] 62.4–74.7) and specificity 69.7% (65.9–73.3). Sensitivity improved significantly pre- to post-intervention (64.0% [54.9–72.4] to 74.5% [65.1–82.5]; OR 2.20, 95% CI 1.09–4.41; $p = 0.027$); specificity was similar (71.2% vs 67.9%; OR 1.49, $p = 0.13$). MRS detection increased with invasion depth (sm1 25.0%, sm2 41.9%, sm3 67.2%, T2 71.3%). Higher confidence predicted deep invasion: 14.6% (no MRS), 36.0% (low-confidence), 49.7% (high-confidence; $p < 0.001$). In 368 post-intervention events, JNET-3 yielded sensitivity 58.5% (48.5–68.0) and specificity 73.3% (67.5–78.5). MRS achieved superior sensitivity (74.5%; OR 0.37, 95% CI 0.19–0.74; $p = 0.005$) with similar specificity (68.7%; OR 0.70, 95% CI 0.43–1.13; $p = 0.14$). Discordance between JNET and MRS among sm3/T2-positive cases (28 MRS-only, 11 JNET-3-only) confirmed complementary diagnostic information. An either-positive rule (MRS or JNET-3) yielded the greatest sensitivity (84.9%, 76.6–91.1; specificity 55.3%, 49.1–61.5); both-positive (MRS and JNET-3) the greatest specificity (86.6%, 81.9–90.5; sensitivity 48.1%, 38.3–58.0).

Conclusions MRS using PDM accurately detects deep SMI in ERC as observed by experienced endoscopists. Sensitivity improved with structured video training. MRS and JNET capture partially non-overlapping diagnostic information; combining them outperforms either alone, enabling effective rule-out when both are absent and confident identification of deep invasion when both are present. Prospective evaluation is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Toyonaga T, Tanaka S, Man-I M, East J, Ono W, Nishino E, Ishida T, Hoshi N, Morita Y, Azuma T. Clinical significance of the muscle-retracting sign during colorectal endoscopic submucosal dissection. *Endosc Int Open* 2015; 3: E246–51. doi:10.1055/s-0034-1391665. Epub 2015 May 5 PMID: 26171438 PMID: PMC4486035
- [2] Argenziano ME, Sorge A, Montori M, Poortmans PJ, Tornai T, Hoorens A, Debels LK, Desomer L, Tate DJ. Diagnostic accuracy of the muscle-retracting sign for determining deep submucosal invasion in early rectal cancer: a prospective observational study. *Endoscopy* 2025; 57: 1394–1400. doi:10.1055/a-2632-4341. Epub 2025 Jun 10 PMID: 40494555

Late Breaking Abstracts Session 2

15/05/2026, 12:00–13:00

Ocean 3 + 4

OP293 One day of antibiotic treatment is non-inferior to 4 – 7 days in patients with acute cholangitis after adequate biliary drainage: a multi-centre randomised controlled trial (COBRA)

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Aims International guidelines recommend 4 to 7 days of antibiotic treatment after adequate biliary drainage for acute cholangitis [1]. Observational data suggest shorter treatment may be sufficient [2]. We assessed whether 1 day of antibiotic treatment is non-inferior to 4 to 7 days of antibiotic treatment after adequate endoscopic biliary drainage in adults with acute cholangitis.

Methods This multicentre, open-label, randomized controlled non-inferiority trial was conducted across 31 hospitals in the Netherlands. We enrolled adults with acute cholangitis (according to Tokyo Guidelines 2018 criteria) due to distal biliary obstruction who achieved adequate endoscopic biliary drainage and fever resolution within 24 hours after ERCP. Patients were randomly assigned 1:1 to receive antibiotics for 1 or 4–7 day(s) after ERCP, stratified by blood culture status and cholangitis aetiology (benign or malignant obstruction) at the time of randomization. We excluded patients with concomitant infections or receiving immunosuppressive therapy.

The primary endpoint was clinical cure, defined as the patient being symptom-free by day 14, without relapse or death occurring by day 30. The primary endpoint was adjudicated by an independent blinded committee. We analysed the intention-to-treat and per-protocol population and calculated the absolute risk difference for clinical cure. Non-inferiority was demonstrated if the one-sided 95% confidence limit for the absolute risk difference was greater than -7.5%. **Results** Between 2023 and 2025, we randomized 413 patients (1-day group: n = 205; 4–7-day group: n = 208). Median age was 74 years, 43.4% were women, 10.0% had malignant obstruction, 57.6% had moderate/severe cholangitis, and 35.6% had gram-negative bacteraemia at the time of randomization. Adherence to the allocated antibiotic treatment duration was 93.0%. Three patients (all in the 4–7-day group) were lost to follow-up before the primary outcome could be assessed and were excluded from all analyses.

In the intention-to-treat analysis, the primary outcome clinical cure occurred in 195/205 patients (95.1%) in the 1-day group versus 192/205 (93.7%) in the 4–7-day group, with an absolute risk difference of 1.5% (one-sided 95% confi-

dence limit: -2.4%), demonstrating non-inferiority. Per-protocol analysis (n = 384) showed non-inferiority (absolute risk difference 0.6%, with one-sided 95% confidence limit: -3.2%). In a worst-case sensitivity analysis (with lost to follow-up counting as failures), non-inferiority was maintained. All-cause 30-day mortality was 2/205 in the 1-day group versus 1/205 in the 4-7-day group.

Conclusions One day of antibiotic treatment after adequate endoscopic biliary drainage is non-inferior to 4 to 7 days in adults with acute cholangitis. Therefore, 1 day should be the preferred duration of antibiotic treatment after adequate biliary drainage.

Conflicts of Interest Lennard P.L. Gilissen received speaker's fees from AbbVie and Boston Scientific. Lennard P.L. Gilissen received speaker's fees from AbbVie and Boston Scientific. Rogier P. Voermans reports research grants from Cook Medical and Prion Medical, performed as a consultant for Boston Scientific and Cook Medical, and received speaker's fees from Viatrix. Roy L.J. van Wanrooij performed as a consultant for Boston Scientific. All outside the submitted work. All other authors have no competing interests or financial ties to disclose. All outside the submitted work. All other authors have no competing interests or financial ties to disclose. Roy L.J. van Wanrooij performed as a consultant for Boston Scientific.

References

- [1] Haal S, Ten Böhmer B, Balkema S, Depla AC, Fockens P, Jansen JM et al. Antimicrobial therapy of 3 days or less is sufficient after successful ERCP for acute cholangitis. *United Eur Gastroenterol J* 2020; 8 (4): 481–8
- [2] Gomi H, Solomkin JS, Schlossberg D, Okamoto K, Takada T, Strasberg SM et al. Tokyo Guidelines 2018: antimicrobial therapy for acute cholangitis and cholecystitis. *J Hepatobiliary Pancreat Sci* 2018; 25 (1): 3–16

OP294 Endoscopic Ultrasound-Guided Gastroenterostomy Versus Enteral Stenting for Palliation of Malignant Gastric Outlet Obstruction: An International Randomized Trial

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DOI 10.1055/s-0046-1822903

Aims Endoscopic enteral stenting (ES) and endoscopic ultrasound-guided gastroenterostomy (EUS-GE) are established minimally invasive palliative therapies for malignant gastric outlet obstruction (mGOO). To date, only one randomized controlled trial has compared these techniques, and it required a double-balloon-assisted EUS-GE approach that is not routinely available. In this multicenter randomized trial, we compared EUS-GE and ES using operator-selected techniques to assess efficacy, safety, and reintervention in patients with mGOO.

Methods In this international multicenter 1:1 randomized trial, adults with unresectable, symptomatic mGOO (GOO symptom score ≤ 1) were randomized to EUS-GE or ES and followed for 1 year. The primary endpoint was 3-month GOO recurrence, defined as recurrent symptoms with endoscopic or radio-

graphic confirmation of stent dysfunction. Secondary endpoints included procedure-related adverse events (AEs, based on ASGE lexicon) with serious AEs defined as moderate or severe, technical success, clinical success (≥ 1-point improvement in GOO score within 7 days), GOO recurrence at 6 and 12 months, reintervention for stent dysfunction at 3, 6, and 12 months, and overall survival. Analyses were conducted on an intention-to-treat basis.

Results Between Oct 2020 and March 2025, 112 patients from five institutions were randomized (EUS-GE, n = 57; ES, n = 55). The median age was 63 years in both groups. Baseline characteristics were well balanced between groups. Technical success was achieved in 98.2% of EUS-GE and 94.5% of ES cases (p = 0.700). Clinical success occurred in 87.7% vs 76.4% (p = 0.330). GOO recurrence was significantly lower with EUS-GE compared with ES based on cumulative incidence analysis accounting for death as a competing risk (Gray's test p = 0.004). Recurrence rates were 0% in the EUS-GE group vs 3.8% in the ES group at 3 months, 0% vs 7.7% at 6 months, and 0% vs 15.4% at 12 months. Similarly, cumulative incidence of reintervention was significantly lower with EUS-GE (Gray's test p = 0.003). Reintervention rates were 0% vs 5.8% at 3 months, 0% vs 9.6% at 6 months, and 0% vs 15.4% at 12 months. Procedure-related AEs occurred in 8.8% of EUS-GE and 7.3% of ES patients (p = 1.00). Serious procedure-related AEs occurred in 0% vs 5.5%, respectively (p = 0.115). In the ES group, serious events included stent migration, perforation, and aspiration requiring ICU admission. Median overall survival was 4.4 months in the EUS-GE group and 3.6 months in the ES group (log-rank p = 0.774).

Conclusions In this international randomized trial, EUS-GE achieved similar technical and clinical success to ES in patients with mGOO, with significantly lower GOO recurrence and reintervention rates and a comparable safety profile.

Conflicts of Interest Mouen Khashab is a consultant for Boston Scientific, Olympus America, Medtronic, and MicroTech, and receives royalties from UpToDate and Elsevier. Amine Benmassaoud is a consultant for Cook Medical. Yen-I Chen is a consultant for Boston Scientific, Cook Medical, and ALPFA, and is a co-Founder of Chess Medical.

OP295 Combined Lactated Ringer's Hydration and Rectal Indomethacin Reduces Post-ERCP Pancreatitis in High-Risk Patients: Subgroup Analysis of the PEPPER Randomized Controlled Trial

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Aims To assess whether vigorous lactated Ringer's hydration combined with rectal indomethacin, compared with rectal indomethacin alone, reduces the incidence of post-ERCP pancreatitis (PEP) in patients with pre-procedural or intra-procedural risk factors.

Methods This prospective, multicenter, open-label randomized controlled trial enrolled ERCP-naïve patients. Participants were randomized 1:1 to receive either vigorous lactated Ringer's hydration (VLRH) plus rectal indomethacin (RI) or RI alone. VLRH consisted of 3 mL/kg/h during ERCP, followed by a 20 mL/kg bolus immediately after the procedure and then 3 mL/kg/h for 8 hours. RI was administered according to standard prophylactic protocols. Pancreatic duct stenting was performed in all cases of inadvertent pancreatic duct cannulation. Detailed pre-, intra- and post-procedural clinical, endoscopic and laboratory data were prospectively collected. Subgroup analyses were conducted according to risk factors for PEP, both pre-procedural (including biliary stone disease, female sex and younger age) and intra-procedural, such as difficult biliary cannulation (defined as ≥ 5 cannulation attempts, cannulation time ≥ 5 minutes, accidental pancreatic duct cannulation), use of the double-guidewire technique, or need for pancreatic duct stenting after cannulation. Treatment effects were estimated as odds ratios (OR) with 95% confidence intervals (CI).

Results A total of 388 patients were randomized to VLRH + RI ($n = 194$) or RI alone ($n = 194$). Baseline demographic, clinical and laboratory characteristics were well balanced between groups. Among patients with pre-procedural risk factors, those with biliary stone disease had a significantly lower incidence of PEP in the VLRH + RI group compared with the RI-alone group (4.8% vs 14.3%; OR 0.34, 95% CI 0.11–0.94). Regarding subgroups of patients with intra-procedural risk factors for PEP, VLRH + RI significantly reduced PEP among patients with difficult cannulation (11.7% vs 21.9%; OR 0.47, 95% CI 0.24–0.96). Notably, in patients with difficult cannulation requiring pancreatic duct stenting, VLRH + RI was associated with a significantly lower incidence of PEP compared with RI alone (7.7% vs 31.0%; OR 0.19, 95% CI 0.05–0.62). No serious adverse events were observed in either group. Adverse events in the VLRH group were infrequent and comparable to the RI-alone group, including three cases of fluid overload and one case of pulmonary edema, all occurring in elderly patients with multiple comorbidities and resolving with diuretic therapy.

Conclusions Intra-procedural risk factors for post-ERCP pancreatitis are often unpredictable before ERCP. In this subgroup analysis of the PEPPER trial, the addition of vigorous lactated Ringer's hydration to rectal indomethacin was associated with a significant reduction of PEP incidence, particularly among patients with difficult cannulation and PD stenting. Given its acceptable safety profile and low cost, intensive lactated Ringer's hydration combined with rectal indomethacin represents an effective and pragmatic preventive strategy for post-ERCP pancreatitis, particularly in patients with risk factors for PEP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP296 Randomized clinical trial comparing ERCP vs ERCP plus EUS-guided gallbladder drainage in non-surgical patients with symptomatic choledocholithiasis

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DOI 10.1055/s-0046-1822905

Aims ERCP remains the primary approach to choledocholithiasis. 30% of patients who undergo clearance of choledocholithiasis by ERCP without subsequent cholecystectomy will suffer recurrent biliary events. We hypothesized that EUS-guided gallbladder drainage (EUS-GBD) performed in the same endoscopic procedure could significantly decrease this risk.

Methods Multicenter, patient and assessor-blinded, randomized clinical trial. Subjects > 75 years of age with an age-adjusted Charlson comorbidity index (aCCI) ≥ 4 and symptomatic choledocholithiasis scheduled for ERCP were eligible. Concurrent acute cholecystitis, altered upper GI anatomy, lack of EUS window, potential surgical candidacy and failed ERCP were exclusion criteria. Participating subjects were randomized to ERCP vs ERCP combined with EUS-GBD (ERP + EUS-GBD). A 1-year follow-up was scheduled. The primary outcome was hospital readmission due to gallstone related disease or procedure related adverse events. Overall survival, all cause admissions and adverse events were also evaluated. A sample size of 75 patients per group was estimated. All outcomes were analyzed according to the intention-to treat principle. The primary outcome was analyzed using a multivariable Cox proportional hazards regression model. Results are presented as hazard ratios (HR)

Results Overall, 152 patients were included (77 in the ERCP group and 75 in the ERCP + EUS-GBD group); 129 (84.9%) have completed follow-up. Baseline characteristics were balanced between cohorts. Overall, median age was 89.8 (IQR: 86–92.1) years, 100 (65.8%) were female, median aCCI was 6 (IQR: 5–7.5), 50 (33.1%) had a history of gallstone disease (16 had undergone an ERCP previously) and 95 (62.5%) presented acute cholangitis.

Sphincterotomy was performed in 71 (91.2%) ERCP patients and in 72 (96%) ERCP + EUS-GBD patients. EUS-GBD was performed using 10x10mm (53 patients, 70.7%) and 15x10mm (22 patients, 29.3%) LAMS and the duodenum was the point of access in 46 (61.3%) subjects. Two patients in each group died during the index admission.

Patients in the ERCP + EUS-GBD group presented a lower risk of biliary readmission, (HR: 0.33 [95% CI: 0.14–0.77], $p = 0.01$), with a 14.1% ARR [4.7–23.5%] and a NNT of 7.1 [4.3–21.3]. The 1-year biliary readmission risk was 22.6% [13.7–35.9%] in the ERCP and 7.1% [3–16.2%] in the ERCP + EUS-GBD group. No differences were observed in the all-cause admission risk, (HR 0.93 [0.70–1.25], $p = 0.65$) or the 1-year mortality (HR: 1.49 [0.63–3.53], $p = 0.37$). Overall, 12 (15.6%) and 17 (22.7%) subjects died in the ERCP and in the ERCP + EUS-GBD group, respectively. Procedure related adverse events rates were comparable, 13% in the ERCP group and 17.3% in the ERCP + EUS-GBD group.

Conclusions In non-surgical patients with symptomatic choledocholithiasis, performing an EUS-GBD in the same procedure as the ERCP reduces the risk of gallstone related admissions. However, this reduction does not impact the 1-year survival or the all-cause hospital admission rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

OP297 Azithromycin in acute upper gastrointestinal bleeding: a multicentric, double-blind, randomized-controlled trial (CLEAN-AZ)

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DOI 10.1055/s-0046-1822906

Aims Current guidelines recommend prokinetic agents for gastric cleansing prior to endoscopy for acute upper gastrointestinal (UGI) bleeding in order to enhance visibility and reduce the need for reintervention [1]. Erythromycin is recommended but not available in all healthcare systems and azithromycin has been studied as a potentially more effective alternative. Our study assessed the efficacy and safety of intravenous azithromycin as pre-endoscopic prokinetic in patients undergoing emergent UGI endoscopy for acute bleeding.

Methods This was a prospective, multicenter, randomized, double-blind, placebo-controlled trial conducted in 12 hospitals in Romania (NCT06077916). Adult patients with acute UGI bleeding less than 12 hours after onset were randomized to either 500 mg intravenous azithromycin (AZT group) in 250 mL of saline or 250 mL saline (placebo group) administered 30–90 minutes prior to endoscopy. Our primary outcomes were: quality of visualization according to Toronto UGI Cleaning Score (TUGCS) [2] and the need to repeat endoscopy due to poor visibility. Our secondary outcomes included: adverse events, TUGCS subscores per segment, transfusion requirements, duration of the procedure, length of hospital stay, and endoscopist satisfaction regarding visibility measured on a 5-point Likert scale. We estimated a need to enroll 224 patients in order to obtain 90% chance of detecting a clinically-relevant increase in adequate visualization (defined by TUGCS ≥ 8) from 60 to 80%.

Results We randomized 224 patients but included 188 in the per-protocol analysis (93 AZT, 95 CTR). The primary outcome was not met as TUGCS ≥ 8 was reported in 79/93 patients (84.9%) in the AZT compared with 70/95 patients (73.7%) in the placebo group ($p=0.07$). However, endoscopists were significantly more satisfied by the intraprocedural visibility achieved in the AZT group compared to placebo (77/93 rated good or excellent vs 62/95, $p=0.008$). There was no statistically significant difference between groups in: need for repeat endoscopy due to poor visualization, TUGCS subscores, duration of the procedure, length of hospital stay, or units of blood transfused. There were 3 instances of potentially AZT-related adverse events (1 diarrhea, 1 severe vomiting, 1 Clostridium difficile infection) but no allergic reactions or arrhythmia. The incidence of adverse events was low and comparable between groups, with no significant differences in rebleeding (6/93 vs 6/95, $p=1$), in-hospital mortality (4/93 vs. 6/95, $p=0.7$), or need for endoscopic hemostatic intervention (44/93 vs. 45/95; $p=0.9$).

Conclusions In the per protocol analysis, i.v. azithromycin administered prior to endoscopy in patients with acute UGI bleeding was safe and well tolerated. While it did not significantly improve the Toronto UGI cleaning score or reduce the need for repeat endoscopy, azithromycin was associated with higher endoscopist satisfaction regarding visibility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khan R et al. The Toronto Upper Gastrointestinal Cleaning Score: a prospective validation study. *Endoscopy* 2023; 55 (2): 121–128
- [2] Gralnek IM et al. Endoscopic diagnosis and management of esophago-gastric variceal hemorrhage: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2022; 54 (11): 1094–1120

OP298 A prospective randomized multicentre trial comparing pneumatic dilation and peroral endoscopic myotomy (POEM) as treatment for idiopathic treatment-naïve achalasia

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Aims Peroral endoscopic myotomy (POEM) and pneumatic dilation (PD) are established treatments for idiopathic achalasia. To date, only one randomized controlled trial has compared these two options but used a less common pneumatic dilation protocol.

Methods In this prospective, multicentre, randomized controlled trial, treatment-naïve adults with manometrically confirmed achalasia were assigned to POEM or graded PD. PD was performed using a standardized step-up protocol (30–35–40 mm) with permitted re-dilation for recurrent symptoms. The primary endpoint was clinical success at 2 years, defined as Eckardt score ≤ 3 . Secondary endpoints included quality of life (SF-36 and disease-specific questionnaires), timed barium oesophagography, high-resolution manometry parameters, oesophageal acid exposure, need for retreatment and safety.

Results A total of 113 of the 118 randomised patients underwent treatment (3 exclusion due to treatment refusal and 2 pseudo-achalasia). At 2 years, clinical success in the full analysis set was achieved in 80.5% (95%CI: 69.6 – 91.5) and 66.1% (95%CI: 53.1 – 79.1) assigned to the POEM and PD group respectively, demonstrating non-inferiority of POEM within the prespecified -10% margin (D14.4%, 95%CI: -2.1 – 32.0, $p=0.004$). In the per-protocol analysis, success rates were 80.5% (95%CI: 69.6 – 91.5) and 73.8% (95%CI: 60.9 – 86.7), respectively. In the PD group, 17.5% of patients required re-dilation and 7.0% underwent a second re-dilation during follow-up. Both treatments resulted in sustained reductions in barium column height over 2-year period. Improvements in general and disease-specific quality-of-life measures were similar in both groups. Objective reflux parameters (total percent time pH < 4) were remarkably higher after POEM during follow-up, although patient-reported reflux symptoms did not differ significantly. One oesophageal perforation occurred after PD, and one POEM procedure was technically not feasible.

Conclusions POEM was non-inferior to graded PD for treatment-naïve achalasia at 2 years. When performed with protocolized re-dilation, PD achieved comparable symptom control and quality-of-life improvement, with lower objective acid exposure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Pitch your poster

There is more to colon screening!

14/05/2026, 09:30–10:30

PYP001 Expanding Colorectal Cancer Screening to Adults Aged 70–75: Outcomes in a Tertiary Care Health Area

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Aims To evaluate participation rates, test positivity, and colonoscopy outcomes following the extension of a biennial fecal immunochemical test (FIT) colorectal cancer (CRC) screening program to adults aged 70–75. This study assesses the impact of including previously unscreened older adults in a tertiary care health area.

Methods A retrospective analysis of screening data was performed from January 2024 to June 2025 using the official regional CRC screening registry. Invitations were sent to adults aged 50–75 years. Participation, FIT results, colonoscopy completion, and findings were recorded. Data were analyzed descriptively, with positivity rates and detection rates of adenomas and CRC reported. First-time participants aged 70–75 were analyzed separately.

Results Overall, 79,872 invitations were sent to adults aged 50–75, with 30,854 completing FIT (38.6% participation). FIT positivity was 4.6% (1,426), leading to 1,059 colonoscopies. Adenomas were detected in 49% (524) and CRC in 5.8% (45).

Among newly invited participants (n = 9,622), 2,960 completed FIT, with 135 positives (4.5%) and 105 colonoscopies performed. Adenomas were found in 46% (48) and CRC in 1.9% (2).

In the 70–75 age group (n = 16,850), participation was 49.5% (8,347). FIT positivity was 5.8% (492), with 423 colonoscopies performed, detecting adenomas in 52% (223) and CRC in 4% (17).

For first-time screened individuals aged 70–75 (n = 638), participation was 36% (236). FIT positivity was 9.7% (23), with 18 colonoscopies performed. Adenomas were identified in 44% (8) and CRC in 11% (2).

Conclusions Extending CRC screening to adults aged 70–75 effectively identifies clinically relevant pathology and engages patients who had not previously participated. While participation remains moderate, inclusion of this age group contributes to early detection and may improve overall program effectiveness. These results support continued evaluation of age expansion in CRC screening programs and highlight the utility of FIT-guided colonoscopy in older populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP002 Concordance between pan-intestinal capsule endoscopy and colonoscopy for the detection and characterization of colonic lesions: post-hoc analysis on the impact of colonic transit time

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Aims Pan-intestinal capsule endoscopy (PCE) enables non-invasive assessment of the small bowel and colon and has been investigated as a first-line diagnostic alternative to colonoscopy in patients with suspected mid- or lower gastrointestinal bleeding (MLGIB). This study aimed to assess the concordance between PCE and colonoscopy for detecting and characterizing colonic lesions, and to evaluate the influence of colonic transit time (CTT) on diagnostic agreement.

Methods This was a post-hoc analysis of data from a prospective single-center clinical trial. Consecutive patients with suspected MLGIB underwent same-day PCE and colonoscopy. Only complete examinations were included. Concordance between techniques was evaluated for detection of any lesion, vascular lesions, polyps, and polyp size categories (<6 mm, 6–10 mm, >10 mm) using Cohen's Kappa (κ). Sensitivity analyses stratified patients by CTT: ≤ 60 vs >60 min, ≤ 90 vs >90 min, and ≤ 120 vs >120 min.

Results Of 100 enrolled patients, 76 had complete PCE examinations (median age 67 years; 60.5% women), and 80.3% presented with occult bleeding. Adequate bowel preparation was achieved in 77.6% of PCEs and 84.2% of colonoscopies.

Overall, PCE demonstrated moderate agreement with colonoscopy for detecting any colorectal lesion ($\kappa = 0.45$, $p < 0.001$). Agreement was also moderate for vascular lesions ($\kappa = 0.56$, $p < 0.001$) and polyps ($\kappa = 0.51$, $p < 0.001$). Polyp size classification showed substantial concordance ($\kappa = 0.69$, $p < 0.001$).

CTT strongly influenced global diagnostic agreement. For any lesion, concordance was non-significant for rapid CTT (≤ 60 and ≤ 90 min). Agreement improved to fair for CTT ≤ 120 min ($\kappa = 0.384$, $p = 0.025$) and reached moderate levels for CTT >120 min ($\kappa = 0.50$, $p = 0.002$).

Detection of vascular lesions was comparatively stable across all CTT categories, with moderate-to-substantial agreement at every threshold ($\kappa = 0.577$, $p = 0.008$ for ≤ 60 min; $\kappa = 0.578$, $p = 0.002$ for ≤ 90 min; $\kappa = 0.635$, $p < 0.001$ for ≤ 120 min).

In contrast, polyp detection showed a marked dependence on CTT. Concordance increased from fair at ≤ 60 min ($\kappa = 0.40$, $p = 0.049$) to moderate for >60 min ($\kappa = 0.55$, $p < 0.001$) and >90 min ($\kappa = 0.56$, $p < 0.001$). For ≤ 120 min agreement remained moderate ($\kappa = 0.46$, $p = 0.006$), again increasing for >120 min ($\kappa = 0.56$, $p < 0.001$).

Similarly, polyp size classification was unreliable for rapid transit (≤ 90 min: $p = 0.273$) but became almost perfect for >90 min ($\kappa = 0.824$, $p < 0.001$) and >120 min ($\kappa = 0.805$, $p < 0.001$).

Conclusions PCE showed moderate-to-substantial agreement with colonoscopy for the detection of colorectal lesions. Diagnostic performance was significantly influenced by CTT. While vascular lesion detection remained stable across all CTT categories, rapid CTT (<90 minutes) was associated with an increased risk of false negatives, especially for polypoid lesions. In such cases, repeat examination, closer follow-up, or alternative diagnostic strategies should be considered.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP003 Re-investigation Rate Following Colon Capsule Endoscopy Stratified by Faecal Haemoglobin Concentration in a Screening Population

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DOI 10.1055/s-0046-1820944

► **Table 1** Odds of re-investigation and increased risk classification based on faecal haemoglobin concentration estimated from univariate and multivariate logistic and ordinal logistic regression models, n = 1,410, reference group: 100-249 ng hb/mL buffer

Outcome	Model	ng hb/mL buffer	Odds Ratio	95 % confidence interval	p-value
Re-investigation	Univariate logistic regression model	250-499	1.14	0.86 – 1.50	.364
		> 499	1.22	0.94 – 1.57	.129
	Multivariate logistic regression model	250-499	1.13	0.85 – 1.50	.395
		> 499	1.24	0.96 – 1.61	.099
Increased risk classification	Univariate ordinal logistic regression model	250-499	1.18	0.93 – 1.51	.177
		> 499	1.36	1.08 – 1.70	.008
	Multivariate ordinal logistic regression model	250-499	1.18	0.92 – 1.50	.193
		> 499	1.40	1.12 – 1.76	.003

Aims The use of colon capsule endoscopy (CCE) in clinical practice has been challenging, mainly due to a high re-investigation rate caused by both incomplete investigations, and a high sensitivity to polyps requiring therapeutic intervention. A strategy to lower the re-investigation rate following CCE, could be to target patients with a lower risk of pathology. Faecal haemoglobin (fHb) is a well-known predictor of colorectal adenomas, and the concentration of fHb may therefore present as a good triaging measure. Therefore, we aimed to investigate the re-investigation rate and risk classification in complete CCEs in a screening population stratified by fHb concentration.

Methods Complete colon capsule endoscopy investigations were identified from the intervention arm of a large randomised controlled trial, CareForColon2015 [1, 2], and the proportions of investigations leading to re-investigation by colonoscopy were stratified by fHb concentration. All participants had a faecal immunochemical test value ≥ 100 ng hb/mL buffer. Further, odds of re-investigation was estimated by logistic regression models and odds of increased risk classification by ordinal regression models. The risk classification in the current study was defined in four levels; Level one: no findings. Level two: less than three polyps, all smaller than 10 mm in size. Level three: three to four polyps of any size, or at least one polyp 10-19 mm in size. Level four: More than four polyps, or at least one polyp larger than 19 mm in size, or cancer suspicion (► **Table 1**).

Results The re-investigation rate was 58.4 % in 1,410 complete CCEs out of 2,030 procedures. There were no significant differences ($p = 0.283$) in re-investigation rates between fHb concentration subgroups with 58.0 %, 61.1 %, and 62.7 % in the groups of 100-249, 250-499, and > 499 ng hb/mL buffer, respectively. Level one or two risk classification was identified in 21.3 % ($n = 300$) and 20.3 % ($n = 286$) of the complete CCE investigations, returning the participant to the colorectal cancer screening. Level three or four risk classification was identified in 30.5 % ($n = 430$) and 27.9 % ($n = 394$) of the complete CCE investigations, resulting in referrals for follow-up colonoscopy. The odds of increased risk classification (i.e. higher than level one) was 1.18 (CI 95 % 0.93; 1.51, $p = 0.177$) for concentrations between 250-499 ng hb/mL buffer, and 1.36 (CI 95 % 1.08; 1.70, $p = 0.008$) for concentrations above 499 ng hb/mL buffer, compared to 100-249 ng hb/mL buffer.

Conclusions Faecal haemoglobin concentration did not prove to be a good stand-alone selection parameter for diagnostic modality in a faecal immunochemical test positive colorectal cancer screening population, although it was significantly associated with an increased risk classification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Baatrup G, Bjørsum-Meyer T, Kaalby L, Schelde-Olesen B, Kobaek-Larsen M, Koulaouzidis A, Kroijer R, Al-Najami I, Buch N, Høgh A, Qvist N, Thygesen MK, Deding U CareForColon2015 study group. Choice of colon capsule or colonoscopy versus default colonoscopy in FIT positive patients in the Danish

screening programme: a parallel group randomised controlled trial. Gut 2025; 74: 1616–1623. doi:10.1136/gutjnl-2024-333687 PMID: 40210462 PMID: PMC12505048

[2] Kaalby L, Deding U, Kobaek-Larsen M, Havshoi AV, Zimmermann-Nielsen E, Thygesen MK, Kroijer R, Bjørsum-Meyer T, Baatrup G. Colon capsule endoscopy in colorectal cancer screening: a randomised controlled trial. BMJ Open Gastroenterol 2020; 7:e000411. doi:10.1136/bmjgast-2020-000411 PMID: 32601101 PMID: PMC7326244

PYP004 Sessile Serrated Polyps Syndrome in Northern Italy: Epidemiological, Clinical, and Histopathological Characterization from a High-Volume Endoscopy Center

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DOI 10.1055/s-0046-1820945

Aims Sessile serrated polyps syndrome (SPS) diagnosis remains challenging, requiring adequate knowledge of this rare syndrome, high-quality colonoscopy, optimal bowel preparation, and expert histopathological evaluation. Despite technological advances, underdiagnosis rates in Europe remain between 30–50 %. The aim of this study was to characterize SPS within a large cohort of patients undergoing colonoscopy at a tertiary endoscopy center in Northern Italy. Specifically, the study sought to describe the epidemiological, demographic and clinical features of patients meeting the 2019 WHO diagnostic criteria for SPS. Furthermore, the study aimed to evaluate the distribution, number, size, and histopathological profile of serrated polyps (SPs), including the presence of dysplasia and associated adenomas, and to assess adherence to WHO criteria types (criterion 1, criterion 2, or both) where criterion 1 requires ≥ 5 proximal to the rectum SPs ≥ 5 mm with at least 2 ≥ 10 mm in size, and criterion 2 requires > 20 SPs throughout the colon with at least 5 proximal to the rectum [1–3].

Methods This retrospective, observational, single-center cohort study was conducted at Fondazione Poliambulanza Istituto Ospedaliero-Brescia. We included all consecutive outpatients who underwent a complete colonoscopy between January 2021-June 2025. All procedures were performed using high-definition endoscopes with narrow-band imaging satisfying ESGE performance measures. Eligible participants included adults (≥ 18 years) who had a histologically confirmed diagnosis of SPS according to the 2019 WHO criteria. Specimens were evaluated by expert gastrointestinal pathologists.

Results During the study period a total of 27,836 elective complete colonoscopies were performed, corresponding to 22,522 consecutive patients. Among these, 4,792 patients had at least one polyp ≥ 5 mm located in the sigmoid colon or proximally. Pathology database screening identified 2,597 patients with at least one SPs. Cross-matching these datasets yielded 1,358 patients who had both a serrated histology and a proximal to the rectum polyp ≥ 5 mm. Following complete review of all colonoscopies and polypectomy histories, 61 patients (4.5 %) fulfilled the 2019 WHO diagnostic criteria for SPS corresponding to an overall prevalence of 0.27 %, 1 in every 370 patients. Most SPS (67 %) were newly recognized during this analysis rather than during prior endoscopic evaluations. According to WHO 2019 diagnostic categories, 62 % of patients fulfilled criterion 1, 5 % fulfilled criterion 2, and 33 % met both criteria. Dysplasia in SPs was observed in 21 % of patients, and 87 % of patients had associated adenomas. Colorectal neoplasia was found in 8 % of patients.

Conclusions Our findings highlight that SPS remains underdiagnosed; only 33 % of our patients had previously established SPS and demands close collaboration between endoscopists and pathologists underling a lack of knowledge of this syndrome. Importantly, this diagnostic delay occurred even in a third-level endoscopy center, underscoring the difficulty of identifying SPS in routine clinical practice. Improved awareness and surveillance strategies are essential to prevent interval colorectal cancer risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] IJspeert JEG et al. Detection rate of serrated polyps and serrated polypoid syndrome in colorectal cancer screening cohorts: a European overview. *Gut*. 1225–1232 2017
- [2] Van Leerdam ME et al. Endoscopic management of polyposis syndromes: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* vol. 51: 877–895. Preprint at. doi:10.1055/a-0965-0605 2019
- [3] Dekker E., Bleijenberg A., Balaguer F., IJspeert J.E.G., Bleijenberg A.G.C., Pellisé Met. al. Update on the World Health organization criteria for diagnosis of serrated polyposis syndrome. *Gastroenterology* 2020; 158: pp 1520–1523

PYP005 Real-life management of T1 colorectal cancer in Italy: results of a GISCOR national survey among colorectal cancer screening centres

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DOI 10.1055/s-0046-1820946

Aims To provide a comprehensive overview of real-life management of T1 colorectal cancer (CRC) in Italy, through a nationwide survey conducted among CRC screening centres.

Methods Anonymous digital survey sent to all Italian CRC screening centres between May–July 2025, through the National Screening Observatory (ONS)-Italian Group for CRC Screening (GISCOR) network. The questionnaire included 8 items: responder and centre information, multidisciplinary team (MDT), endoscopy, staging, histopathology, treatment and follow-up.

Results Out of 207 survey links opened, 131 questionnaires at least half completed, of which 83 fully completed. The geographical provenience of responses was representative of the screening centres across the country (North 51 %, Centre 21 %, South-Islands 29 %). Participants were mostly > 50yo (56 %), with > 10y of professional experience (74 %), mainly gastroenterologists (73 %)

or surgeons (21 %). Most worked in non-academic (77 %) level II/III centres (73 %), all public or accredited private hospitals, performing 2,000–5,000 screening colonoscopies annually (44 %). A MDT for CRC management was present in 91 % of centres, with nearly all T1 cases discussed by the MDT. Core members included oncologists, surgeons, gastroenterologists, radiologists, and pathologists, while radiotherapists and palliative care specialists less common. Other specialists—nuclear medicine physicians, psychologists, case manager nurses, geneticists, stomatherapists, anesthetists, nutritionists, internists—were rarely involved. For endoscopic evaluation of lesions, the most used technique was virtual chromoendoscopy (73 %) with vital chromoendoscopy nearly abandoned. Lesions were most often described according to Paris and Kudo classification (≈ 70 %) with minimal use of JNET, NICE and Sano (< 30 %). Responders declared a median of 70 % histologically confirmed T1 already suspected at index endoscopy, but with huge heterogeneity (Q1–Q3 30–80 %; range 0–100 %). Pre-treatment staging was variably performed: always (34 %), never (31 %), only for rectal lesions (25 %), specific cases (10 %). Abdominal CT was the main tool for colon lesions, while pelvis MRI for rectal lesions. A post-endoscopic treatment staging was routinely performed, either in all cases (42 %) or only with positive margins or high risk histology (57 %). CEA dosage was variably done. A standardized pathology report form for T1 CRC was used in 84 % of centres, with key features including lymphovascular invasion (LVI) (95 %), grading (92 %), deepness of invasion (88 %), resection margins (88 %), budding (87 %), Haggitt classification for peduncolated polyps (71 %), with minor presence of MMR (45 %) and microRNA (22 %) analyses. LVI (92 %) and poor differentiation (83 %) were most frequently considered high-risk factors. Budding grade 2–3 (77 %), positive resection margins (80 %), deep submucosal invasion (63–73 %), and free resection margin < 1 mm (59 %) were variably considered high-risk. In most centres (66 %) only one pathologist was responsible for reporting T1 CRC cases; when involved two pathologists (34 %), both usually of the same institution (89 %). T1 colon cancers in most cases were treated locally at first, with secondary surgery only when high risk histological features were present, often following MDT decision. For T1 rectal cancers, MDT decision had a primary role. For endoscopically removed lesions revealing T1 only after histological examination, the most used approaches were MDT discussion (41 %) or only follow-up if negative margins and high risk histology absent (32 %). EFTR was rarely used to treat the scar of an excised T1 (30 %), mostly in case of positive margins at endoscopic excision (56 %) or for patients unfit for surgery (28 %). Follow-up protocols were highly heterogeneous: for endoscopically treated T1 CRC, follow-up most commonly included endoscopy and clinical evaluation at 12 months, with limited use of imaging. For surgically treated patients, most centres performed comprehensive follow-up at 12 months (endoscopy, abdominal/thoracic imaging, CEA, clinical evaluation), with fewer repeat assessments at 24–36–60 months.

Conclusions This national survey, like previous Dutch survey [1], highlights substantial heterogeneity in the management of T1 CRC across Italian screening centres. These findings underscore once again the need for shared recommendations to standardize diagnostic, therapeutic and follow-up pathways to optimize patient outcomes, avoiding overtreatment and malpractice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] (on behalf of the Dutch T1 CRC Working Group) Gijsbers K, de Graaf W, Moons LMG, Ter Borg F High practice variation in risk stratification, baseline oncological staging, and follow-up strategies for T1 colorectal cancers in the Netherlands. *Endosc Int Open* 2020; 8: E1117–E1122. doi:10.1055/a-1192-3545 Epub 2020 Aug 31 PMID: 32904821 PMID: PMC7458727

PYP006 Diagnostic yield and usefulness of terminal ileal intubation in asymptomatic patients undergoing colonoscopy for colorectal cancer screening or post-polypectomy surveillance: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1820947

Aims The role of routine terminal ileal intubation (TII) in asymptomatic patients undergoing colonoscopy for colorectal cancer (CRC) screening or post-polypectomy surveillance is debated. While considered a quality indicator in some settings, its clinical utility in this population remains unclear. This systematic review and meta-analysis aimed to evaluate the diagnostic yield, clinical utility and procedural impact of routine TII in patients undergoing CRC screening or post-polypectomy surveillance.

Methods We conducted a systematic search of PubMed and Embase up to September 2025, according to PRISMA guidelines. We included studies reporting TII diagnostic yield in asymptomatic adults undergoing CRC screening or post-polypectomy surveillance colonoscopy. Data were synthesized using random-effects models. The primary outcome was the overall diagnostic yield of TII. Secondary outcomes included the diagnostic yield for clinically significant findings, Crohn's disease, and the impact of TII on procedure duration.

Results Eleven studies involving 25659 patients, of whom 13672 underwent TII, were included. The pooled overall diagnostic yield for any ileal finding was 1.74% (95%CI 1.18%-2.57%), with most abnormalities being non-specific and not requiring clinical action. The diagnostic yield for clinically significant pathology was substantially lower at 0.28% (95%CI 0.07%-1.05%), while the yield for detecting Crohn's disease was only 0.1% (95%CI 0.02%-0.44%), corresponding to one case per 1000 ileoscopies during colonoscopy for CRC screening. Across eight studies including 12,591 patients, ileal biopsies showed a very low diagnostic yield of 0.12%. Two studies found that terminal ileum intubation added about 56 seconds to procedure time, with no reported complications. Only two studies compared ileal findings across primary screening, FOBT-based screening, and post-polypectomy surveillance, preventing subgroup analysis. Limited data suggest similarly low diagnostic yields across groups: OR of 0.22 for primary screening and 0.1 for FOBT-positive patients, and overall yields of 1.9% (clinically significant 0.3%) for primary screening versus 4.0% (clinically significant 0.3%) for post-polypectomy surveillance. The studies showed variable methodological quality (NOS 4–8), mostly indicating moderate risk of bias. Sensitivity analyses showed no significant differences in diagnostic yield based

on bias level or inclusion of non-TII patients, supporting the robustness of overall findings.

Conclusions Routine TII in asymptomatic patients undergoing screening or surveillance colonoscopy provides a negligible diagnostic yield for clinically significant pathology, including Crohn's disease. Our findings do not support performing routine TII during colonoscopy in this patient population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP007 Colorectal-Cancer Screening Coverage Determinants and Outcomes of Various Screening Patterns: A Large-Scale Cohort Analysis

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DOI 10.1055/s-0046-1820948

Aims Colorectal cancer (CRC) screening behaviors vary widely in real world settings. We aimed to study population-level screening behavior, identify screening determinants and patterns, and concordant CRC outcomes.

Methods We conducted a retrospective cohort study using electronic health records from Maccabi Health Services (Israel) between 2006–2021. Members at screening age, free of CRC and mortality for ≥ 3 initial years were included. Individuals were followed until end of follow up, CRC, or death. Annual coverage was defined as fecal immunochemical test (FIT) in the prior year, virtual colonoscopy in the prior 5 years, or colonoscopy in the prior 10 years. Proportion of time covered (POTC) equaled years covered/years observed. We modeled predictors of yearly adherence using population-averaged logistic regression. We also classified five prespecified patterns: Early single colonoscopy (at 50–60 years with no further tests), FIT-regular (POTC ≥ 50%; FIT only), FIT-sporadic (POTC < 50%; FIT only), Mixed (all tests), and no screening. CRC incidence rates were calculated by Poisson methods. Time-to-CRC was analyzed with Fine–Gray subdistribution models treating death as a competing event (► Table 1).

Results We included 558,996 individuals (50.7% female), contributing 5,955,605 person-years; median follow-up was 11.0 years (IQR 6.0–16.0). Median final POTC was 0.62 (IQR 0.15–0.83). Older age and higher socioeconomic rank were associated with adherence (aOR per year 1.01, 95% CI 1.00–1.01; per rank 1.02, 1.01–1.02). Obesity and hypertension were associated with increased adherence (aOR 1.18, 1.16–1.19; 1.18, 1.15–1.20), while anticoagulation and chronic lung disease were associated with lower adherence (aOR 0.89; 0.83–0.96 and 0.84–0.94). In prespecified patterns (Early single colonoscopy 8,814; FIT-regular 137,251; FIT-sporadic 79,727; Mixed 209,472; None 123,732), CRC incidence was highest in None (479, 95% CI 456–503) and FIT-sporadic (370, 347–393), and lower and not substantially different in the Mixed (108, 101–116) and Early single colonoscopy (137, 101–183). In Fine–Gray models, compared with early single colonoscopy, FIT-sporadic and none had the highest CRC risk (aHR 2.74, 2.04–3.69; aHR 3.74, 2.78–5.02), whereas FIT-regular and Mixed were not significantly different (aHR 1.24, 0.92–1.67; aHR 0.82, 0.61–1.10).

Conclusions In this nationwide cohort, we identified predictors of CRC screening adherence and showed that regular FIT screening carries equal CRC outcome as early colonoscopy and mixed screening pattern. These patterns are associated with a significantly lower CRC incidence than no screening or sporadic use of FIT.

► Table 1

Variable	All (n = 558996)	Single early colonoscopy (n = 8814)	FIT regular (n = 137251)	FIT sporadic (79727)	Mixed (n = 209472)	None (n = 123732)
Follow up, years	11.00 [6.00, 16.00]	15.00 [12.00, 16.00]	9.00 [5.00, 15.00]	12.00 [8.00, 16.00]	13.00 [8.00, 16.00]	8.00 [5.00, 13.00]
Age, years	50.80 [50.40, 54.03]	51.20 [50.50, 55.41]	50.75 [50.37, 52.99]	50.85 [50.41, 54.35]	50.90 [50.45, 55.08]	50.71 [50.37, 52.46]
Female, n (%)	283662 (50.7)	4388 (49.8)	72593 (52.9)	38395 (48.2)	107730 (51.4)	60556 (48.9)
Baseline hemoglobin, g/dL	13.80 [12.90, 14.90]	13.20 [12.50, 14.20]	13.90 [13.00, 14.90]	13.90 [12.90, 14.90]	13.80 [12.80, 14.80]	13.80 [12.80, 14.85]
Proportion of time covered, %	62 [15, 83]	50 [31, 69]	75 [62, 88]	29 [19, 38]	81 [67, 94]	0 [0, 0]

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP008 Artificial Intelligence for Anal Cancer Screening: First Multicentric Validation of an Interoperable System for Simultaneous Detection and Differentiation of Squamous Cell Precursor Lesions

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DOI 10.1055/s-0046-1820949

Aims Anal cancer incidence continues to rise, underscoring the urgent need for more effective and scalable screening strategies. High resolution anoscopy (HRA) remains the cornerstone of early detection, yet achieving precise identification and confident differentiation of lesions remains challenging. Artificial intelligence has emerged as a powerful tool to enhance recognition and stratification of squamous intraepithelial lesions, including LSIL (low grade squamous intraepithelial lesion) and HSIL (high grade squamous intraepithelial lesion), with clear advancement along the technology readiness level scale (TRL, a measure of technological maturity). CADe systems (computer aided detection) improve lesion localization, while CADx systems (computer aided diagnosis) deliver real time differentiation that can directly shape clinical decisions. This study set out to develop an interoperable CADex system capable of simultaneously detecting and distinguishing LSIL and HSIL during HRA, aiming to elevate diagnostic precision, reduce subjectivity, and accelerate progress toward more consistent and effective anal cancer prevention [1–4].

Methods This multicenter study analyzed 156,246 frames extracted from 308 HRA procedures performed in 279 patients across eight centers. Data were obtained using six different devices, including four colonoscopes, one procto-

scope, and one endoscope. Frames were annotated as HSIL or LSIL based on corresponding histopathology, which served as the ground truth. A YOLO-tiny object detection model was trained to perform simultaneous lesion detection and differentiation using bounding-box annotations. The dataset was randomly divided into training, validation, and test sets. Model performance was evaluated at two levels. Object detection metrics were mean average precision (mAP) and mAP at an Intersection over Union threshold of ≥ 0.50 (mAP50). Classification metrics were recall (sensitivity), precision (PPV), and accuracy.

Results Precision was 0.8332 for LSIL and 0.8165 for HSIL, with an overall precision of 0.8247. Recall was 0.9988 for LSIL and 0.9994 for HSIL, yielding an overall recall of 0.9991. Overall classification accuracy was 0.9432. For combined LSIL and HSIL detection, the model achieved a mAP of 0.7488 and mAP50 of 0.9738.

Conclusions This study introduces the first interoperable CADex model capable of simultaneous detection and classification of anal canal precursor lesions, using an explainable bounding box approach. These findings indicate that CADex can provide a more robust pathway for integrating AI into anal cancer screening and mark a meaningful step forward in the TRL of AI applied to HRA. Its consistent performance across diverse imaging devices reinforces this potential and highlights interoperability as a prerequisite for broad clinical adoption. This interoperability also paves the way to secondary applications, such as opportunistic assessment of the anal canal during colonoscopy, where incidental visualization could ultimately complement and extend dedicated HRA based screening programs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mascarenhas M. et al. Automated detection and classification of cervical and anal squamous cancer precursors using deep learning and multidevice colposcopy. *Sci Rep* 2025; 15 (1): p 33068
- [2] Igi W.F. et al. Anal intraepithelial neoplasia screening during colonoscopy: a technical proposal. *Endoscopy* 2024; 56: p E762–e763
- [3] Stier E.A. et al. International Anal Neoplasia Society's consensus guidelines for anal cancer screening. *Int J Cancer* 2024; 154 (10): p 1694–1702
- [4] Palefsky J.M. et al. Treatment of Anal High-Grade Squamous Intraepithelial Lesions to Prevent Anal Cancer. *N Engl J Med* 2022; 386 (24): p 2273–2282

PYP009 Endoscopic Resection of Large Non-Pedunculated Polyps in Hereditary Colorectal Cancer Patients- Feasibility, Safety, and Efficacy

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DOI 10.1055/s-0046-1820950

Aims Patients with hereditary colorectal cancer syndromes who undergo colectomy require lifelong surveillance due to continued risk of neoplasia development. Large (> 20mm) non-pedunculated polyps in the pouch and anastomotic region present unique therapeutic challenges due to altered anatomy, thin small bowel wall and often severe submucosal fibrosis. We present our experience of endoscopic resection feasibility, safety, and efficacy in this specialized population (► **Table 1**).

Methods Retrospective analysis of 10 large non-pedunculated polyps (>20mm) resected endoscopically in 9 patients, who had previously undergone Total proctocolectomy with ileo-anal anastomosis (TPC-IPAA) (n = 8) or Subtotal colectomy with ileo-rectal anastomosis (n = 1). Endpoints included technical success, procedural complications, and recurrence rates [1, 2].

Results Mean age 43.7 years (range 25-66), 55% female. Eight patients carried pathogenic APC mutations (FAP) and 1 carried homozygous MSH6 mutations (CMMRD). Mean lesion size was 28.0mm (range 20-40mm), most were Paris 0-IIa (N=8) and one was Paris 0-IIa + Is. Lesion were located over the ileo-anal or ileo-rectal anastomosis (n = 4), rectal cuff (n = 2), and pouch (n = 4). Twenty-five percent had previous failed resection attempts. Submucosal fibrosis was present in 80%. EMR was used in 5 cases, hybrid ESD in 3, and ESD in 2. Two complications (20%) occurred, both in ESD cases. A procedural perforation treated by clip and delayed microporforation treated conservatively. Both were classified as mild (Clavien-Dindo grade B).

All lesions were benign, with low- grade dysplasia in 8 lesions (80%) and high-grade dysplasia present in 2 lesions (20%). Local recurrence occurred in 5 lesions (50%) within mean follow up of 3 years, all were managed endoscopically.

Conclusions Endoscopic resection of large non-pedunculated polyps is feasible with acceptable safety profiles despite significant technical challenges. The substantial 50% recurrence rate emphasizes the critical importance of intensive surveillance protocols and potential need for repeat interventions in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Le Cosquer G, Buscail E, Gilletta C et al. *Cancers (Basel)*. 2022; 14 (3): 530
- [2] Monahan KJ, Bradshaw N, Dolwani S et al. *Gut*. 2020; 69: 411–444

PYP010 Screening Modalities for Colorectal Cancer in Liver-transplanted patients: A National French Practice Survey and a Tertiary-Center Case Review

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DOI 10.1055/s-0046-1820951

Aims Liver transplanted patients have an increased risk—approximately 2.3-fold higher than the general population—of developing colorectal cancer (CRC). However, no specific recommendations currently exist regarding screening modalities to be performed before and after transplantation.

The first aim of our study was to conduct a practice national french survey among liver transplantation centers to determine whether screening methods for CRC in liver transplanted patients are standardized. Secondly, we retrospectively reviewed data from a tertiary center to identify liver transplanted patients who developed CRC during follow-up and to analyze the screening methods used in these patients before and after transplantation.

Methods We conducted a practice national survey between April and August 2025 among the 16 French centers performing adult liver transplantation (LT), using an online questionnaire developed and validated by three hepatology

► **Table 1**

	Age	Sex	Syn-drome	Colecto-my	Location	Size (mm)	Previously attempted	Method	Procedural complica-tion	Delayed complica-tion	Surveil-lence	Follow up (months)
1	63	F	FAP	TPC + IPAA	Anastamo-sis	20	EMR	EMR	None	None	Normal	44
2	36	M	FAP	TPC + IPAA	Anastamo-sis	30	No	EMR	None	None	Normal	48
3	25	F	FAP	TPC + IPAA	Cuff	30	No	Hybrid ESD	None	None	Recur-rence	41
4	66	F	FAP	TPC + IPAA	Blind loop	20	No	EMR	None	None	Normal	30
5	51	F	FAP	TPC + IPAA	Cuff	30	TEM	ESD	Perforation	None	Normal	84
6	35	M	FAP	TPC + IPAA	Pouch	35	No	EMR	None	None	Normal	34
7	38	M	FAP	TPC + IPAA	Anastamo-sis	40	No	Hybrid ESD	None	None	Recur-rence	36
8	54	M	FAP	Sub total	Anastamo-sis	20	EMR	EMR	None	None	Recur-rence	6
9*	25	F	CM-MRD	TPC + IPAA	Blind loop	35	No	ESD	None	Perforation	Recur-rence	19
10*	25	F	CM-MRD	TPC + IPAA	Pouch	20	No	Hybrid ESD	None	None	Normal	19

* Lesions 9 and 10 in the same patient. FAP = Familial Adenomatous Polyposis. CMMRD = constitutional mismatch repair deficiency. TPC + IPAA = Total proctocolectomy with ileal pouch anal anastomosis. EMR = Endoscopic Mucosal Resection. TEM = Transanal Endoscopic Microsurgery. ESD = Endoscopic Submucosal Dissection.

transplant experts from two different tertiary centers. The questionnaire assessed, among other items, the existence of a systematic CRC screening protocol, screening examinations performed according to classical risk factors (RFs) for colorectal adenomas, and their frequency. RFs were defined as age > 50 years, personal or family history of adenoma or CRC. In the second part of the study, we reviewed cases from a tertiary center, identifying liver transplanted patients who developed CRC. Analyzed data included: indication for LT, performance of fecal immune test (FIT) and/or colonoscopy before and after transplantation, indications for these tests, and timing of their completion. Statistics were descriptive, expressed as mean $\pm$ standard deviation or median for quantitative variables, and as percentages for qualitative variables.

Results With 24 responses to our questionnaire, from 12 of the 16 surveyed centers, we found significant heterogeneity in screening practices before and after transplantation, with no dedicated protocol in 37.5 % and 58.4 % of centers, respectively. Before LT, screening was performed by colonoscopy in 91.7 % of cases in the presence of RFs, whereas no screening was performed in 56 % of cases in the absence of RFs. In the absence of RFs, FIT was used in 16.8 % of cases. After LT, in patients without RFs, screening was performed using FIT in 76.9 % of cases and colonoscopy in 15.4 %. In the presence of RFs, FIT was used in 46.2 % and colonoscopy in 53.8 % of cases.

In the tertiary-center cohort, 336 patients underwent LT, between January 2011 and August 2024 and 10 developed CRC, corresponding to an incidence of 2.9 %. Although 80 % of them had CRC RFs, only 50 % underwent dedicated CRC screening before transplantation. Among screened patients, the median time to CRC diagnosis was 68 months post-transplant. In contrast, all patients who were not screened before transplantation ($n = 5$) and subsequently developed CRC were diagnosed within 18 months after transplantation (median: 13 months). Notably, all patients who developed CRC had alcohol-related cirrhosis, and 80 % had hepatocellular carcinoma (HCC) before transplantation.

Conclusions There is a lack of standardization of CRC screening modalities in liver transplanted patients, resulting in heterogeneous practices across centers. National recommendations appear essential to harmonize screening strategies and better define pre- and post-transplant screening according to patient RFs. Particular attention should be given to patients with HCC before transplantation and those with alcohol-related cirrhosis, who appear to be at especially high risk in our cohort. Finally, in the absence of pre-transplant screening, we propose performing routine colonoscopy within 6–12 months after transplantation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Intelligent Detection Systems in Gastrointestinal Endoscopy

14/05/2026, 09:30–10:30

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PYP011 Artificial Intelligence in Colonoscopy: Insights from a Prospective Real-Life Study

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DOI 10.1055/s-0046-1820952

Aims Prevention of colorectal adenocarcinoma mainly relies on the detection and resection of precancerous lesions (adenomas and serrated lesions) during colonoscopy. The implementation of artificial intelligence (AI) solutions in digestive endoscopy aims to improve detection performance. However, in the literature, detection rates depend on multiple factors related to the patient, the operator, and the procedural context. Moreover, while AI seems to increase the number of resected lesions, its impact on the detection of clinically significant

lesions remains debated. The primary objective of this study was to evaluate the impact of AI on the detection of polyps ≥ 10 mm.

Methods We conducted a prospective, observational, single-center study in a university hospital between January and December 2024. Colonoscopy data were collected by operators using dedicated questionnaires. Inclusion of examinations and the choice to use AI were left to the operator's discretion. Patient and procedural characteristics as well as quality indicators were recorded. Operator perception of AI was also assessed. A propensity score matching analysis was performed on age, sex, and operator experience to evaluate factors associated with resection of polyps ≥ 10 mm, after excluding known lesions and colonoscopies performed for inflammatory bowel disease. The study protocol was approved by the local ethics committee.

Results A total of 547 colonoscopies (median age 63 years; 57 % male) were analyzed, including 290 with AI and 257 without AI. Indications differed significantly between groups, with more follow-up colonoscopies (32 % vs. 17 %) and FIT-positive indications (8 % vs. 4 %), and fewer known lesions (14 % vs. 4 %) in the AI group compared to the non-AI group ($p < 0.01$). Colonoscopies with AI were more often performed by experienced endoscopists, in the morning, and with patients in the left lateral position. The total number of resected polyps and detection of polyps ≥ 10 mm did not differ between AI and non-AI groups. However, total procedure time (20 vs. 25 min) and withdrawal time (10 vs. 13 min, $p < 0.05$) were significantly shorter with AI. After propensity score matching, the proportion of colonoscopies resecting at least one polyp ≥ 10 mm was not significantly different between AI and non-AI groups (20.7 % vs. 20.6 %). In multivariable analysis, factors associated with detection of polyps ≥ 10 mm were operator status (assistant or fellow vs. resident; OR 0.04; $p = 0.004$), absence of music in the endoscopy room (OR 0.2; $p = 0.013$), screening colonoscopy vs. symptomatic colonoscopy (OR 0.08; $p < 0.001$), and longer withdrawal time (OR 14.7; $p < 0.001$). AI use had no impact on detection of polyps ≥ 10 mm.

Operator perception from the 290 AI-assisted procedures showed that 88.3 % of endoscopists considered AI neither saved nor wasted time. System interruptions were rare (2.1 %). AI was reported to detect a polyp missed by the operator in 5.2 % of cases, but failed to detect a polyp seen by the operator in 7.6 %.

Conclusions In this prospective real-life study, AI did not improve detection of clinically significant lesions. Detection performance remained mainly determined by patient- and operator-related factors. In routine practice, numerous confounding factors exist, which differ from the highly controlled conditions of randomized trials.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP012 Application of Fusion Foundation Model for Artificial Intelligence-Assisted Capsule Endoscopy Reading

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DOI 10.1055/s-0046-1820953

Aims Capsule endoscopy reading is time-consuming and subject to variability among readers. Although artificial intelligence-assisted reading has improved diagnostic accuracy, its performance often lacks generalizability in different clinical settings. This study aimed to develop a foundation model to improve accuracy and generalizability in capsule endoscopy reading.

Methods The Attention-based Token Mixing (AToM) model was developed by integrating two validated foundation models, BiomedCLIP and GastroNet. This model incorporates an Efficient Token Mixer and a Squeeze-and-Excitation Convolutional Neck to enhance feature integration and overall performance. The model was evaluated using three datasets, including two public datasets (Kvasir and Kvasir-Capsule) and one real-world dataset (DUMC). The analysis was conducted under patient-level splitting protocol.

Results AToM consistently outperformed conventional deep learning, transformers, and recent foundation models across all evaluation metrics. On the Kvasir-Capsule dataset, AToM achieved an F1-score of 87.4%, an accuracy of 88.7%, and MCC of 0.616, outperforming the latest foundation model (DINOv2) by 1.7% in F1-score, 1.6% in accuracy, and 0.08 in MCC ($p < 0.05$ for all). Interestingly, under image-level splitting, the AToM model reached an accuracy of 98.6% and an MCC of 0.987 with highest performance, showing the highest performance.

Conclusions The AToM model demonstrated the highest accuracy and strong generalization across different datasets compared with conventional models. Although overall accuracy decreased under the strict patient-level compared with the image-level split, the AToM model consistently maintained the best performance. These findings suggest that foundation model could be feasibly implemented in real-world clinical setting for capsule endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP013 A Novel Artificial Intelligence Assisted White Light endoscopic Model in the Diagnosis of Cardia Atrophy : A Multicenter Study

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DOI 10.1055/s-0046-1820954

Aims Atrophy extends beyond the cardia is open atrophy and closely related to gastric cancer. However, there is difficulty in determining cardia atrophy under endoscopy.

Methods This is multicenter prospective study, a total of 895 patients were assigned to the training and validation sets to establish a cardia atrophy diagnostic model. 220 patients were included in the internal test set. Additionally, a total of 354 patients were included in the external test set. In the internal and external test sets, 3 senior and 3 junior endoscopists made online diagnoses, comparing the performance differences to the AI-assisted system (► Table 1).

Results In the internal test dataset, the accuracy, sensitivity, and specificity of the AI-assisted cardia atrophy diagnostic system were 0.927, 0.941, and 0.919, respectively, with a PPV of 0.878, NPV of 0.962, and AUC of 0.967. In the external test dataset, the accuracy, sensitivity, and specificity were 0.918, 0.894, and 0.931 respectively, with a PPV of 0.874, NPV of 0.943, and AUC of 0.953. Furtherly, it was found the diagnosis accuracy, sensitivity, specificity, PPV, and NPV of the AI-assisted system were all higher than those of senior endoscopists. The ROC curve area (AUC) of AI-assisted system was 0.967 and 0.953 in the internal and external test sets, respectively. Heat map showed a high consistency between the AI-system and endoscopists.

Conclusions Our newly developed AI-assisted system shows superior performance in identifying cardia atrophy compared to senior endoscopists, and can be used to guide endoscopic judgment and targeted biopsies for cardia atrophy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP015 Implementation of a FAIR-Compliant Video Databank for Artificial Intelligence Model Development and Clinical Outcomes Research in Gastrointestinal Endoscopy

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DOI 10.1055/s-0046-1820955

Aims Artificial intelligence (AI) has potential to improve diagnosis and outcome assessment in gastrointestinal (GI) endoscopy. However, robust AI models require large, labeled datasets with full-length, high-resolution endoscopic videos. Many existing endoscopic databases rely on retrospective sampling, isolated images, or lack clinical context, limiting their utility for AI systems development. We therefore aimed to develop an endoscopy video databank coupling full-length recording with capture of structured clinical, procedural, and pathology data.

Methods A prospective video databank was established at the Montreal University Hospital Center (NCT06822616) with enrollment of patients undergoing endoscopic procedures since 2022. Inclusion criteria comprised all screen-

► **Table 1** Comparison of diagnostic performance of cardia atrophy between AI-assisted system and endoscopists

	Internal Testing dataset				External Testing dataset			
	AI-assisted system	Endos-copists	Senior	Junior	AI-assisted system	Endos-copists	Senior	Junior
Accuracy (95 %CI)	0.927 (0.891, 0.964)	0.714 (0.688, 0.741)	0.774 (0.738, 0.810)	0.655 (0.617, 0.692)	0.918 (0.881, 0.956)	0.836 (0.817, 0.856)	0.867 (0.843, 0.891)	0.805 (0.777, 0.833)
Sensitivity (95 %CI)	0.941 (0.884, 0.997)	0.687 (0.642, 0.731)	0.730 (0.673, 0.787)	0.643 (0.582, 0.704)	0.894 (0.827, 0.961)	0.770 (0.734, 0.806)	0.841 (0.795, 0.887)	0.699 (0.651, 0.747)
Specificity (95 %CI)	0.919 (0.876, 0.963)	0.732 (0.697, 0.766)	0.802 (0.757, 0.846)	0.662 (0.613, 0.710)	0.931 (0.894, 0.969)	0.872 (0.849, 0.894)	0.882 (0.851, 0.913)	0.862 (0.830, 0.894)
PPV (95 %CI)	0.878 (0.820, 0.936)	0.612 (0.569, 0.656)	0.694 (0.636, 0.753)	0.540 (0.483, 0.597)	0.874 (0.807, 0.941)	0.762 (0.727, 0.796)	0.791 (0.750, 0.832)	0.729 (0.683, 0.775)
NPV (95 %CI)	0.962 (0.930, 0.993)	0.791 (0.759, 0.823)	0.828 (0.786, 0.869)	0.750 (0.707, 0.794)	0.943 (0.905, 0.981)	0.877 (0.855, 0.899)	0.912 (0.886, 0.938)	0.843 (0.812, 0.874)
AUC (95 %CI)	0.967 (0.945-0.988)	–	–	–	0.953 (0.929-0.977)	–	–	–

PPV: Positive Predictive Value NPV: Negative Predictive Value AUC: Area Under Curve

ing, surveillance, diagnostic, or therapeutic upper (EGD) or lower (colonoscopy) endoscopies performed in patients ≥ 18 years old. All patients provided informed consent for data collection and subsequent use in AI system development. The databank follows FAIR principles: Findable, Accessible, Interoperable, and Reusable. Video recordings were de-identified from acquisition, using study identifiers without protected health information, with all technical specifications optimized for AI training (full-length, full-frame videos in 1920x1080-pixel resolution and 60fps, and 10-bit color depth). Trained research staff systematically documented and timestamped detected anatomical landmarks, all identified lesions, including endoscopist optical diagnoses, interventions, disease-specific scores (e.g., Ulcerative colitis: Mayo Endoscopic Subscore, Crohn's disease: SES-CD, Barrett's esophagus: Prague classification), AI system outputs, and endoscopy quality metrics in structured case report forms (CRFs) during the procedure. All data, including patient, procedure, and pathology outcomes, were then documented in a REDCap database and linked to the videos using the unique study identifiers [1–5].

Results As of July 2025, 6,272 patients (mean 59.0 years, 52.1 % female) have been prospectively enrolled for a total of 7,591 endoscopic procedures (5,605 (73.8 %) colonoscopies, 1,986 (26.2 %) EGDs) performed by 48 different endoscopists, with complete video capture and documentation included in the databank. Up to 747 and 455 structured datapoints were documented for each enrolled colonoscopy and EGD, respectively. Each polyp identified and biopsy performed were documented with up to 48 and 46 variables each. Disease-specific datapoints included up to 169 datapoints specifically for patients with inflammatory bowel disease. Prevalence of main cohort procedural indications are summarily presented in ► **Table 1**, demonstrating substantial diversity in pathologic findings across inflammatory, neoplastic, and structural disease categories. Pathologic findings (including inflammation, polyps, ulcers, dysplasia, malignancy) of any type were found in 6355 (83.7 %) procedures, of which 6987 colorectal polyps found in 2981 patients and 48 cancers. Data enabled calculation of multiple endoscopic quality metrics: mean adenoma detection rate (ADR) was 38.9 % (CI[37.2–40.7]), sessile serrated lesion detection rate (SSLDR) was 4.5 % [3.8–5.3], advanced adenoma detection rate (AADR) was 9.0 % [8.0–10.1], and mean withdrawal time was 12.1 +/– 11.9 minutes for colonoscopies and procedure times 5.1 +/– 7.1 minutes for EGDs.

Conclusions This large, prospective, FAIR-compliant video databank of > 7,500 procedures enrolled at our tertiary care center provides a scalable foundation for AI development, validation, and clinical outcomes research for gastrointestinal endoscopy. Ongoing multi-center expansion and integration of digital pathology slides, microbiome and multi-omics analyses will enable future projects combining endoscopic video data with precision medicine approaches.

Conflicts of Interest Daniel von Renteln is supported by a "Fonds de Recherche du Québec Santé" career development award. He has also received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. Roupén Djinbajian has received speaker fees from Fujifilm. The remaining authors declare that they have no conflict of interest.

References

- [1] Jong MR, Boers TGW, Fockens KN et al. GastroNet-5M: A Multicenter Dataset for Developing Foundation Models in Gastrointestinal Endoscopy. *Gastroenterology*. 2025;
- [2] Wilkinson MD, Dumontier M, Aalsbersberg IJ et al. The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* 2016; 3: 160018
- [3] Steinhäuser JL, Berzin TM, Geissler ME et al. Implementing endoscopy video recording in routine clinical practice: Strategies from three tertiary care centers. *Endosc Int Open* 2025; 13: PMID: a25923338
- [4] Bazerbachi F, Murad F, Kubiliun N et al. Video recording in GI endoscopy. *VideoGIE* 2025; 10 (2): 67–80
- [5] Uche-Anyà EN, Gerke S, Berzin TM et al. Video Endoscopy as Big Data: Balancing Privacy and Progress in Gastroenterology. *Am J Gastroenterol* 2024; 119 (4): 600–605

PYP016 Public Perspectives on Liability for Errors With AI-Enabled Gastrointestinal Endoscopy

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DOI 10.1055/s-0046-1820956

Aims Uncertainty around medical liability and accountability remains a major barrier to the effective implementation of AI in endoscopy. To date, no malpractice cases have involved AI-enabled endoscopy. As systems become increasingly automated, responsibility becomes more complex, involving clinical

► **Table 1** Cohort characteristics: prevalence of procedural indications

Colonoscopies	N = 5,605	EGD	N = 1,986
Surveillance	1,931 (34.4 %)	Dyspepsia	306 (15.6 %)
Diagnostic	760 (13.6 %)	Barrett's esophagus	229 (11.5 %)
Screening	642 (11.4 %)	Anemia	198 (10.0 %)
Crohn's disease	543 (9.7 %)	Dysphagia	151 (7.6 %)
Ulcerative colitis	459 (8.2 %)	GERD	93 (4.7 %)
EMR polypectomy	427 (7.6 %)	EMR polypectomy	70 (3.5 %)
FIT +	173 (3.1 %)	Eosinophilic esophagitis	67 (3.4 %)

cians, hospitals and manufacturers. A better understanding of public perception around AI and liability will be critical for clinical adoption and the development of legal frameworks. This study examines how laypersons assign responsibility across stakeholders at different levels of AI automation in endoscopy [1–5].

Methods An online survey was conducted via a dedicated research platform (Prolific). Adults > 18 years old from the USA and Europe were randomly presented with three AI endoscopy harm scenarios representing increasing levels of automation. Participants rated responsibility for four stakeholder groups [doctor, hospital, AI manufacturer and a no-fault compensation scheme] using a 7-point Likert scale. Scenario 1 involved a computer aided quality (CAQ) tool reporting adequate mucosal visualization followed by a missed colorectal cancer (CRC). Scenario 2 involved a computer aided diagnosis (CADx) system misclassifying an adenoma as a hyperplastic polyp, leaving an adenoma in situ, which later progressed to CRC. Scenario 3 described a capsule endoscopy tool with which physicians check only images flagged by the system as abnormal, failing to identify a significant gastrointestinal bleed.

Results 502 respondents completed the survey (USA: 250; Europe: 252). Responsibility scores varied significantly by both AI automation level and stakeholder ($p < 0.001$). Doctors received the highest overall mean responsibility score of any stakeholder (5.15, $p < 0.001$). However, accountability patterns shifted significantly with increasing AI automation. Doctors' mean responsibility declined steadily, reaching 3.32 at the highest automation level ($p < 0.001$). In contrast, hospitals and manufacturers showed the opposite trend. Their mean responsibility scores peaked at the highest automation level, at 5.73 and 5.83, respectively ($p < 0.001$). Ratings for the no-fault compensation scheme remained largely unchanged.

Conclusions This is the first study to examine public perceptions of liability for AI-related harms in endoscopy. Participants perceived that increasing AI automation shifts responsibility away from clinicians and toward hospitals and manufacturers, though clinicians were assigned high responsibility ratings across all scenarios. As automation increases, hospitals and manufacturers should strengthen governance and monitoring to ensure safety and accountability. These findings underscore the need to preserve a clear human-in-the-loop role within AI-supported endoscopy and to establish structured, transparent liability frameworks to guide clinical practice.

Conflicts of Interest Yuichi Mori: Olympus, Cybernet System. Tyler Berzin: Boston Scientific, Medtronic, Wision AI, Fractyl. Cesare Hassan: Olympus, Fujifilm, Medtronic, Norgine. Laurence Lovat: Olympus, Medtronic, Pentax Medical, DynamX, Ninepoint Medical. Omer Ahmad: Olympus, Boston Scientific, Norgine.

References

- [1] Kass JS, Rose RV. Medical Malpractice Reform: Historical Approaches, Alternative Models, and Communication and Resolution Programs. *AMA Journal of Ethics* 2007; 18 (3): 299–310. doi:10.1001/journalofethics.2017.18.3.pfor6-1603.
- [2] World Health Organization Regional Office for Europe (2025). Artificial intelligence is reshaping health systems: state of readiness across the WHO European Region. World Health Organization. Regional Office for Europe <https://iris.who.int/handle/10665/383509>
- [3] Price WN, Gerke S, Cohen IG. Potential Liability for Physicians Using Artificial Intelligence. *JAMA* 2019; 322 (18): 1765–1766. doi:10.1001/jama.2019.15064
- [4] Tobia K, Nielsen A, Stremitzer A. When Does Physician Use of AI Increase Liability? *Journal of Nuclear Medicine* 2020; 62 (1): 17–21. doi:10.2967/jnumed.120.256032
- [5] Elamin S, Duffourc M, Berzin TM, Geissler ME, Gerke S. Artificial Intelligence and Medical Liability in Gastrointestinal Endoscopy. *Clinical gastroenterology and hepatology* Published online March 1 2024. doi:10.1016/j.cgh.2024.03.011

PYP017 Diagnostic accuracy of artificial intelligence in endoscopic detection of early esophageal neoplasia: systematic review and meta-analysis

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DOI 10.1055/s-0046-1820957

Aims Esophageal neoplasia (EN) remains a significant contributor to cancer-related mortality, primarily due to the difficulty in visualizing and characterizing early-stage lesions during endoscopy. Inter-observer variability in interpretation is substantial, even with enhanced imaging modalities (e.g., NBI, BLI, i-scan). Artificial intelligence (AI) systems, including computer-aided detection (CADE) and diagnosis (CADx), have emerged as potential tools to enhance and standardize diagnostic accuracy. We aimed to synthesize the diagnostic performance of AI-assisted endoscopy for EN, conducting subgroup analyses based on histology (Esophageal Squamous Cell Carcinoma [ESCC] vs. Barrett's Esophagus-Related Neoplasia [BERN]) and comparing accuracy by the unit of analysis (per-patient vs. per-image).

Methods A systematic review and meta-analysis were performed. Study-level 2 × 2 data (True Positives, False Positives, False Negatives, True Negatives) were extracted from eligible studies. Data were pooled using a bivariate random-effects hierarchical summary receiver operating characteristic (HSROC) model (MIDAS, Stata 18). Primary outcome measures were pooled sensitivity, specificity, and the Area Under the Curve (AUC). Secondary metrics included positive and negative likelihood ratios (LR+, LR-) and the Diagnostic Odds Ratio (DOR). Separate meta-analyses were conducted for per-patient data (overall and by histology) and per-image data. Statistical heterogeneity was quantified using the I² statistic, and threshold effects were evaluated.

Results Thirteen studies met inclusion criteria for the per-patient analysis (752 reference-positive; 876 reference-negative patients). The pooled sensitivity was 0.91 (95% CI 0.85–0.94) and specificity was 0.78 (95% CI 0.63–0.88). The summary AUC was 0.93 (95% CI 0.90–0.95), with an LR+ of 4.1, LR- of 0.12, and DOR of 34. Substantial heterogeneity was observed (I² ≈ 97%) with no significant threshold effect [1].

In histological subgroup analyses, ESCC (8 studies) yielded a sensitivity of 0.92 (95% CI 0.85–0.96) and specificity of 0.73 (95% CI 0.51–0.87) (AUC 0.93). For BERN (5 studies), sensitivity was 0.86 (95% CI 0.77–0.92) and specificity was 0.85 (95% CI 0.69–0.93) (AUC 0.91).

The per-image analysis (6 studies; 2,574 positive; 7,089 negative images) demonstrated higher pooled accuracy: sensitivity 0.96 (95% CI 0.92–0.98), specificity 0.93 (95% CI 0.85–0.97), and AUC 0.98 (LR+ 13.3, LR- 0.04). Heterogeneity remained substantial (I² ≈ 93%).

Conclusions AI-assisted endoscopy demonstrates high overall diagnostic accuracy for esophageal neoplasia. On a per-patient basis, a metric more relevant to clinical decision-making, AI provides excellent sensitivity with moderate specificity, showing comparable utility across both ESCC and BERN. The outstanding per-image accuracy (AUC 0.98) and high LR+ (13.3) suggest strong "rule-in" capability, while the consistently low LR- (0.12 per-patient, 0.04 per-image) indicates a robust "rule-out" potential, implying a reduced risk of missed lesions. Despite significant heterogeneity across studies, these findings support the continued development of AI in endoscopy. Prospective, real-time, multicenter validation studies using standardized workflows are warranted to establish optimal operating thresholds and confirm the generalizability of these systems in routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Esophageal neoplasia; Artificial intelligence; Endoscopy; Diagnostic accuracy; Meta-analysis.

PYP018 Colon Capsule Endoscopy and Health Inequalities: Early Signals from an Ethnically Diverse Patient Cohort

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DOI 10.1055/s-0046-1820958

Aims Colon Capsule Endoscopy (CCE) is a minimally invasive alternative to standard colonoscopy. Although it does not currently provide population-level therapeutic intervention, it is highly sensitive, well tolerated and is associated with low rates of discomfort and complications [1]. In the UK, CCE has now been implemented in routine clinical pathways, which has helped to reduce the demand for conventional colonoscopy [2].

Bowel cancer screening in the UK heavily relies on faecal immunochemical testing (FIT) to identify patients who require endoscopic assessment. In some ethnic groups, a lower than expected uptake has been identified, [3]. Additionally, subsequent colonoscopy uptake has historically been lower in ethnic minority groups [4]; for example, uptake has been reported to be as low as 33% in the South Asian population in England [5]. Consequently, minority populations are more likely to be diagnosed with advanced colorectal cancer as a result [6] – this is an important public health concern.

We analysed data from one of the UK's largest CCE centres, itself serving an ethnically diverse population, to determine whether CCE could play a role in increasing lower gastrointestinal investigation among ethnic minority groups.

Methods We performed a retrospective analysis of CCE reports between January 2021 and September 2025. Eligible patients included those with a lower risk of colorectal cancer (FIT of < 100) with or without the presence of NG12 symptoms (such as rectal bleeding or a change in bowel habit). Data sources included CCE reports, scanned written patient records and electronic patient records. We recorded demographics (ethnicity, sex and age) in addition to the diagnosis from the study.

Results A total of 473 CCE reports were analysed. Of this cohort, 385 (81%) patients were White British. 37 (7.8%) patients were Pakistani, constituting the largest minority population in the cohort. Within this subgroup, 87% were female, compared to 55% in the overall cohort. The median age in the Pakistani subgroup was 45 years compared to 57 overall. 6 (16.2%) of these patients had polyps, 8 (21.6%) had diverticulae and 8 (21.6%) had haemorrhoids. Other ethnicities included 7 (1.4%) Black (African), 4 (0.84%) Indian and 2 (0.42%) Caribbean patients.

Conclusions This analysis suggests comparatively higher uptake of CCE amongst some ethnic minority populations that might be expected from historical diagnostic colonoscopy data.

Pakistani people comprise 13.5% of the total population in the area our centre covers [7]. Local colonoscopy uptake in this group has been reported as 1.4%; this is significantly lower than the uptake of CCEs in our data. This suggests there is a signal that CCE may play a role in overcoming known barriers to participation among minority populations accessing screening investigations, thereby addressing known disparities in colorectal screening. Qualitative research identifies common barriers including individual beliefs, a reliance on family and friends, health concerns (such as the disproportionate effect of healthcare-acquired infections on minority groups) and a perceived loss of autonomy [8].

Confirmatory, prospective research is required to explore minority communities' preferences for investigative modalities, including CCE, and to determine how CCE might be integrated into colorectal cancer diagnostic pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Morris S, Sutton M, Gravelle H. Socioeconomic variation in uptake of colonoscopy in the English Bowel Cancer Screening Programme. *Journal of Medical Screening* 2012; 19 (2): 67–72 PMID: 22864455
- [2] Campbell C, Douglas A, Williams L, Cezard G et al. Are there ethnic and religious variations in uptake of bowel cancer screening? A retrospective co-

hort study among 1.7 million people in Scotland. *BMJ Open* 2020; 10:e037011. doi:10.1136/bmjopen-2020-037011

- [3] Bailey JA, Wan N, Gholkar M et al. Sociodemographic variations in the uptake of faecal immunochemical test for symptomatic patients. *The British Journal of General Practice* 2023; 73: e843–e849. doi:10.3399/BJGP.2023.0033. PMID: PMC10587902
- [4] Turvill J, Haritakis M, Pygall S, Bryant E, Cox H, Forshaw G, Musicha C, Allgar V, Logan R, Alindon M. Multicentre Study of 10,369 Symptomatic Patients Comparing the Diagnostic Accuracy of Colon Capsule Endoscopy, Colonoscopy and CT Colonography. *Alimentary Pharmacology & Therapeutics* 2025; 61 (9): 1532–1544. doi:10.1111/apt.70046
- [5] Kerrison RS, Gil N, Travis E, Jones R, Whitaker KL, Rees C, von Wagner C. Barriers and facilitators to colonoscopy: qualitative study of ethnic minority groups following a positive faecal immunochemical test. *Psycho-Oncology* 2023; 32: doi:10.1002/pon.6123. PMID: PMC10946452
- [6] Jackson A, Taylor J, Pritchard J. Census 2021: Ethnicity Overview. Oldham Council, Strategy and Performance Service. 2022; Report No.: V1.01. Available from: https://www.jsnaoldham.co.uk/cms-data/depot/profile-depot/Census_2021_First_Ethnicity_Report_v101.pdf Accessed 2025 Nov 18
- [7] Birch RJ, Burr NE, Taylor JC, Downing A, Quirke P, Morris EJA et al. Inequalities in colorectal cancer diagnosis by ethnic group: a population-level study in the English National Health Service. *BMJ Open Gastroenterology* 2025; 12 (1): PMID: e001629
- [8] Palmer CK, Thomas MC, McGregor LM, von Wagner C, Raine R. Understanding low colorectal cancer screening uptake in South Asian faith communities in England – a qualitative study. *BMC Public Health* 2015; 15: 998. doi:10.1186/s12889-015-2334-9

PYP019 A Decade of Colon Capsule Endoscopy: Downstream Workload and Follow-up Procedures

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DOI 10.1055/s-0046-1820959

Aims Colon capsule endoscopy (CCE) is a minimally invasive alternative to colonoscopy that offers a patient-friendly method of evaluating the colon. While its diagnostic yield is well established and shown to be comparable to conventional colonoscopy, far less is known about the downstream workload generated by CCE—particularly the need for subsequent colonoscopy, additional imaging, or repeat CCE examinations. Understanding these follow-up requirements is crucial for assessing service efficiency, planning resource allocation, and evaluating cost-effectiveness. As CCE becomes increasingly integrated into colorectal pathways, quantifying the procedural load it generates is essential for informed decision-making. This study aims to characterize the downstream workload associated with our CCE service over the past decade, with a specific focus on the frequency and drivers of follow-up procedures, including colonoscopy, imaging, and repeat CCE [1].

Methods We conducted a retrospective analysis of all colon capsule endoscopy (CCE) studies performed at our centre over the past 10 years. Case lists were generated from the local PillCam database, and patient identifiers were cross-referenced with the hospital Endoscopy database to identify subsequent procedures. Individual CCE reports were reviewed to assess study completeness and to document any downstream investigations, including colonoscopy, radiological imaging, or repeat capsule examinations. The primary outcomes were the frequency and type of follow-up procedures following CCE, with secondary outcomes capturing repeat CCE rates and indications for additional investigations

Results Over the 10-year period, 1,302 CCE examinations were performed. Repeat CCE was recommended in 268 cases (21%). The annual repeat CCE rate showed substantial variability, ranging from 4.8% to 26.6%, with a mean of 17.7% and a median of 17.9%, indicating a consistently moderate downstream capsule workload. Surveillance was the predominant indication with 209 procedures (78%), with a progressive rise over time, increasing more than 30-fold between 2015 (1 case) and 2023 (52 cases). Symptomatic indications account-

ed for 24 cases (10%) and repeats due to failed or inadequate bowel preparation occurred in 32 cases (11%). Follow-up endoscopy was recommended in 440 cases (34%). Annual endoscopic workload ranged from 14.3% to 41.6%, with a mean of 29.1% and median of 28.3%, demonstrating greater yearly fluctuation than repeat CCE. Peaks in 2019 and 2023 (both 87 cases) reflected high-volume years with increased diagnostic yield or completion requirements. Indications included polypectomy (224; 51%), completion colonoscopy (95; 21%), and other therapeutic or diagnostic interventions (102; 23%). CT colonography was recommended in only four cases (0.3%), all following failed CCE studies. Across the dataset, a substantial proportion of patients did not require further investigation, 586 cases (45%).

Conclusions Overall, 45% of CCE examinations required no further follow-up and a further 21% were suitable for capsule-based surveillance—patients who historically would have undergone colonoscopy. This represents a potential 66% reduction in index colonoscopy demand (859 cases). Repeat CCE was required in 21% of examinations, with an average annual repeat rate of 18%, a factor that will need to be considered in future service planning should national adoption of CCE expand. Our follow-up endoscopy rate of 34% (mean annual rate 29%) compares favourably with the ~42% pooled rate reported by Lei et al. (2025). These findings indicate that CCE can operate effectively alongside colonoscopy, reducing the overall burden on endoscopy services. Appropriate patient triage will be essential to further minimise downstream workload, consistent with broader use of non-invasive testing pathways such as the Faecal Immunochemical Test (FIT). In the context of a growing population and increasing colonoscopy waiting lists, expanding CCE capacity offers a practical strategy to enhance access and efficiency within colorectal diagnostics. Additionally, by reducing procedure-related resource use, CCE may contribute to lower carbon emissions in endoscopy units and support the goals of Green Endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lei J.L., Cortegoso Valdivia P., Marlicz W., Skonieczna-Żydecka K., Arasradnam R., Eliakim R., Koulaouzidis A. 2025 Systematic meta-review: diagnostic accuracy of colon capsule endoscopy for colonic neoplasia with umbrella meta-analysis. . doi:10.1177/26317745251370845

PYP020 Artificial Intelligence–Assisted Endoscopy Reduces Adenoma and Polyp Miss Rates: Updated Meta-Analysis of Randomized Clinical Trials

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DOI 10.1055/s-0046-1820960

Aims Artificial intelligence (AI) is increasingly used in GI endoscopy to enhance polyp and adenoma detection. We measured the AI enhanced endoscopy on adenoma miss rate (AMR), polyp miss rate (PMR) and sessile serrated lesion miss rate (SSL-MR).

Methods We searched PubMed and Embase databases to July 2025 for RCTs comparing AI-assisted with standard Endoscopy. Pooled risk ratios (RR) were calculated with random effects.

Results Twelve trials showed significantly AI endoscopy lowered AMR by 39% (RR 0.61, 95% CI 0.5-0.75) and PMR by 36% (RR 0.64, 95% CI 0.44-0.91). SSL-MR fell but was not significant (RR 0.58, 95% CI 0.29-1.16).

Conclusions Our meta-analysis showed that AI-assisted endoscopy results in a significant reduction in missed adenomas and polyps. A similar reduction was also observed for missed sessile serrated lesions but did not reach significance. These results point to the potential of AI enhancement to improve the accuracy of endoscopic surveillance by catching more lesions on the first pass. Widespread use of AI in endoscopy could make fewer missed lesions and reduce the incidence of interval neoplasms [1–5].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yao L, Li X, Wu Z, Wang J, Luo C, Chen B et al. Effect of artificial intelligence on novice-performed colonoscopy: A multicenter randomized controlled tandem study. *Gastrointestinal Endoscopy* [Internet] 2024;[cited 2025 Nov 22] 99: 91–99.e9. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0016510723027955>
- [2] Yamaguchi D, Shimoda R, Miyahara K, Yukimoto T, Sakata Y, Takamori A et al. Impact of an artificial intelligence-aided endoscopic diagnosis system on improving endoscopy quality for trainees in colonoscopy: Prospective, randomized, multicenter study. *Digestive Endoscopy* [Internet]. 2024 [cited 2025 Nov 22] 36: 40–8. Available from: . doi:10.1111/den.14573
- [3] Maas MHJ, Neumann H, Shirin H, Katz LH, Benson AA, Kahloon A et al. A computer-aided polyp detection system in screening and surveillance colonoscopy: An international, multicentre, randomised, tandem trial. *The Lancet Digital Health* [Internet] 2024;[cited 2025 Nov 22] 6: e157–65. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S258975002300242X>
- [4] Lui TKL, Hang DV, Tsao SKK, Hui CKY, Mak LLY, Ko MKL et al. Computer-assisted detection versus conventional colonoscopy for proximal colonic lesions: A multicenter, randomized, tandem-colonoscopy study. *Gastrointestinal Endoscopy* [Internet] 2023;[cited 2025 Nov 22] 97: 325–334.e1. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0016510722020181>
- [5] Lui TKL, Hang DV, Tsao SKK, Hui CKY, Mak LLY, Ko MKL et al. Computer-assisted detection versus conventional colonoscopy for proximal colonic lesions: A multicenter, randomized, tandem-colonoscopy study. *Gastrointestinal Endoscopy* [Internet] 2023;[cited 2025 Nov 22] 97: 325–334.e1. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0016510722020181>

Transgastric Endoscopic Intervention: Evolving Paradigms

14/05/2026, 09:30–10:30

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PYP021V Severe Early Bleeding after EUS-Guided Gastroenterostomy (EUS-GE): Over-the-Wire LAMS Exchange for SEMS

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DOI 10.1055/s-0046-1820961

Problem to solve Post-LAMS bleeding caused by distal flange pressure over jejunal mucosa is uncommon but severe. Management strategies for LAMS-induced pressure bleeding typically include exchanging the LAMS for double-pig-tail stents; however, this is not feasible in immature gastrointestinal anastomoses due to the risk of leakage.

Innovation We describe a novel approach for managing early post-EUS-GE bleeding: exchanging the LAMS using a dual-channel endoscope to ensure safe hemostasis.

Results A patient with advanced pancreatic adenocarcinoma undergoing chemotherapy presented with symptomatic duodenal stenosis after 4 years. An EUS-GE was performed using a 20x10mm Axios stent. Twenty-four hours later, the patient developed hemodynamically unstable upper GI bleeding. Urgent gastroscopy revealed active jejunal bleeding caused by distal flange pressure ulceration. To minimize the risk of anastomotic dehiscence during LAMS removal, jejunal access was first secured with a guidewire through the second channel of a dual-channel endoscope. The LAMS was then retracted from the anastomosis into the stomach, allowing for complete sclerotherapy. Jejunal inspection confirmed hemostasis. A covered enteral stent (Hanaro DPC 20-90mm) was deployed between the stomach and jejunum over the guidewire to seal both perforations. The patient showed no signs of rebleeding or peritonitis, resumed oral intake, and was discharged within 48 hours.

Conclusions Withdrawing a LAMS over a guidewire in EUS-GE facilitates endoscopic hemostasis in cases of severe early bleeding, allowing for exchange to a covered SEMS. The covered stent prevents rebleeding by eliminating persistent flange pressure while maintaining a functional anastomosis. Although a dual-channel endoscope facilitates this maneuver, it could also be performed using a therapeutic gastroscope with grasping forceps inserted parallel to the guidewire.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/dc0bf795-d61f-457b-986d-6c2754511e0d/Uploads/19990_ESGE_2026%20-%20Vi%CC%81deo%20V-M-T%20V1.mp4

Conflicts of Interest Manuel Pérez-Miranda: Consulting/Lecture Olympus/Medtronic/Lumendi/Siemens/Boston Scientific/M.I.Tech

PYP022V Temporary EUS-guided Gastroenterostomy as a bridge to surgical anastomosis success for congenital duodenal web

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DOI 10.1055/s-0046-1820962

Abstract Text A 25 year-old woman presented with vomiting. CT showed gastric dilatation and “windsock sign” typical of duodenal web. She underwent surgical duodenojejunostomy, but this failed because of oedematous substenosis of duodenojejunal surgical anastomosis. EUS-Gastroenterostomy was proposed as temporary alternative during surgical anastomosis healing. Duodenal web was cannulated with a guidewire to regain access to the Treitz region bypassed by the surgery. Then an orojejunal tube was placed over the ligament of Treitz following a standard Wireless Simplified EUS-Gastroenterostomy technique (WEST). A 20mm Lumen Apposing Metal Stent (LAMS) was placed free-hand. The patient tolerated oral liquids and solid food on postoperative day 1 and 2. Six months later, X-Ray contrast study and endoscopy confirmed patency of the surgical anastomosis and the LAMS was removed.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/09a08-0728-47db-8cfe-621ad3d1f892/Uploads/19978_BG-video.mp4

Conflicts of Interest G. Vanella has received lecture and consultancy fees from Boston Scientific.

PYP023 Fluorless direct free-hand EUS-guided gastroenterostomy: a single-centre retrospective study

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DOI 10.1055/s-0046-1820963

Aims Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) is a minimally invasive alternative to surgery and endoscopic stenting for malignant and benign gastric outlet obstruction (GOO). Fluoroscopy is traditionally used to insert an oro/naso-enteral catheter to ensure bowel distension and facilitate recognition of the target loop and final stent placement. Cautery-enhanced lumen-apposing metal stents (EC-LAMS) enable a fluorless direct freehand technique, but clinical data on its reproducibility remain limited. We assessed the technical feasibility of fluorless direct freehand EUS-GE and described its safety and clinical outcomes in patients with malignant and benign GOO.

Methods Retrospective consecutive cohort of adults with symptomatic malignant or benign GOO who underwent an attempted fluorless EUS-GE at a tertiary interventional endoscopy centre (January 2020–October 2025). Eligibility was MDT-defined. Exclusions: planned fluoroscopy, hybrid/non-standard approaches (wire-guided/double-balloon), or incomplete data precluding outcomes assessment. All procedures were performed under deep sedation or general anaesthesia. A diagnostic forward-viewing gastroscope was first advanced to the stricture to assess traversability and identify a safe window—either passage beyond the stenosis or a pinpoint orifice suitable for tip apposition. In case of complete or near-complete obstruction, the procedure was performed under fluoroscopic guidance to ensure adequate target distension and mitigate misdeployment risk. When a fluorless approach was feasible, butylbromide 20 mg IV was administered, and the distal jejunal loop was distended by hand-instilling saline–methylene blue (plus a small amount of iodinated contrast to increase fluid density) with 50–60 mL syringes, directly via the gastroscope channel; no infusion pump was used. The gastroscope was then exchanged for a therapeutic linear echoendoscope positioned in the stomach, and an EC-LAMS (Hot-Axios, Boston Scientific, USA; 15 × 10 or 20 × 10 mm) was deployed freehand under real-time EUS guidance (a second butylbromide 20 mg dose could be given immediately before deployment). Gastrojejunostomy creation was confirmed by reflux of blue-stained fluid through the LAMS into the stomach.

Primary outcome was feasibility, defined as completion of EUS-GE entirely without fluoroscopy, with technical success achieved. Secondary outcomes were: technical success (creation of a functional gastroenteric anastomosis with correct LAMS deployment, no same-session surgical/percutaneous rescue); clinical success (symptom improvement with a GOOSS increase ≥ 1 within 72 h); and early safety, reported as intra-procedural adverse events (AEs) and early post-procedural AEs ≤ 7 days (AGREE-graded). Analyses were descriptive and included all consecutive planned fluoroscopy-free attempts.

Results Thirty-six consecutive patients underwent an attempted fluoroscopy-free EUS-GE. Median age 70.5 years; ASA II/III/IV 7/25/4; median Charlson Comorbidity Index 7. Etiology was malignant in 30/36 (83.3 %) and benign in 6/36 (16.7 %). The obstruction more often involved the second duodenal portion (22/36, 61.1 %) than the pylorus/bulb (14/36, 38.9 %). One patient had a prior unsuccessful duodenal stent. In two patients, the fluorless strategy could not be completed (one conversion to fluoroscopy-assisted EUS-GE without anastomosis completion; one aborted). Feasibility (primary) and technical success were both 94.4 % (34/36), with a mean procedural time of 15 minutes. Clinical success was 88.9 % (32/36), with rapid recovery—liquids at 24 hours and a median hospital stay of 4 days. Intraprocedural AEs occurred in 4/36 (11.1 %), all AGREE IIIA, managed endoscopically (clip closure and, when required, LAMS retrieval/redeployment). Early AEs ≤ 7 days were 2/36 (5.6 %): one minor bleeding (AGREE II) treated conservatively and one fatal misdeployment (AGREE V). Overall, early safety endpoint (intraprocedural or ≤ 7-day AE) was 16.7 % (6/36).

Conclusions Fluorless direct freehand EUS-GE showed high feasibility and strong technical and clinical performance in a consecutive cohort. Intraprocedural and early adverse events were not uncommon, yet most were low-to-moderate in severity and readily controlled endoscopically. These findings support the adoption of a radiation-free workflow in experienced centres and motivate prospective studies to validate reproducibility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP024 Predictive factors for early mortality after Endoscopic ultrasound guided Gastroenterostomy

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DOI 10.1055/s-0046-1820964

► Table 1

Variables	Patients, n	Events, n	Crude OR (95% CI)	Adjusted OR (95% CI)
BMI				
BMI > 20	10	0	NA	
BMI < 20	22	8	1	
Technical Success				
Success	29	7	0.636 (0.05 – 8.12)	
Failure	3	1	1	
Clinical Success				
Success	29	6	0.130 (0.01 – 1.69)	
Failure	3	2	1	
ECOG				
ECOG 1	16	1	1	1
ECOG 2	4	2	15 (0.89 – 251)	9.0 (0.52 – 155)
ECOG 3	7	2	6.0 (0.44 – 81.2)	9.0 (0.52 – 155)
ECOG 4	5	3	22.5 (1.51 – 335)	27 (1.26 – 578)
Presence of Ascites				
Grade 0	18	5	1	
Grade 1	0	0	0	
Grade 2	12	3	0.867 (0.16 – 4.57)	
Grade 3	2	0	0	
NGT drainage				
Yes	22	6	1.5 (0.25 – 9.18)	
No	10	2	1	
High Risk Subgroup	7	4	7.0 (1.11 – 44.1)	
Low Risk Subgroup	25	4	1	

Aims Endoscopic ultrasound–guided gastroenterostomy (EUS-GE) is effective for palliation of malignant gastric outlet obstruction (mGOO). Though costlier and invasive, it offers a chance at better quality of life. We aim to define predictors of poor survival following EUS GE.

Methods Thirty-two consecutive patients undergoing EUS-GE for mGOO at the National University Health System (Singapore) over two years were analysed. Uni- and multivariate analyses evaluated factors associated with 30-day mortality.

Results Technical and clinical success was 90.6%. GOO scores improved from 0.25 ± 0.51 to 2.72 ± 0.52 , with time to soft diet taking 2.42 ± 1.82 days. BMI < 20 predicted 30-day mortality ($p = 0.03$). ECOG 4 was strongly associated with 30-day mortality (OR 27.0, 95% CI 1.26–578; $p = 0.035$) (► Table 1). Multi-visceral metastases, ascites, and pre-procedure drainage were not predictive. Patients with ECOG 3–4 and BMI < 20 showed less improvement in GOO scores at discharge (2.14 vs 2.88 ; $p = 0.015$), higher 30-day mortality risk (OR 7.0; $p = 0.038$), and shorter median survival (30 ± 6 vs 79 ± 35 days; log rank $p = 0.033$) (Figure 1).

Conclusions Disease burden does not affect short term survival after EUS-GE. Patients with ECOG 3–4 and BMI < 20 experienced limited symptomatic improvement and high early mortality, suggesting EUS-GE may offer limited benefit in this subgroup.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP025 Comparable outcomes after endoscopic ultrasound-guided gastroenterostomy in patients with versus without intra-abdominal carcinomatosis: a single centre study

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DOI 10.1055/s-0046-1820965

Aims EUS-guided gastroenterostomy (EUS-GE) with lumen-apposing metal stent (LAMS) has emerged as a mini-invasive, effective and safe alternative to surgical gastroduodenostomy and endoluminal stenting to treat malignant gastric outlet obstruction (MGOO). Currently, intra-abdominal carcinomatosis represents a relative contraindication to this procedure, due to a possible higher risk of clinical failure. The primary aim was to compare clinical success of EUS-GE in patients with MGOO with vs without concomitant intra-abdominal carcinomatosis. Secondary aims were to compare in the same subgroups of patients the clinical and procedural characteristics, the technical success rate and the long-term outcomes [1–3].

Methods All patients undergoing EUS-GE for MGOO at our institution from June 2018 to December 2024 were retrospectively enrolled. Technical success was defined as successfully establishing EUS-GE and clinical success as low-residue diet tolerance without re-intervention for 14 days after the procedure. Inclusion criteria were: 1) age > 18 years; 2) MGOO; 3) complete clinical records. Exclusion criteria was missing data. Intra-abdominal carcinomatosis was defined according either to CT and MRI imaging. Adverse events (AEs) recorded and classified (AGREE). Obstructive symptoms graded according to the GOOSS score. Data expressed as median [range]. The Student-t-test, Mann-Whitney-u test and X2 test used as appropriate.

Results EUS-GE for MGOO was performed in 74 patients (36 [48.6%] males, age 71 [30–92]), with ECOG performance status ≥ 2 in 29 (39.2%) and obstructive symptoms reported by 72 (97.3%), with a median GOOSS of 1 [0–3]. Malignancy stage was II in 6 (8%) patients, III in 4 (5%) and IV in 64 (87%). Intra-abdominal carcinomatosis was present in 29 (39.2%) patients. Ascites was significantly more frequent in patients with vs without carcinomatosis (19 [65.5%] vs 12 [26.7%], $p = 0.02$). Other clinical characteristics were comparable between groups.

All EUS-GE were performed in deep sedation. LAMS size 20mm was used in a comparable proportion of patients with vs without carcinomatosis (25 [86.2%] vs 37 [83.2%], $p = 0.89$). Technical success rates and procedural time did not differ between groups (28 [96.6%] vs 43 [95.6%], $p = 0.69$; vs 33 [16–85] vs 40 [20–106], $p = 0.52$). Overall, 9 misdeployments were observed (carcinomatosis: 3 [10.3%] vs no-carcinomatosis: 6 [13.3%], $p = 0.98$). AEs were 4 (19.8%) and

9 (20%) in patients with vs without carcinomatosis ($p = 0.71$), all grade III. Time to refeeding was comparable between groups (1 [1-5] vs 1 [1-5], $p = 0.96$), while post-procedural hospital stay was longer in patients with carcinomatosis (8 [2-18] vs 4 [2-15], $p = 0.0009$). Clinical success rate did not differ in patients with vs without carcinomatosis (25 [86.2%] vs 43 [95.6%], $p = 0.31$). All 6 failures were due to malignancy progression. Median follow-up duration was 51 [21-622] days. During follow-up, 27 (93.1%) patients with and 38 (84.4%) without carcinomatosis died ($p = 0.45$). Median survival (days) and oral feeding toleration until last follow-up/death were comparable between patients with vs without carcinomatosis (42 [21-398] vs 66 [26-622], $p = 0.07$ and 26 [89.6%] vs 42 [93.3%], $p = 0.89$). Overall, oncological treatments were resumed in 11 (37.9%) patients with and 23 (51.1%) without carcinomatosis ($p = 0.38$). Re-hospitalization for any cause were observed in a comparable proportion of patients with vs without carcinosis (14 [48.3%] vs 26 [57.7%], $p = 0.57$), requiring re-intervention in 1 case.

Conclusions In our study population the high technical and clinical success rates of EUS-GE were comparable in patients with and without intra-abdominal carcinomatosis. The major outcomes were comparable between these 2 subgroups of patients, thus suggesting the long-term efficacy of this procedure also in patients with more advanced malignancy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nass KJ, Zwager LW, van der Vlugt M et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc.* 2022; 95: 1078–1085
- [2] EUS-GE Study Group Ghandour B, Bejjani M, Irani SS, Sharaiha RZ, Kowalski TE, Pleskow DK, Do-Cong Pham K, Anderloni AA, Martinez-Moreno B, Khara HS, D'Souza LS, Lajin M, Paranandi B, Subtil JC, Fabbri C, Weber T, Barthet M, Khashab MA Classification, outcomes, and management of misdeployed stents during EUS-guided gastroenterostomy. *Gastrointest Endosc* 2022; 95: 80–89
- [3] van der Merwe SW, van Wanrooij RLJ, Bronswijk M, Everett S, Lakhtakia S, Rimbaz M, Hucl T, Kunda R, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Perez-Miranda M, van Hooft JE. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy.* 2022; 54 (2): 185–205

PYP026 Procedure-related details and long-term outcomes of EUS-guided gastroenterostomy- a single center experience

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DOI 10.1055/s-0046-1820966

Aims Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) has recently emerged as the standard of care for gastric outlet obstruction (GOO), owing to its high short-term clinical success and favorable safety profile. Nevertheless, long-term outcome data remain limited. The aim of this study is to evaluate the factors associated with the EUS-GE outcomes and to assess the durability of clinical success during long-term follow-up.

Methods All consecutive patients undergoing EUS-GE to treat GOO at a single center between May 2022 and October 2025 were enrolled in this retrospective study. Data on patient demographics, procedure-related details, type of lumen apposing metal stent (LAMS) used and follow-up results were collected. Primary outcomes included technical success, clinical success, and adverse events (AEs). The secondary outcome was the assessment of clinical success during mid-term (6 months) and long-term (12 months or more) follow-up.

Results Fifty-two patients who underwent EUS-GE (mean age 62.65 [SD 13.71], male 51.9%, malignant indication 86.5%) were included. Median follow-up duration was 100.5 days (IQR 60-221). Technical success, defined as successful LAMS deployment, was 96.2%. Clinical success, defined as Gastric Outlet Obstruction Scoring System (GOOSS) ≥ 2 at 7 days was 94%. Intraprocedural AEs – stent misdeployment (SM) were observed in 10% of patients with

no association between LAMS type (15/10mm or 20/10mm Hot Axios Boston Scientific, USA/ 16/20mm Hot Spaxus Taewoong Medical, Seoul, South Korea, $p = 0.331$), peritoneal carcinomatosis ($p = 0.154$), ascites ($p = 0.400$), shape of target loop (longitudinal/oval, $p = 1.000$) and serum albumin level (SM group 33g/L [IQR 15]/without SM group 35g/L [IQR 11], $p = 0.737$). All SMs were managed by NOTES approach. The rate of short-term AEs was 10%, associated only with etiology ($p = 0.036$). Long-term AEs, mostly procedure-related due to stent migration and ingrowth, occurred in 18% of cases without association with previous surgery ($p = 0.214$), site of obstruction ($p = 0.293$), diameter, length, and type of LAMS ($p = 1.000$). At the 6-month follow-up, among alive patients ($N = 24$), 12.5% had a GOOSS = 2 and 87.5% had GOOSS = 3, without recurrence of symptoms. During the long-term follow-up at 12 months, symptom recurrence was observed in one patient with Diffuse Large B-Cell Gastric Lymphoma. Endoscopy found complete obliteration of the pylorus and stent ingrowth, successfully managed with the stent-in-stent technique. Thus, a final-12-month GOOSS of 2 and 3 was observed in 28.6% and 71.4% of patients, respectively.

Conclusions To our knowledge, this study is one of the first to assess the performance of different types of LAMS in the context of EUS-GE, demonstrating comparable outcomes across stent types and showing that neither target intestinal loop shape nor serum albumin levels, in contrast to the surgical approach, significantly influenced procedural or long-term results. Our findings suggest that mid and long-term outcomes of EUS-GE are primarily determined by disease etiology, emphasizing the importance of appropriate patient selection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP027 Endoscopic Ultrasound-Guided Gastroenterostomy – the first two years experience with follow-up from the tertiary center in Poland

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DOI 10.1055/s-0046-1820967

Aims Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) is a minimally invasive alternative to surgery for patients with high gastrointestinal obstruction, most commonly resulting from malignant gastric outlet obstruction (GOO) [1]. Despite increasing adoption, high-quality real-world clinical data remain limited. The aim of this study was to assess the safety, technical success, and early clinical outcomes—including improvements in oral intake—among patients undergoing EUS-GE during the first two years of implementing this procedure at a tertiary center.

Methods We performed a retrospective analysis of prospectively collected database of adult patients who underwent EUS-GE at a single tertiary center from December 2023 to November 2025. Baseline demographic characteristics, underlying disease and clinical indications were collected at admission. Procedural parameters included technical success, peri-procedural course and adverse events (AEs). AEs were classified and described according to the American Society for Gastrointestinal Endoscopy (ASGE) lexicon [2], based on severity and clinical impact. Follow-up evaluation included assessment of dietary progression, symptom relief and need for reintervention within the first 1–3 months after the procedure.

Results A total of 21 patients (11 male, 10 female; median age 67 years, range 41 – 86) were included. The majority (16/ 21, 76%) presented with malignant gastric outlet obstruction secondary to locally advanced pancreatic cancer, duodenal infiltration, or pyloric involvement. The remaining 5 patients (24%) underwent EUS-GE for nonmalignant indications, including chronic groove pancreatitis (1 case) or choledocholithiasis in patients after gastrectomy or surgical hepaticojejunostomy: endoscopic ultrasound-directed transgastric ERCP (EDGE) stage I – 2 cases and endoscopic ultrasound-directed transenteric ERCP (EDEE) stage I – 2 cases. The median procedure duration was 38 minutes (range 26 – 71), with no significant reduction in procedure time observed over

the study period. Lumen-apposing metal stents (LAMS) were used in all procedures: 16×30 mm stents in 2 cases (9.5%) and 20×10 mm in 19 cases (90.5%). Technical success was achieved in 20/21 (95%) procedures. One case (5%) of failed bowel loop puncture occurred, followed by laparotomy 10 days later due to untreated gastric outlet obstruction. The only perforation which occurred after an initially successful EUS-GE, was noted during the first year of performing the procedure and was successfully treated surgically.

Within 8 days after the procedure, two patients (9.5%) died due to progression of advanced malignant disease, not as a procedure-related adverse event. 1 patient (5%) was lost to follow-up.

Remarkably, all patients undergoing EUS-GE for malignant GOO demonstrated a rapid improvement in oral intake, progressing from pre-procedural intolerance of liquids or solids to the ability to tolerate a soft or full oral diet shortly after the intervention. During the 1-month follow-up, no reinterventions or stent-related complications were observed. Throughout the entire follow-up period (median 35 days, range 7-90 days), one case of ulceration at the stent site (1.5 months post-procedure) and one case of recurrent obstructive symptoms (>30 days post-procedure) were documented.

Conclusions The single center retrospective analysis of prospectively collected patient database demonstrates that EUS-GE provides high technical and clinical success rate and a quite favorable safety profile even early in the learning curve. The procedure resulted in rapid and meaningful clinical improvement, reflected by restoration of oral intake and relief of obstructive symptoms. In patients with malignant gastric outlet obstruction—who typically have limited therapeutic options and poor performance status—EUS-GE appears to be an effective, reproducible and minimally invasive alternative to surgical gastroenterostomy. These results strongly support broader adoption of EUS-GE as a frontline therapeutic strategy in appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cotton PB, Eisen GM, Aabakken L et al. A lexicon for endoscopic adverse events: report of an ASGE workshop. *Gastrointest Endosc* 2010; 71 (3): 446–454. doi:10.1016/j.gie.2009.10.027
- [2] Bang JY, Puri R, Lakhtakia S et al. Endoscopic or surgical gastroenterostomy for malignant gastric outlet obstruction: a randomised trial. *Gut* Published online September 24 2025. doi:10.1136/gutjnl-2025-336339

PYP028 Artificial Intelligence for Endoscopic Ultrasound: Multicenter Multidevice Detection and Differentiation of Subepithelial Lesions

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DOI 10.1055/s-0046-1820968

Aims Subepithelial lesions (SELs) are commonly identified during esophago-gastroduodenoscopy. Nevertheless, their diagnostic approach is complex, and patient management is dependent of appropriate anatomopathological diagnosis. In this context, endoscopic ultrasound (EUS) offers the possibility of both lesion characterization and sampling, being a first line procedure in patients with suspected upper gastrointestinal tract SELs over 10 millimeters. However, EUS is operator dependent and has a suboptimal diagnostic accuracy. This multicentric study aimed to develop a deep learning model for detection of upper gastrointestinal tract SEL, with distinction between leiomyoma and gastrointestinal stromal tumors (GIST).

Methods An artificial intelligence model based on a convolutional neural network (YOLO) was developed. This architecture included both detection and characterization modules, in which lesions were delimited with bounding boxes and classified as GIST or leiomyoma. The model performance of the detection module was assessed through the mean average precision at an intersection-over-unity threshold of 50% (mAP50), while the classification module was evaluated through its sensitivity, precision, accuracy, and area under precision-recall curve (AUPRC).

Results A convolutional neural network was developed using a total of 67,452 images from 91 EUS procedures performed across 12 centers in 6 countries (Portugal, Spain, United Kingdom, United States of America, Brazil and Argentina). Pleomorphic SEL were identified with a mAP50 of 98.6%. The AI system had an overall sensitivity of 98.4%, precision of 98.3% and accuracy of 98.5%. The model had an AUPRC of 0.996 for GIST and 0.977 for leiomyoma.

Conclusions This study represents one of the first multicentric efforts to detect and differentiate the most frequent subepithelial lesions on EUS with a single interoperable AI system. Leveraging data from five distinct EUS processors strengthens technical robustness, while integrating cases from six countries across three continents reduces demographic bias and supports global applicability. This AI model has the potential to redefine the evaluation of subepithelial lesions by improving diagnostic discrimination and supporting more targeted EUS-guided tissue sampling, ultimately elevating clinical confidence and decision making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP029 EUS-guided direct portal pressure in a one-stop endoscopy: feasibility, safety, and diagnostic utility in a prospective cohort

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Aims To assess feasibility and safety of integrating endoscopic ultrasound (EUS)-guided direct portal venous pressure (PVP) measurement into a one-stop endoscopy and to report endoscopy-relevant diagnostic performance. We prospectively compared PVP with the endoscopic portal pressure gradient (PPG = PVP – hepatic/inferior vena cava [IVC]) for two prespecified endpoints: oesophageal varices and clinically significant portal hypertension.

Methods Prospective single-centre outpatient cohort (15 Mar 2024–15 May 2025). A standardized protocol used conscious sedation with midazolam and fentanyl, left-lateral decubitus, spontaneous breathing, and zeroing at the mid-axillary line. At least three acceptable end-expiratory plateaus were acquired in the portal vein and in a hepatic vein/retrohepatic IVC; technical success required ≥3 accepted measurements per site to compute PPG. Adverse events (AEs) were prospectively attributed to the pressure-measurement step

vs EUS-guided liver biopsy (EUS-LB) and graded by AGREE classification. Clinically significant portal hypertension (CSPH) was defined a priori as a composite of ≥ 3 portal-hypertension signs (unweighted sum) from a literature-adapted list. Primary analyses estimated ROC/AUCs with paired DeLong tests; .632-bootstrap internal validation and decision-curve analysis quantified robustness and net benefit.

Results Fifty-two patients were analysed (63.5% male; median age 56.5 years). Technical success was 52/52 (100%); median EUS time 35 min [IQR 29–39]. EUS-LB was performed in 31/52 (59.6%). AEs occurred in 5/52 (9.6%): one Grade I epistaxis at insertion and four Grade IIIa post-biopsy bleeds (three clipped; one managed by interventional radiology); 4/5 (80%) were attributable to EUS-LB; none to the pressure-measurement step. For varices, AUCs were 0.981 for PVP vs 0.857 for PPG (paired DeLong $p = 0.031$); Youden cut-offs respectively 23.5 and 8.5 mmHg. For CSPH (composite ≥ 3 signs), AUCs were 0.840 (PVP) vs 0.671 (PPG) ($p = 0.0049$); cut-offs 27.5 and 10.5 mmHg. Internal .632-bootstrap and decision-curve analyses supported robustness and net benefit, consistently higher for PVP.

Conclusions EUS-guided direct portal pressure can be embedded in a one-stop endoscopy with 100% technical success and a favourable safety profile, with events almost exclusively related to liver biopsy rather than the haemodynamic step. Absolute PVP provided stronger discrimination than PPG for both varices and CSPH, supporting its pragmatic value to anchor intra-procedural decisions and triage. These findings warrant multicentre confirmation under harmonized protocols (sedation, breathing mode, zero-leveling, replicate rules) and an evaluation of implementation pathways alongside traditional routes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP030V EUS-guided radiofrequency ablation for a left adrenal gland pheochromocytoma: A 'good shot' to prevent adrenal insufficiency in a patient with NF-1 and prior right adrenalectomy

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DOI 10.1055/s-0046-1820970

Abstract Text

EUS-guided radiofrequency ablation (EUS-RFA) can be used for any lesion near the gut, such as left adrenal gland (LAG) is. Its goals are organ preservation and surgery complications avoiding.

We present the case of a 57 years-old male with neurofibromatosis type 1, prior right adrenalectomy and a metachronous 12x10mm LAG pheochromocytoma successfully treated by EUS-RFA. Following proper premedication, the procedure was done under general anesthesia and ablation was carried out with four 10-second/60W shots of EUSRA 19G device.

Patient suffered a catecholaminergic crisis after the second ablation shot (SBP:260 mmHg/ HR:120 bpm) successfully controled, with no other immediate or delayed complications. At one year follow-up catecholamine levels remain normal and no lesion can be seen in LAG on CT-scan.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/af45053e-cb2f-42cf-973f-a77416846440/Uploads/19978_FEOCROMO_ESGE%20ok.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

EUS: Its not black or white endoscopy anymore!

14/05/2026, 11:30–12:30

Emerald 4

PYP031 Objective Assessment of Pancreatic Microvascular Density Using Computer-Assisted Detective Flow Imaging Endoscopic Ultrasonography

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DOI 10.1055/s-0046-1820971

Aims Detective flow imaging (DFI) is an emerging endoscopic ultrasound (EUS) modality capable of visualizing low-velocity microvascular flow without contrast agents [1]. While qualitative assessment of pancreatic vascularity has been explored [1–4], quantitative metrics such as the number of vessels are insufficient. Automated vessel-detection using computer-assisted detection (CAdE) software may allow objective measurement of microvascular density, potentially distinguishing healthy pancreas from inflammatory or neoplastic pathology. We aim to evaluate the diagnostic accuracy of a CAdE developed for quantification of fine vessels within the pancreas during real-time EUS.

Methods A prospective study including consecutive adult patients undergoing EUS was performed between June 2024 and October 2025. The pancreas was assessed using DFI. Real-time CAdE software analyzed live DFI images, detecting and counting fine vessels. Average fine vessel count (AVC) was defined as the mean vessel count detected by the CAdE during the procedure. Ten external physicians, divided into senior (40%) and fellow (60%) endoscopists, evaluated 11 randomly selected EUS-DFI videos to provide vessel counts and categorical interpretation. Intra-class correlation (ICC) and interobserver agreement (IOA) for interpretation were calculated.

Results Sixty-five participants were included (Inflammatory: 35; Neoplastic: 17; Healthy: 13). Mean age was 53.5 ± 15.0 , 66.2 ± 15.9 and 42.2 ± 16.1 ($p < .05$), and 58.5% were female ($p = .281$). There were no differences between abdominal pain, and nausea/vomiting among groups ($p > .05$), jaundice was more common in the neoplastic lesions ($p = .03$) (Table 1).

CAdE provided a median AVC of 13.0 (10–17) for inflammatory conditions, 8.0 (7.0–16.0) for neoplastic, and 4.0 (3.0–6.0) for healthy pancreas ($p < 0.05$) (Figure 1). The maximum fine vessel count (MVC) was 36.0 (28.0–48.0) for inflammatory conditions, 33.0 (21–36) for neoplastic, and 14.0 (11–23) for healthy pancreas ($p < 0.05$). Sensitivity, specificity, positive and negative predictive values, and observed agreement for distinguishing between pathological from healthy pancreas were 90%, 92%, 98%, 71%, and 91%, respectively. Visual assessment showed poor ICC in both senior (-0.2 , $p = .965$) and fellow (-0.09 , $p = .905$), whereas categorical interpretation achieved substantial agreement (senior: $k = 0.624$, $p < 0.05$; fellows: 0.653 , $p < 0.05$).

Conclusions CAdE-based vessel detection provides reliable, objective quantification of fine pancreatic vessels during real-time EUS, demonstrating high diagnostic accuracy for differentiating pathological from healthy pancreas. Inflammatory lesions exhibited higher AVC than neoplastic lesions, which had

values closer to healthy tissue, suggesting reduced microvasculature in pancreatic neoplastic lesions. Visual assessment showed poor reproducibility for vessel counts but substantial agreement for categorical interpretation.

Conflicts of Interest Dr. Carlos Robles-Medranda is a key opinion leader for PENTAX Medical, CREO Medical, Motus, mdconsgroup, EndoSound, Limaca Medical, Micro-Tech and Gastri-tech Medical Supplies. Dr. Juan Alcivar-Vasquez is a key opinion leader for Micro-tech. The rest of the authors declare no conflict of interest.

References

- [1] Endo K, Miwa H, Sugimori K et al. Diagnostic Accuracy of Detective Flow Imaging Endoscopic Ultrasonography for Evaluating Blood Flow Within Mural Nodules of Intraductal Papillary Mucinous Neoplasms. *Diagnostics (Basel)* 2025; 15 (2): 196
- [2] Antonini F, Donnarumma D, Buono T. Detective flow imaging, directional enhanced blood flow imaging, and contrast-enhanced harmonic endoscopic ultrasound in pancreatic solid lesions. *Endoscopy*. 2025; 57: (Suppl 1): E447–E448
- [3] Yamashita Y, Yamazaki H, Nakahata A et al. Endoscopic ultrasonography for microvascular imaging without contrast enhancement in the differential diagnosis of pancreatic lesions. *Dig Endosc* 2025; 37 (2): 192–198
- [4] Endo K, Miwa H, Sugimori K et al. Diagnostic Accuracy of Detective Flow Imaging Endoscopic Ultrasonography for Evaluating Blood Flow Within Mural Nodules of Intraductal Papillary Mucinous Neoplasms. *Diagnostics (Basel)* 2025; 15 (2): 196

PYP032 New advance imaging techniques associated to endoscopic ultrasound in the differential diagnosis of solid pancreatic tumors

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DOI 10.1055/s-0046-1820972

Aims Aim of our study was to evaluate the accuracy of Endoscopic Ultrasound Advance Imaging (strain elastography (SE), contrast enhancement (CE) and detective flow imaging (DFI)) for the differential diagnosis of solid pancreatic tumors (SPT), either alone or in combination.

Methods Patients that underwent EUS-guided advance imaging for SPT between 2023 and 2025 were identified from a prospective EUS registry. EUS was performed with linear FujiFilm echoendoscopes and Hitachi-Arietta system. For EUS-SE, qualitative patterns were described and strain ratio (SR) and strain histogram (SH) were evaluated. For EUS-CE (with Sonovue) and DFI, tumors were classified as iso, hypo or hypervascular. Diagnostic accuracy was analyzed using as gold standard the cyto-histological analysis of the surgical specimen and/or EUS-guided sampling, or the clinical/radiological evaluation with a minimum of 6 months of follow-up. Data are presented as mean $\pm$ standard deviation or median and range for quantitative variables and as percentages for categorical variables, correlation was analyzed using linear regression and Spearman test. STARD criteria for studies was followed

Results 217 patients were included (median age 68.2 years $\pm$ 11.0 years, 115 males). Median size of SPT was 25.2 $\pm$ 15.9 mm. 131 presented a malignant tumor (60.4%) (116 adenocarcinomas; 7 NETs-G2-3; 8 other etiology), whereas 86 presented a benign lesion (39.6%) (66 NETs-G1; 13 inflammatory masses, 2 lipomas and 5 accessory spleen). Sensitivity, specificity, and overall accuracy of SE (SR and SR) for diagnosing malignancy was 97.7%, 91.9%, and 94.5%, respectively (ROC-curve = 0.936). With CE and DFI, the values were 92.4%, 96.5%, 94.0% (ROC-curve = 0.944), and 93.9%, 95.4%, 94.5% (ROC-curve = 0.946), respectively. Correlation between EUS-CE and DFI was 0.946. Combining SE with DFI $\pm$ CE yielded a ROC-curve = 0.956.

Conclusions EUS-guided advanced imaging represents a very useful tool for the differential diagnosis and detection of malignancy in SPT.

Conflicts of Interest Yessica Dominguez-Novoa, José Lariño-Noia, Julio Iglesias-García, J. Enrique Domínguez-Muñoz: International advisor for FujiFilm

PYP033 Artificial Intelligence-Assisted Detective Flow Imaging Enables Objective Microvascular Quantification in Healthy and Pathologic Liver during Endoscopic Ultrasound

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DOI 10.1055/s-0046-1820973

Aims Contrast-enhanced endoscopic ultrasound (CE-EUS) provides high-resolution assessment of hepatic microvasculature but requires contrast agents and remains largely qualitative [1, 2]. Detective flow imaging (DFI) is a novel EUS modality capable of visualizing low-velocity microvascular flow without contrast [3]; however, its application in liver evaluation is limited. We aimed to evaluate a real-time AI-based vessel-detection algorithm for objective quantification of microvascular density to distinguish between healthy and pathological liver tissue.

Methods A prospective study including consecutive adult patients undergoing EUS was performed between June 2024 and October 2025. The liver was assessed using DFI. Real-time CAdE software analyzed live DFI images, detecting and counting fine vessels. Average fine vessel count (AVC) was defined as the mean vessel count detected by the CAdE during the procedure. Ten external physicians, divided into senior (40%) and fellow (60%) endoscopists, evaluated 10 randomly selected EUS-DFI videos to provide vessel counts and categorical interpretation. Intra-class correlation (ICC) and interobserver agreement (IOA) were calculated.

Results Sixty participants were included (Pathological: 48; Healthy: 12). Mean age was 59.7 $\pm$ 13.6 and 52.0 $\pm$ 16.0 ($p > .05$), and 58.3% were female ($p = .512$). The most common pathology was alcoholic liver disease, and 68.8% of cases had mild liver disease (Child-Pugh A) (Table 1). CAdE provided an AVC of 13.6 $\pm$ 5.6 in pathologic and 6.2 $\pm$ 7.2 for healthy liver ($p < 0.05$). The maximum fine vessel count (MVC) for pathological liver was 49.0 $\pm$ 13.3 and 25.1 $\pm$ 16.8 for healthy liver ($p < .05$). Sensitivity, specificity, positive and negative predictive values, and observed agreement for distinguishing between pathological from healthy liver were 94%, 83%, 96%, 77%, and 92%, respectively. Visual assessment showed poor ICC in both senior (-0.02 , $p = .545$) and fellow (-0.01 , $p = .513$). Additionally, categorical interpretation (healthy or pathological liver) achieved poor agreement (senior: $k = 0.05$, $p = .697$; fellows: -0.01 , $p = .846$).

Conclusions AI-assisted DFI enables objective quantification of hepatic microvasculature and distinguishes pathological from healthy liver tissue. The AI-derived average vessel count demonstrated strong diagnostic performance. Human evaluation, regardless of expertise level, showed poor interobserver agreement and minimal reliability. Real-time AI-enhanced DFI vessel count is a quantitative alternative for liver microvascular assessment, with potential applicability when contrast agents are unavailable or contraindicated. Further validation against CE-EUS across broader liver disease severities are needed.

Conflicts of Interest Dr. Carlos Robles-Medranda is a consultant for PENTAX Medical, CREO Medical, Motus, mdconsgroup, EndoSound, Limaca Medical, Micro-Tech and Gastri-tech Medical Supplies. Dr. Juan Alcivar-Vasquez is a consultant for Micro-tech. All other authors declare no conflict of interest.

References

- [1] Yamashita Y, Yoshikawa T, Yamazaki H et al. A novel endoscopic ultrasonography imaging technique for depicting microcirculation in pancreaticobiliary lesions without the need for contrast-enhancement: a prospective exploratory study. *Diagnostics* (Basel) 2021; 11: 2018
- [2] Lisotti A, Serrani M, Caletti G et al. EUS liver assessment using contrast agents and elastography. *Endosc Ultrasound* 2018; 7 (4): 252–256
- [3] Saffioiu A, Napoleon B, Arcidiacono PG et al. Do we need contrast agents for EUS? *Endosc Ultrasound* 2020; 9 (6): 361–68

PYP034 Diagnostic Accuracy and Safety of a Newly Designed Franseen-Tip Needle with Macroscopic On-Site Evaluation for Solid Lesions: A Multicenter Study

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DOI 10.1055/s-0046-1820974

Aims Macroscopic on-site evaluation (MOSE) has gained interest as a practical tool for assessing tissue adequacy during endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB). Recently, a new Franseen FNB needle was developed for EUS-TA, the SonoTip TopGain from Medi-Globe. This study aimed to assess the diagnostic performance and safety of MOSE-guided EUS-FNB using the SonoTip TopGain FNB needle across high-volume international centers.

Methods This retrospective, multicenter study included 95 patients from nine international referral centers who underwent EUS-FNB with MOSE between May 2024 and January 2025. Inclusion criteria comprised adults (> 18 years) with predominantly solid lesions undergoing EUS-FNB using the SonoTip TopGain FNB needle (22G or 25G) and without concurrent ROSE. Data on demographics, lesion characteristics, procedural details, and final histopathologic outcomes were collected. Biopsy adequacy was determined by endosonographers based on the presence of visible cores on macroscopic inspection [1–20].

Results The mean patient age was 65.2 ± 12.0 years, with 53 males (55.8%). Most lesions were pancreatic (67.4%), with a mean size of 31.5 ± 16.9 mm. The slow-pull technique was predominantly used, with 92 procedures (96.8%) employing a 22G needle. MOSE identified visible cores in 92 cases (96.8%). Of the 95 specimens, 6 (6.3%) were inconclusive. Cytology confirmed all 75 malignant cases (100%) and 14 of 20 benign cases (70%). Diagnostic performance for MOSE-positive samples demonstrated a sensitivity of 100%, specificity of 50%, positive predictive value of 96.7%, negative predictive value of 100%, and overall accuracy of 96.7%. Adverse events were minimal (3.2%).

Conclusions MOSE using the SonoTip TopGain FNB needle demonstrates high diagnostic accuracy and excellent sensitivity for detecting malignancy, with a favorable safety profile. These findings support its utility as a reliable tool for real-time adequacy assessment in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ishigaki K, Nakai Y, Endo G, Kurihara K, Ishida K, Tange S, Fukuda R, Takao S, Tokito Y, Suzuki Y, Oyama H, Kanai S, Suzuki T, Sato T, Hakuta R, Saito T, Hamada T, Takahara N, Shinozaki-Ushiku A, Fujishiro M. Feasibility of comprehensive genomic profiling using endoscopic ultrasound-guided tissue acquisition with a 22-gauge Franseen needle. *DEN Open* 2024; 4: e365. doi:10.1002/deo2.365 PMID: 38628502 PMID: PMC11019146
- [2] Ishikawa T, Suzuki H, Hori Y, Yashika J, Suhara H, Sumi H, Ando M, Kuwatsuka Y, Yamao K, Mizutani Y, Iida T, Uetsuki K, Yamamura T, Furukawa K, Nakamura M, Kataoka H, Kawashima H. Randomized trial comparing the Franseen needle versus 2 types of sharpened-tip 3-prong needles in EUS-guided tissue acquisition from solid pancreatic lesions. *Gastrointest Endosc* 2025; S0016-5107: 00810–7. doi:10.1016/j.gie.2025.03.641. Epub ahead of print PMID: 40120866
- [3] Mangiavillano B, Crinò SF, Facciorusso A, Di Matteo F, Barbera C, Larghi A, Rizzatti G, Carrara S, Spadaccini M, Auriemma F, Fabbri C, Binda C, Coluccio C, Marocchi G, Staiano T, Conti Bellocchi MC, Bernardoni L, Eusebi LH, Cirotta GG, De Nucci G, Stigliano S, Manes G, Bonanno G, Ofosu A, Lamonaca L, Paduano D, Spatola F, Repici A. Endoscopic ultrasound-guided fine-needle biopsy with or without macroscopic on-site evaluation: a randomized controlled noninferiority trial. *Endoscopy* 2023; 55: 129–137. doi:10.1055/a-1915-5263 Epub 2022 Aug 31 PMID: 36044915
- [4] ASGE Standards of Practice Committee Eloubeidi MA, Decker GA, Chandrasekhara V, Chathadi KV, Early DS, Evans JA, Fanelli RD, Fisher DA, Foley K, Hwang JH, Jue TL, Lightdale JR, Pasha SF, Saltzman JR, Sharaf R, Shergill AK, Cash BD, DeWitt JM. The role of endoscopy in the evaluation and management of patients with solid pancreatic neoplasia. *Gastrointest Endosc* 2016; 83 (1): 17–28. doi:10.1016/j.gie.2015.09.009. PMID: 26706297
- [5] Carrara S, Soldà G, Di Leo M, Rahal D, Peano C, Giunta M, Lamonaca L, Auriemma F, Anderloni A, Fugazza A, Maselli R, Malesci A, Laghi L, Repici A. Side-by-side comparison of next-generation sequencing, cytology, and histology in diagnosing locally advanced pancreatic adenocarcinoma. *Gastrointest Endosc* 2021; 93: 597–604.e5. doi:10.1016/j.gie.2020.06.069 Epub 2020 Jul 5 PMID: 32640200
- [6] Sundaram S, Chhanchure U, Patil P, Seth V, Mahajan A, Bal M, Kaushal RK, Ramadwar M, Prabhudesai N, Bhandare M, Shrikhande SV, Mehta S. Rapid on-site evaluation (ROSE) versus macroscopic on-site evaluation (MOSE) for endoscopic ultrasound-guided sampling of solid pancreatic lesions: a paired comparative analysis using newer-generation fine needle biopsy needles. *Ann Gastroenterol* 2023; 36: 340–346. doi:10.20524/aog.2023.0790 Epub 2023 Apr 4 PMID: 37144017 PMID: PMC10152805
- [7] Kaneko J, Ishiwatari H, Sasaki K, Satoh T, Sato J, Matsubayashi H, Yabuuchi Y, Kishida Y, Yoshida M, Ito S, Kawata N, Imai K, Kakushima N, Takizawa K, Hotta K, Ono H. Macroscopic on-site evaluation of biopsy specimens for accurate pathological diagnosis during EUS-guided fine needle biopsy using 22-G Franseen needle. *Endosc Ultrasound* 2020; 9: 385–391. doi:10.4103/eus.eus_49_20 PMID: 32913149 PMID: PMC7811705
- [8] da Cunha Santos G, Ko HM, Saieg MA, Geddie WR. "The petals and thorns" of ROSE (rapid on-site evaluation). *Cancer Cytopathol* 2013; 121: 4–8. doi:10.1002/cncy.21215. Epub 2012 Jul 3 PMID: 22760969
- [9] Crinò SF, Di Mitri R, Nguyen NQ, Tarantino I, de Nucci G, Deprez PH, Carrara S, Kitano M, Shami VM, Fernández-Esparrach G, Poley JW, Baldaque-Silva F, Itoi T, Manfrin E, Bernardoni L, Gabbriellini A, Conte E, Unti E, Naidu J, Ruszkiewicz A, Amata M, Liotta R, Manes G, Di Nuovo F, Borbath I, Komuta M, Lamonaca L, Rahal D, Hatamaru K, Itonaga M, Rizzatti G, Costamagna G, Inzani F, Curatolo M, Strand DS, Wang AY, Ginès À, Sendino O, Signoretti M, van Driel LMJW, Dolapcsiev K, Matsunami Y, van der Merwe S, van Malenstein H, Locatelli F, Corrales L, Scarpa A, Larghi A. Endoscopic Ultrasound-guided Fine-needle Biopsy With or Without Rapid On-site Evaluation for Diagnosis of Solid Pancreatic Lesions: A Randomized Controlled Non-Inferiority Trial. *Gastroenterology* 2021; 161: 899–909.e5. doi:10.1053/j.gastro.2021.06.005. Epub 2021 Jun 9 PMID: 34116031
- [10] Crinò SF, Di Mitri R, Nguyen NQ, Tarantino I, de Nucci G, Deprez PH, Carrara S, Kitano M, Shami VM, Fernández-Esparrach G, Poley JW, Baldaque-Silva F, Itoi T, Manfrin E, Bernardoni L, Gabbriellini A, Conte E, Unti E, Naidu J, Ruszkiewicz A, Amata M, Liotta R, Manes G, Di Nuovo F, Borbath I, Komuta M, Lamonaca L, Rahal D, Hatamaru K, Itonaga M, Rizzatti G, Costamagna G, Inzani F, Curatolo M, Strand DS, Wang AY, Ginès À, Sendino O, Si-

gnoretta M, van Driel LMJW, Dolapcsiev K, Matsunami Y, van der Merwe S, van Malenstein H, Locatelli F, Correale L, Scarpa A, Larghi A. Endoscopic Ultrasound-guided Fine-needle Biopsy With or Without Rapid On-site Evaluation for Diagnosis of Solid Pancreatic Lesions: A Randomized Controlled Non-Inferiority Trial. *Gastroenterology* 2021; 161: 899–909.e5. doi:10.1053/j.gastro.2021.06.005. Epub 2021 Jun 9 PMID: 34116031

[11] Mangiavillano B, Frazzoni L, Togliani T, Fabbri C, Tarantino I, De Luca L, Staiano T, Binda C, Signoretti M, Eusebi LH, Auriemma F, Lamonaca L, Paduano D, Di Leo M, Carrara S, Fuccio L, Repici A. Macroscopic on-site evaluation (MOSE) of specimens from solid lesions acquired during EUS-FNB: multicenter study and comparison between needle gauges. *Endosc Int Open* 2021; 9: E901–E906. doi:10.1055/a-1395-7129. Epub 2021 May 27 PMID: 34079874 PMID: PMC8159577

[12] Mohan BP, Madhu D, Reddy N, Chara BS, Khan SR, Garg G, Kassab LL, Muthusamy AK, Singh A, Chandan S, Facciorusso A, Mangiavillano B, Repici A, Adler DG. Diagnostic accuracy of EUS-guided fine-needle biopsy sampling by macroscopic on-site evaluation: a systematic review and meta-analysis. *Gastrointest Endosc* 2022; 96: 909–917.e11. doi:10.1016/j.gie.2022.07.026. Epub 2022 Aug 3 PMID: 35932815

[13] Iwashita T, Yasuda I, Mukai T, Doi S, Nakashima M, Uemura S, Mabuchi M, Shimizu M, Hatano Y, Hara A, Moriaki H. Macroscopic on-site quality evaluation of biopsy specimens to improve the diagnostic accuracy during EUS-guided FNA using a 19-gauge needle for solid lesions: a single-center prospective pilot study (MOSE study). *Gastrointest Endosc* 2015; 81: 177–85. doi:10.1016/j.gie.2014.08.040 Epub 2014 Oct 29 PMID: 25440688

[14] Fujii LL, Levy MJ. Pitfalls in EUS FNA. *Gastrointest Endosc Clin N Am* 2014; 24: 125–42. doi:10.1016/j.giec.2013.08.003 Epub 2013 Sep 19 PMID: 24215764

[15] Hewitt MJ, McPhail MJ, Possamai L, Dhar A, Vlavianos P, Monahan KJ. EUS-guided FNA for diagnosis of solid pancreatic neoplasms: a meta-analysis. *Gastrointest Endosc* 2012; 75(2): 319–31. doi:10.1016/j.gie.2011.08.049. PMID: 22248600

[16] Crinò SF, Di Mitri R, Nguyen NQ, Tarantino I, de Nucci G, Deprez PH, Carrara S, Kitano M, Shami VM, Fernández-Esparrach G, Poley JW, Baldaque-Silva F, Itoi T, Manfrin E, Bernardoni L, Gabbrielli A, Conte E, Unti E, Naidu J, Ruszkiewicz A, Amata M, Liotta R, Manes G, Di Nuovo F, Borbath I, Komuta M, Lamonaca L, Rahal D, Hatamaru K, Itonaga M, Rizzatti G, Costamagna G, Inzani F, Curatolo M, Strand DS, Wang AY, Ginès À, Sendino O, Signoretti M, van Driel LMJW, Dolapcsiev K, Matsunami Y, van der Merwe S, van Malenstein H, Locatelli F, Correale L, Scarpa A, Larghi A. Endoscopic Ultrasound-guided Fine-needle Biopsy With or Without Rapid On-site Evaluation for Diagnosis of Solid Pancreatic Lesions: A Randomized Controlled Non-Inferiority Trial. *Gastroenterology* 2021; 161: 899–909.e5. doi:10.1053/j.gastro.2021.06.005. Epub 2021 Jun 9 PMID: 34116031

[17] Crinò SF, Di Mitri R, Nguyen NQ, Tarantino I, de Nucci G, Deprez PH, Carrara S, Kitano M, Shami VM, Fernández-Esparrach G, Poley JW, Baldaque-Silva F, Itoi T, Manfrin E, Bernardoni L, Gabbrielli A, Conte E, Unti E, Naidu J, Ruszkiewicz A, Amata M, Liotta R, Manes G, Di Nuovo F, Borbath I, Komuta M, Lamonaca L, Rahal D, Hatamaru K, Itonaga M, Rizzatti G, Costamagna G, Inzani F, Curatolo M, Strand DS, Wang AY, Ginès À, Sendino O, Signoretti M, van Driel LMJW, Dolapcsiev K, Matsunami Y, van der Merwe S, van Malenstein H, Locatelli F, Correale L, Scarpa A, Larghi A. Endoscopic Ultrasound-guided Fine-needle Biopsy With or Without Rapid On-site Evaluation for Diagnosis of Solid Pancreatic Lesions: A Randomized Controlled Non-Inferiority Trial. *Gastroenterology* 2021; 161: 899–909.e5. doi:10.1053/j.gastro.2021.06.005. Epub 2021 Jun 9 PMID: 34116031

[18] Bang JY, Hebert-Magee S, Trevino J, Ramesh J, Varadarajulu S. Randomized trial comparing the 22-gauge aspiration and 22-gauge biopsy needles for EUS-guided sampling of solid pancreatic mass lesions. *Gastrointest Endosc* 2012; 76: 321–7. doi:10.1016/j.gie.2012.03.1392 Epub 2012 May 31 PMID: 22658389 PMID: PMC4148209

[19] European Society of Gastrointestinal EndoscopyDumonceau JM, Polkowski M, Larghi A, Vilman J, Giovannini M, Frossard JL, Heresbach D, Pujol B, Fernández-Esparrach G, Vazquez-Sequeiros E, Ginès A. Indications, results, and clinical impact of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2011; 43: 897–912. doi:10.1055/s-0030-1256754 Epub 2011 Aug 12 PMID: 21842456

[20] Puli SR, Bechtold ML, Buxbaum JL, Eloubeidi MA. How good is endoscopic ultrasound-guided fine-needle aspiration in diagnosing the correct etiology for a solid pancreatic mass?: A meta-analysis and systematic review. *Pancreas*. 2013; 42 (1): 20–6. doi:10.1097/MPA.0b013e3182546e79 PMID: 23254913

PYP035 Evaluation of a novel 22G Franseen-Tip FNB needle for EUS-guided sampling of solid pancreatic lesions: a single-center experience

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DOI 10.1055/s-0046-1820975

Aims Advances in endoscopic ultrasound-guided tissue acquisition (EUS-TA) have increasingly shifted diagnostic strategies toward histology-based assessment, expanding the need for needles capable of providing consistent core tissue while maintaining optimal flexibility and procedural control. To assess, in pancreatic solid lesions, the technical performance, histological yield, and diagnostic accuracy of a novel 22-gauge (22G) FNB needle featuring a Franseen tip made of cobalt-chromium alloy, designed to optimize puncture control and flexibility through a spring-coiled, dual-coated sheath.

Methods Consecutive patients undergoing EUS-FNB for solid pancreatic lesions at a single referral center were prospectively included. Each lesion was sampled with three standardized passes using the study needle. All specimens were fixed in formalin and assessed for microcore quantity and quality. The primary endpoint was microcore procurement (number and size > 550 µm). Secondary endpoints included diagnostic accuracy and adverse events.

Results From May to October 2025, 51 patients (51% male; mean age 62 years, range 38–86) were enrolled. Technical success was achieved in all cases. High-quality histological cores were obtained in 75% of procedures. Overall diagnostic accuracy was 90.2%. No major adverse events occurred. Endoscopists reported excellent needle sharpness, low puncture resistance, and improved maneuverability, particularly within anatomically challenging regions of the pancreas.

Conclusions This novel cobalt-chromium 22G Franseen-tip FNB needle demonstrated excellent technical performance, reliable core tissue procurement, and high diagnostic accuracy in EUS-guided sampling of solid pancreatic lesions. The combination of controlled tip penetration and enhanced shaft flexibility appears to facilitate safe, effective access to difficult pancreatic locations and may represent an advancement in EUS-TA technology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP036 Endoscopic ultrasound fine-needle biopsy of solid pancreatic lesions: histologic yield of suction versus no-suction technique in a high-volume tertiary center

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DOI 10.1055/s-0046-1820976

Aims Endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) is the recommended method for tissue acquisition in suspected pancreatic cancer. Third-generation biopsy needles provide improved histologic yield; however, the optimal sampling technique—particularly the use of suction—remains unclear. This prospective study compared suction versus no-suction sampling during EUS-FNB of solid pancreatic lesions using a Franseen-tip needle [1, 2].

Methods In a tertiary center, 88 consecutive patients with pancreatic solid lesions highly suggestive of malignancy on cross-sectional imaging were en-

rolled. All underwent EUS-FNB using a 22-gauge Franseen needle. Patients were randomized to an aspiration technique (stylet removal and 20-ml negative suction) or a non-aspiration technique (NAT, no application of negative pressure). Macroscopic on-site evaluation guided the number of needle passes. A single blinded gastrointestinal pathologist assessed tissue integrity, blood contamination, and final histopathologic diagnosis. The primary endpoint was diagnostic accuracy for pancreatic cancer.

Results 46 procedures were performed using NAT and 42 using the aspiration technique. Demographic characteristics were comparable between groups. Non-aspiration sampling yielded significantly less blood contamination (39.1 % vs 64.2 %, $p < 0.05$). Diagnostic confirmation of adenocarcinoma was higher in the non-aspiration group (95.6 % vs 88 %). Negative results occurred only in the aspiration group (12 %). Indeterminate samples were noted in the NAT group (4.4 %). The number of needle passes did not differ significantly (1.39 vs 1.25, $p = 0.228$).

Conclusions EUS-FNB without suction resulted in higher diagnostic accuracy and lower blood contamination compared with suction-assisted sampling. Avoiding suction may optimize tissue quality when using a Franseen-tip needle for solid pancreatic lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Renelus BD, Jamorabo DS, Boston I, Briggs WM, Poneris JM. Endoscopic Ultrasound-Guided Fine Needle Biopsy Needles Provide Higher Diagnostic Yield Compared to Endoscopic Ultrasound-Guided Fine Needle Aspiration Needles When Sampling Solid Pancreatic Lesions: A Meta-Analysis. *Clin Endosc* 2021; 54 (2): 261–268. doi:10.5946/ce.2020.101.
- [2] Facciorusso A, Del Prete V, Buccino VR, Purohit P, Setia P, Muscatiello N. Diagnostic yield of Franseen and Fork-Tip biopsy needles for endoscopic ultrasound-guided tissue acquisition: a meta-analysis. *Endosc Int Open* 2019; 7 (10): E1221–E1230. doi:10.1055/s-00982-2997

PYP037 Complications after EUS-guided tissue acquisition: A seven-year retrospective analysis from a tertiary referral center

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DOI 10.1055/s-0046-1820977

Aims Endoscopic ultrasound (EUS) has become a cornerstone in the diagnostic work-up of pancreaticobiliary and mediastinal diseases. EUS-guided fine needle aspiration (FNA) and fine needle biopsy (FNB) provide high diagnostic yield with a generally low risk profile. However, procedure-related complications still occur and may have multiple contributing factors, especially when EUS is performed together with ERCP. The present study aimed to evaluate the incidence, type, and clinical outcome of complications following EUS-guided tissue acquisition in a tertiary referral center over a seven-year period.

Methods All EUS procedures performed between December 2018 and September 2025 were retrospectively reviewed. Demographic and procedural data were collected, including type of needle, number of passes, puncture route, and clinical course. Complications were classified according to their type, timing, and severity. Cases with combined EUS–ERCP were analyzed separately. Descriptive statistics were used to summarize the findings.

Results During the study period, 2,759 EUS procedures were performed, of which 1,237 involved tissue sampling (EUS-FNA or EUS-FNB). Complications occurred in 89 patients (7.2 %). The mean age of affected patients was 66.6 years (median 68, IQR 57–75), and 49 % were male and 45 (50.6 %) were female. Most procedures were performed with FNB (91 %) using a 22G needle (92 %), with a median of three needle passes. The median hospital stay was five days (IQR 4–6).

Of all complications, 47.2 % occurred after combined EUS–ERCP and 52.8 % after EUS alone. The most frequent event was pancreatitis ($n = 65$; 73 %), in-

cluding five severe cases (5.6 %) and two deaths. Other complications included cholecystitis ($n = 6$), bleeding-related events ($n = 6$), sepsis ($n = 3$), peritonitis ($n = 2$), intracystic hemorrhage ($n = 3$; one fatal), and several isolated events such as retroperitoneal hematoma and hemoperitoneum (two fatal). Overall, four patients (4.5 %) died due to procedure-related complications. Conservative management was effective in 95.5 % of cases, while two patients required interventional and two surgical treatment. The procedure-related mortality rate was 0.32 % among EUS-FNA/FNB cases and 0.15 % of all EUS procedures.

Conclusions EUS-guided tissue acquisition remains a safe diagnostic procedure with a low complication rate and very low mortality. Nearly half of all complications were observed in combined EUS–ERCP sessions, highlighting the complex interplay of risk factors in such cases. Most complications were mild pancreatitis managed conservatively, while bleeding and infectious events were rare and effectively treated. These real-world data confirm that EUS-FNA and EUS-FNB are safe and reliable when performed in experienced hands within a high-volume center.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP038 Histologic Changes in the Pancreas Following EUS-FNA: Insights from Resected Specimens

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DOI 10.1055/s-0046-1820978

Aims Endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA) is widely used for the diagnosis of pancreaticobiliary diseases. Although its clinical safety profile is generally favorable, procedure-related adverse events such as bleeding, pancreatitis, and infection have been reported. Most existing evidence is based on clinical observations, whereas studies evaluating tissue-level effects are scarce. This study aimed to assess the histopathological impact of EUS-FNA on the pancreas using resected surgical specimens and to clarify the procedure's safety from a pathological perspective.

Methods We retrospectively reviewed patients who underwent EUS-FNA followed by pancreatic resection between 2021 and 2024 (EUS-FNA group, $n = 29$). A control group consisted of patients who underwent pancreatic resection during the same period without preceding EUS-FNA or ERCP ($n = 35$). Clinical characteristics and procedural details were collected, and histopathological findings in resected specimens were compared between the two groups. Fat necrosis, neutrophil infiltration, fibrosis, protein plugs, fat replacement, and squamous metaplasia were graded on a four-point scale (0: none, 1: mild, 2: moderate, 3: severe). Group differences were analyzed using t-tests. For neoplastic lesions, needle tract seeding was specifically evaluated.

Results Baseline characteristics for the EUS-FNA and control groups were as follows: median age 70 and 72 years; male sex 31.0 % and 51.4 %. Underlying diseases included conventional pancreatic ductal adenocarcinoma (21 vs. 8), IPMN (1 vs. 5), other pancreatic tumors (6 vs. 11), extrapancreatic malignancies (1 vs. 10), and benign disease (0 vs. 1). Surgical procedures included pancreatoduodenectomy (19 vs. 16) and distal pancreatectomy (10 vs. 19). All EUS-FNA procedures were performed using a 22-gauge needle, with a mean of two passes. The only clinical abnormality was asymptomatic hyperamylasemia in five patients; no procedure-related pancreatitis, bleeding, or infection occurred. Mean histological scores in the EUS-FNA and control groups, respectively, were: fat necrosis 0.167 vs. 0.059 ($p = 0.289$), neutrophil infiltration 0.033 vs. 0.059 ($p = 0.637$), fibrosis 0.967 vs. 0.706 ($p = 0.177$), protein plugs 0.300 vs. 0.235 ($p = 0.618$), fat replacement 0.900 vs. 0.909 ($p = 0.968$), and squamous metaplasia 0.100 vs. 0.031 ($p = 0.278$). None of the differences were statistically significant. No needle tract seeding was identified in any specimen.

Conclusions Pancreatic resection specimens obtained after EUS-FNA showed no significant histopathological alterations compared with specimens from patients without prior puncture, suggesting that EUS-FNA does not induce measurable tissue injury. Notably, even patients who developed transient hyperamylasemia demonstrated no corresponding histopathological changes, indicating that asymptomatic enzyme elevation may not reflect true pancreatic damage. The absence of clinically apparent adverse events in this cohort represents a limitation; larger studies including cases with documented complications are warranted to further clarify the tissue-level safety profile of EUS-FNA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP039 Diagnostic Performance of a 3rd generation Dual-Beveled Raptor Tip EUS Fine-Needle Biopsy (EUS-FNB) Needle: A Multicenter Prospective Evaluation

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DOI 10.1055/s-0046-1820979

Aims Recently, a third-generation FNB needle (SecureFlex, Olympus, Japan), featuring a dual-beveled front-cutting raptor tip, was introduced. We aimed to evaluate the diagnostic performance and safety of this needle in an international, multicenter, prospective study.

Methods Consecutive patients undergoing EUS-guided sampling using the SecureFlex EUS-FNB needle were enrolled across eight centers. The primary endpoint was diagnostic accuracy; secondary endpoints included adequacy, number of needle passes, and adverse events. Final diagnosis was based on surgical pathology or FNB findings with clinical/radiologic follow-up. Operators rated needle performance on a 5-point Likert scale evaluating insertion, flexibility, tip control, echogenicity, puncturability, and overall use.

Results Eighty-five patients (58.8% male, median age 68 [IQR 60-76]) were included. Targets included pancreatic masses (51.8%), lymph nodes (18.8%), subepithelial lesions (9.4%), liver lesions (8.2%), and other sites (11.8%); median lesion size was 25 [IQR 15-32] mm. Needle calibers used were 22G (58.8%), 19G (23.5%), and 25G (17.6%); sampling techniques included dry suction (37.6%) slow-pull (29.4%), and wet suction (21.2%) and a combination of dry and wet suction (11.8%), respectively. MOSE was used in all cases and ROSE in 1 case; one pass was required in 38.8%, two in 49.4%, and ≥ 3 in 11.8% of cases. Sample adequacy was 98.8%; sensitivity and specificity for malignancy were 97.1% and 100%, with overall diagnostic accuracy of 97.6%. Four patients (4.7%) had mild adverse events (3 self-limiting bleeding, AGREE I; 1 mild acute pancreatitis, AGREE II, in a patient undergoing same-session ERCP with stent). Operator ratings were consistently high, with "excellent" or "very good" scores across needle insertion (74.1% and 25.9%), flexibility (85.9% and 14.1%), tip control (71.8% and 25.9%), echogenicity (72.9% and 22.4%), puncturability (67.1% and 32.9%), and overall performance (74.1% and 25.9%).

Conclusions The new dual-beveled raptor-tip EUS-FNB needle demonstrated excellent accuracy and core procurement, with optimal safety. Physicians' as-

sessments were excellent in most cases in all domains across different centers and operators.

Conflicts of Interest Andrea Lisotti received consultancy from Olympus company.

PYP040 Balanced propofol sedation versus general anaesthesia for endoscopic ultrasonography-guided tissue acquisition for solid pancreatic lesions

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DOI 10.1055/s-0046-1820980

Aims To compare the adequacy of balanced propofol sedation (BPS) and general anaesthesia (GA) for endoscopic ultrasonography-guided tissue acquisition (EUS-TA) of solid pancreatic lesions.

Methods This is a single-center, controlled cohort study with retrospective analysis of a prospectively collected database including all patients who underwent EUS-TA for diagnosis of a solid pancreatic mass at the gastrointestinal endoscopy unit in a tertiary referral cancer center. According to our institutional protocol, all ERCP is performed under GA. Many patients with pancreatic masses present with jaundice, thus requiring endoscopic biliary drainage, and it is common for ERCP and EUS to be indicated concomitantly. Patients who underwent ERCP and EUS on the same day under general anaesthesia as well as some cases in which EUS was performed alone but under intubation were analysed in the GA group. All procedures were performed by advanced fellows under the direct supervision of expert endoscopists. The material obtained was subsequently analysed by a pathologist specialising in the gastrointestinal tract. However, the pathologist was not present in the endoscopy room during the procedure, i.e., there was no rapid on-site evaluation (ROSE). The sample was considered adequate if sufficient material was obtained for histological interpretation, and inadequate if sufficient cells were absent or if aspirates contained only blood or gastrointestinal epithelial cells. The final diagnosis was based on histology or clinical/radiological follow-up [1–4].

Results From April 2013 to February 2025, a total of 491 EUS-guided pancreatic punctures were conducted on 433 patients, of whom 50.3% were female. Overall, 85.7% (95% CI 82.3–88.6%) of the samples were considered adequate. Three hundred sixty-three (73.9%) received BPS, ninety-three (18.9%) received GA, twenty-six (5.3%) were sedated by an anaesthetist (AS), and sedation data was not available for nine procedures (1.8%). The demographic and lesion characteristics did not differ between groups. Adequacy was 84.3% (95% CI 80.6–88.0%) in the BPS group, 89.2% (95% CI 83.0–95.2%) in the GA group, and 89.7% (95% CI 78.8–100%) in AS procedures (p = 0.202). Comparing only BPS and GA also did not achieve statistical significance (p = 0.223). Comparison of endoscopist (BPS) versus anaesthetist (GA + AS) similarly showed no statistically significant difference (p = 0.175).

Conclusions To the best of our knowledge, this real-world cohort study comprising 491 EUS-TA procedures for solid pancreatic lesions represents the largest single-centre series directly comparing BPS with GA and AS regimens. This study conveys a clear message: endoscopist-administered BPS is as effective as GA and AS for EUS-TA.

Although a minor numerical difference was observed, GA does not confer any meaningful advantage in terms of adequacy. While patient immobility is undeniably superior under GA, this does not result in increased efficacy for obtaining adequate samples when experienced endoscopists perform sedation

with propofol. Thus, mandating GA for all pancreatic EUS-TA procedures is unwarranted, even in the context of training fellows in EUS-TA.

BPS directed by trained endoscopists must remain the standard of care. GA should be reserved selectively for high-risk patients and concomitant ERCP. In summary, in a contemporary real-world setting, endoscopist-administered BPS delivered an adequacy equivalent to GA for EUS-TA of solid pancreatic lesions. Further studies evaluating adverse event rates, recovery time, and cost-effectiveness are needed to strengthen these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nayar DS, Guthrie WG, Goodman A, Lee Y, Feuerman M, Scheinberg L, Gress FG. Comparison of propofol deep sedation versus moderate sedation during endosonography. *Dig Dis Sci* 2010; 55: 2537–44. doi:10.1007/s10620-010-1308-0 Epub 2010 Jul 16 PMID: 20635148
- [2] ASGE Standards of Practice Committee Early DS, Lightdale JR, Vargo JJ 2nd, Acosta RD, Chandrasekhara V, Chathadi KV, Evans JA, Fisher DA, Fonkalsrud L, Hwang JH, Khashab MA, Muthusamy VR, Pasha SF, Saltzman JR, Shergill AK, Cash BD, DeWitt JM. Guidelines for sedation and anesthesia in GI endoscopy. *Gastrointest Endosc* 2018; 87: 327–337. doi:10.1016/j.gie.2017.07.018 Epub 2018 Jan 3 PMID: 29306520
- [3] Ootaki C, Stevens T, Vargo J, You J, Shiba A, Foss J, Borkowski R, Maurer W. Does general anesthesia increase the diagnostic yield of endoscopic ultrasound-guided fine needle aspiration of pancreatic masses? *Anesthesiology*. 2012; 117 (5): 1044–50. doi:10.1097/ALN.0b013e31826e0590. PMID: 23042221
- [4] Facciorusso A, Arvanitakis M, Crinò SF, Fabbri C, Fornelli A, Leeds J, Archibugi L, Carrara S, Dhar J, Gkolfakis P, Haugk B, Iglesias Garcia J, Napoleon B, Papanikolaou IS, Seicean A, Stassen PMC, Vilman P, Tham TC, Fuccio L. Endoscopic ultrasound-guided tissue sampling: European Society of Gastrointestinal Endoscopy (ESGE) Technical and Technology Review. *Endoscopy* 2025; 57: 390–418. doi:10.1055/a-2524-2596 Epub 2025 Feb 27 PMID: 40015316

ESD – Techniques, Training and Challenging Cases

14/05/2026, 11:30–12:30

Emerald 5

PYP041 Clinical Endoscopic Submucosal Dissection of Trainees Tutored by Experts – ESGE endorsed courses and Live Endoscopic Events 2011–2015

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DOI 10.1055/s-0046-1820981

Aims Aims & Background: Endoscopic submucosal dissection (ESD) is state-of-the-art en-bloc resection for early gastro-intestinal cancers and precursors developed and validated in Japan. Western expertise with this complex technique remains limited. Tutored training might be optimal for patients and ESD learning [1]. **Aims:** We established ESD tutoring courses led by experienced Japanese experts to provide (i) optimal long-term curative outcomes and low complication rates for patients, and (ii) hands-on training on difficult lesions for European endoscopists under direct expert supervision.

Methods Prospective data from 2011–2015 (follow-up to 12/2024) were analyzed. A total of 118 neoplasms (50% HGIEN & cancer) in 101 patients (median age 68 [37–91] years; 38% with significant comorbidities) were treated with expert or tutored ESD. The neoplasms (n) were located in esophagus & cardia (22), stomach (14), duodenum (9), and colorectum (72). Japanese experts performed 28 ESDs, while 22 trained beginners conducted 90 supervised procedures on difficult lesions during 5 live and 20 tutoring events (1–4 days each, total 54 d).

Results Analysis of the complete data showed en bloc and curative resection rates of 95% and 88%, with no recurrence after R0 resections during a median follow-up of 9.8 [1.5–14.9] years. Long-term survival remained recurrence-free after endoscopic resection of 3 recurrent adenomas (at R1/Rx) and curative surgery /2nd ESD for 5 non-curative ESD. Adverse events occurred in 9.3% without emergency surgery or 30-day mortality. Comparing expert only vs. tutored ESD procedures, beginners correctly applied curative ESD indications in 94% of ESD. Experts resected larger lesions (22 cm²) at 9.3 cm²/h in 121 minutes. Tutored beginners achieved a 75% [25–100] self-completion rate on 33% smaller lesions in 112 min.

Conclusions ESD tutoring courses led by Japanese top experts ensure curative patient outcomes and standardized training on complex lesions during routine endoscopy program. This model may advance current ESD performance across European referral centers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Oyama T, Yahagi N, Ponchon T, Kiesslich T, Berr F. How to establish endoscopic submucosal dissection in Western countries. *World J Gastroenterol* 2015; 21: 11209–20

PYP042 Endoscopy as an ‘organ-preserving’ strategy: the Italian experience in endoscopic submucosal dissection (ESD) of ileocecal valve lesions

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Aims Endoscopic submucosal dissection (ESD) has emerged as an organ-preserving strategy for superficial colorectal neoplasia, offering high rates of en bloc and curative resections. However, the ileocecal valve (ICV) remains one of the most technically challenging sites because of its complex anatomy, thin wall, and potential ileal extension. Evidence from Western countries is limited, with few studies and small sample sizes. This national multicenter study aimed to evaluate the efficacy, safety, and long-term outcomes of ESD for ICV neoplasia in expert Italian centers.

Methods A retrospective multicenter study involving 14 high-volume Italian units of the Endoscopic Resection Italian Network (ERIN) was performed. Patients with superficial neoplastic lesions involving the ICV treated with ESD or hybrid ESD (h-ESD) between January 2018 and July 2025 were retrospectively enrolled in this study. The primary outcomes were en bloc, R0, and curative resection rates. Secondary outcomes included intra-procedural and delayed adverse events (AEs), the need for surgery, local recurrence rate, recurrence-free survival (RFS), and surgery-free survival (SFS).

Results A total of 142 patients were included (median age, 67 years). Lesions had a median size of 34 mm, and nearly half (49%) extended into the terminal ileum. Most lesions were LST-G (56%), and ESD was performed in 88% of cases, with h-ESD in 12% of cases. En bloc resection was achieved in 93% of patients, and R0 resection was achieved in 89% of patients. Curative resection according to the ESGE guidelines was achieved in 87% of patients. Intraprocedural AEs occurred in 22% of patients, all of whom were successfully managed endoscopically. Delayed AEs occurred in 5% of patients, with only two cases requiring surgery. Most lesions were benign, with adenocarcinoma in 12% (n = 17) of cases. At 10 months follow-up, local recurrence occurred in 7% of patients, and only 5% of patients required surgery. In the Firth logistic regression, h-ESD was significantly associated with an increased risk of non-R0 resection (OR 7.59; $p = 0.001$) and non-curative resection (OR 12.40, $p < 0.001$). Moreover, T-ESD was a protective factor for R0 resection (OR 0.22; $p = 0.038$). Lesion morphology, size, circumferential involvement, and ileal extension were not associated with adverse outcomes. The estimated probability of RFS at 6 months was 97.3%, 88.9% at 12 months, then stabilized at 14 months.

Conclusions In expert hands, ESD for ICV neoplasia demonstrates high efficacy and safety, yielding excellent curative resections. Despite the anatomical complexity inherent to the ileocecal region, these findings endorse ESD as a viable organ-preserving alternative to surgery for these superficial neoplastic lesions, mostly benign, of the ICV. This affirms the long-term durability and safety of endoscopic management of ICV lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP043 The Saline Immersion/irrigation TEchnique for endoscopic submucosal dissection of proximal colonic lesions

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DOI 10.1055/s-0046-1820983

Aims Endoscopic submucosal dissection (ESD) enables en-bloc resection of large or fibrotic colorectal lesions that are not amenable to snare-based techniques. Its uptake for proximal colonic lesions in Western practice remains limited, largely due to technical complexity and anatomical challenges. The Saline Immersion/irrigation TEchnique (SITE) has emerged as a strategy to help overcome these limitations. This study evaluated the procedural efficacy and safety of SITE-facilitated ESD for proximal colonic lesions in a tertiary center [1–4].

Methods All proximal colonic ESDs performed between April 2018 and October 2025 were retrospectively analyzed from a prospectively maintained institutional database. All cases were discussed in a multidisciplinary team meeting beforehand. SITE was applied in every procedure, in combination with the pocket-creation method (PCM) or its variants. Baseline characteristics, procedural parameters, histopathological outcomes and adverse events were recorded.

Results Of 106 lesions referred for ESD, eight (7.5%) procedures were abandoned due to intra-procedural detection of deep submucosal invasion, and 12 lesions were resected using snare-based techniques. Eighty-six lesions were removed by ESD and included in the analysis. Eighty-two procedures (95.3%) were performed under operator-delivered conscious sedation. Mean patient age was 68 ± 9.1 years, and 51 patients (59.3%) were male. Lesion location was caecum (n = 29), ascending colon (n = 41) and transverse colon (n = 16). Nine lesions (10.5%) were recurrent.

Median lesion size was 40 mm (IQR 35–58.8) $\times$ 35 mm (IQR 25–50). En-bloc resection was achieved in all cases. Resection status was R0 in 76 (88.3%), R1 in 8 (9.3%) and Rx in 2 (2.3%). Median resection time was 120 min (IQR 90–160), with a median dissection speed of $10.8 \text{ mm}^2/\text{min}$ (IQR 6.2–16.1). Histopathology revealed low-grade dysplasia in 68 lesions (79%), high-grade dysplasia in 10 (11.6%), SM1 cancer in 1 (1.2%), deeply invasive cancer in 3 (3.5%) and sessile serrated lesions with dysplasia in 4 (4.7%).

Among the eight R1 resections, four were vertical and four lateral. Three patients with vertical R1 margins and invasive cancer underwent surgery, with residual cancer identified in one case. The remaining vertical R1 (LGD) lesion was successfully managed endoscopically. Six patients had lateral R1/Rx resections, all LGD; only one case—located at the ileocecal valve—developed recurrence, which was treated endoscopically.

Four adverse events occurred (4.7%): two microperforations and one delayed bleed requiring embolization. None required surgical intervention. Thirty-two patients (37.2%) were admitted, with a median length of stay of 1 day (IQR 1–2). Defect closure was achieved in 60 cases (69.7%).

Conclusions SITE-facilitated ESD for proximal colonic lesions was performed predominantly under conscious sedation and achieved consistently high en-bloc and R0 resection rates with low adverse-event rates. These results support consideration for routine adoption for right-sided colonic ESD. Further multicenter prospective studies are needed to validate these outcomes as the preferred approach for proximal colonic ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Despott EJ, Murino A. Saline-immersion therapeutic endoscopy (SITE): An evolution of underwater endoscopic lesion resection. Vol. 49: Digestive and liver disease 2017; p 1376
- [2] Maristany Bosch G, Rimondi A, Gulotta M, Murino A, Despott EJEK. The saline-immersion/irrigation technique (SITE) to facilitate colorectal endoscopic submucosal dissection. *Endoscopy* [Internet] 2025; 57: OP189. Available from: doi:10.1055/s-0045-1805295
- [3] Despott EJ, Hirayama Y, Lazaridis N, Koukias N, Telese A, Hayashi Y et al. Saline immersion therapeutic endoscopy facilitated pocket-creation method for endoscopic submucosal dissection (with video). Vol. 89: Gastrointestinal endoscopy United States 2019; p. 652–3
- [4] Libânio D, Pimentel-Nunes P, Bastiaansen B, Bisschops R, Bourke MJ, Deprez PH, Esposito G, Lemmers A, Leclercq P, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, Fuccio L, Bhandari P, Dinis-Ribeiro M. DPN Endoscopic submucosal dissection techniques and technology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy* [Internet] 2023; 55: 361–89. Available from: doi:10.1055/a-2031-0874

PYP044V Right colon tumor endoscopic submucosal dissection (ESD) with thulium laser (case report video)

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DOI 10.1055/s-0046-1820984

Abstract Text

The patient had no complains, blood stool test was positive. Colonoscopy revealed a laterally spreading tumor granular-type, NICE type 2, KudolIII, measuring 3,5x3,0 sm. Biopsy showed an adenoma HGD. Underwater conditions were required for the laser ESD. Tumor lifting was satisfactory. 1940-nm thulium laser with 940-µm fiber was used. Dissection began caudally, continued to both sides, and ended cranially. The laser enable contactless cutting and effective coagulation; hot forceps were occasionally used for hemostasis. The lesion was removed en block. Postoperative histology confirmed tubular adenoma HGD. Advantages: contactless coagulation and cutting, strong coagulation effect, energy is delivered locally, minimizing the lateral thermal damage, cost effective. Conclusion: thulium laser appears safe for colonic ESD thought further evaluation is needed.

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/9d98aa3a-ec87-4863-803a-453c85e7bbae/Uploads/19978_Right_colon%20tumor%20endoscopic%20submucosal%20dissection%20\(ESD\)%20with%20t....mp4](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/9d98aa3a-ec87-4863-803a-453c85e7bbae/Uploads/19978_Right_colon%20tumor%20endoscopic%20submucosal%20dissection%20(ESD)%20with%20t....mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP045 Submucosal fibrosis in large colorectal serrated lesions in cases receiving endoscopic submucosal dissection

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DOI 10.1055/s-0046-1820985

Aims Colorectal serrated lesions (CSLs) are increasingly recognized as important precursors of colorectal cancer, accounting for up to a quarter of cases. Recent advances include the 2019 WHO classification, which categorizes CSLs into sessile serrated lesions (SSL), SSL with dysplasia (SSLD), traditional serrat-

ed adenomas (TSA), and unclassified serrated adenomas. Although piecemeal resection is widely used, larger CSLs may harbor unexpected dysplasia and carry a higher risk of metachronous neoplasia, underscoring the importance of achieving accurate histological evaluation. Endoscopic submucosal dissection (ESD) enables en bloc resection and precise pathological assessment, but its technical difficulty and risk profile are influenced by factors such as lesion size, location, and submucosal fibrosis. This study aimed to clarify the association between CSLs and submucosal fibrosis, and to determine how fibrosis affects therapeutic outcomes in colorectal ESD.

Methods This retrospective cohort study reviewed consecutive colorectal ESD procedures performed at Kyoto Prefectural University of Medicine from January 2020 to November 2024. To align with the 2019 WHO classification, only lesions measuring ≥ 20 mm was included. Indications followed Japanese ESD guidelines, with serrated lesions treated when SSLs were ≥ 30 mm or when lesions ≥ 20 mm were suspected to be SSLD or TSA based on magnified endoscopic evaluation. Lesions were classified histologically as CSLs—including SSL, TSA, SSLD, and unclassified serrated adenomas—or as adenomas/T1 cancers. Data on patient and lesion characteristics, fibrosis status, and therapeutic outcomes were collected. Submucosal fibrosis was graded endoscopically. ESD outcomes included procedure time, en bloc and R0 resection, and adverse events such as perforation or delayed bleeding. The primary outcome was the frequency of any or severe fibrosis in CSLs compared with adenomas/T1 cancers. Logistic regression analyses identified predictors of fibrosis, severe fibrosis, and prolonged procedure time (>90 min), with lesion size categorized as <40 or ≥ 40 mm.

Results Among 445 colorectal ESD cases, 72 were CSLs (16.2%) and 373 were adenoma + T1 cancers. Submucosal fibrosis was present in 46.3% of all lesions, and severe fibrosis in 16.4%. CSLs showed significantly lower rates of fibrosis than adenoma + T1 cancers (34.7% vs 48.5%, $p=0.04$) and lower severe fibrosis (6.9% vs 18.2%, $p=0.03$). CSLs were more common in females (61.1% vs 41.0%, $p<0.01$), predominantly right-sided (73.6%), and more frequently non-polypoid (95.8% vs 77.7%, $p<0.01$). Mean procedure time was shorter for CSLs (53.0 ± 25.6 min vs 67.1 ± 44.2 min, $p<0.01$). In multivariate analysis, serrated histology independently reduced the risk of fibrosis (OR 0.58, 95% CI 0.33–0.99; $p=0.04$), while lesion size ≥ 40 mm increased it (OR 2.03, 95% CI 1.30–3.20; $p<0.01$); rectal location lowered risk (OR 0.40, 95% CI 0.22–0.70; $p<0.01$). Severe fibrosis was associated with lesion size ≥ 40 mm (OR 2.45, 95% CI 1.40–4.27; $p<0.01$) and polypoid morphology (OR 3.42, 95% CI 1.92–6.06; $p<0.01$). Prolonged procedure time ≥ 90 min was linked to lesion size ≥ 40 mm (OR 25.00), fibrosis (OR 3.73), and severe fibrosis (OR 5.14). Among five CSLs with severe fibrosis, R0 resection was achieved in 60%.

Conclusions This study investigated serrated histology as a predictor of reduced submucosal fibrosis in colorectal ESD. These results may aid therapeutic decision-making. ESD should be considered for lesions ≥ 40 mm or those with polypoid morphology, as characteristics were associated with a higher risk of severe submucosal fibrosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP046 Safety and Efficacy of Colorectal Endoscopic Submucosal Dissection in Elderly Patients: A Large Multicenter Western Cohort Study

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DOI 10.1055/s-0046-1820986

Aims Endoscopic Submucosal Dissection (ESD) enables en bloc resection of large colorectal lesions [1], yet evidence on its efficacy and safety in elderly patients remains limited in Western countries, with most data originating from Asia [2–4]. The definition of “elderly” varies, although individuals aged 65 years or older are commonly included [5]. This study aimed to evaluate the efficacy and safety of colorectal ESD in patients aged ≥ 65 years, stratified by age group, compared with younger controls (< 65 years).

Methods This retrospective multicenter study included consecutive patients who underwent colorectal ESD across 19 European referral centers (2010–2025). Patients were grouped as < 65 or ≥ 65 years, with elderly patients further divided into 65–74, 75–84, and ≥ 85 years. Demographic, endoscopic, and histologic data were collected. Primary outcomes included successful, en bloc, R0 resection, adverse events (bleeding, perforation, delayed events) rates, and need for surgery.

Results A total of 3,493 ESDs were analyzed (≥ 65: 2,273; < 65: 1,220). Overall success (89.2% vs 89.5%; $p = 0.81$), R0 resection rates (76.6% vs 78.2%; $p = 0.42$), and en bloc rates (89.1% vs 90.9%; $p = 0.1059$) were comparable between elderly and younger patients. Lesion size, fibrosis, morphology, JNET classification, lesion site, and resection time did not differ significantly. Adverse events (perforation, bleeding, delayed bleeding, delayed perforation, and other delayed events such as strictures) occurred in 9.3% of elderly patients and 8.8% of younger patients ($p = 0.51$). Most were managed conservatively, with the need for surgery due to complications being 0.3% and 0.6% respectively ($p = 0.18$). Within elderly subgroups, patients aged 75–84 had higher rates of perforation (OR 1.6; $p = 0.014$) and delayed bleeding (OR 1.8; $p = 0.037$) than those aged 65–74, while ≥ 85 showed no significant difference, likely due to limited sample size. Complication odds increased by 3.1% per year of age (OR 1.031; $p = 0.009$). The need for surgery due to complications or malignancy did not differ by age ($p = 0.123$). The distribution of submucosal invasive cancer was also similar ($p = 0.357$).

Conclusions Colorectal ESD in elderly patients is effective and curative, maintaining high en-bloc, successful, and R0 resection rates. While age inde-

pendently increases the risk of procedural complications, most events were endoscopically manageable, resulting in low surgical conversion rates. These findings, derived from one of the largest Western elderly ESD cohorts, confirm and expand prior Asian data, supporting the use of ESD as a curative, minimally invasive option in selected elderly patients, with appropriate risk stratification. Future studies incorporating comorbidity and frailty are warranted to refine patient selection beyond biological age.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] NHS England. Improving care for older people [Internet]. NHS England; 2025 [cited 2025 Nov 06]. Available from: <https://www.england.nhs.uk/our-work/clinical-policy/older-people/improving-care-for-20older-people/>
- [2] Sferazza S, Calabrese G, Maida M, Capogreco A, de Sire R, Cecinato P, Sassatelli R, De Roberto G, Barbaro F, Spada C, Chiappetta MF, Pugliese F, Cutolo F, Manno M, Soriani P, Rosa Rizzotto E, Gubbiotti A, Andrisani G, Di Matteo F, Azzolini F, Repici A, Di Mitri R, Maselli R. Impact of age and comorbidities on colorectal endoscopic submucosal dissection outcomes: Large multicenter study in a Western cohort. *Endosc Int Open* 2025; 13: PMID: a25681366
- [3] Jin BC, Kim DH, Oh HH, Song HY, Kim SJ, Myung DS, Joo YE, Lee J, Kim HS, Seo GS, Kim SW. Outcomes of Colorectal Endoscopic Submucosal Dissection for Elderly Patients: A Multicenter Study by the Honam Association for the Study of Intestinal Disease (HASID). *In Vivo* 2024; 38 (3): 1405–1411
- [4] Ichita C, Goto T, Sasaki A, Fushimi K, Shimizu S. Risk of Colorectal Endoscopic Submucosal Dissection in Older Adults: A Nationwide Study in Japan. *Am J Gastroenterol*. 2025
- [5] Fujiya M, Tanaka K, Dokoshi T, Tominaga M, Ueno N, Inaba Y, Ito T, Moriichi K, Kohgo Y. Efficacy and adverse events of EMR and endoscopic submucosal dissection for the treatment of colon neoplasms: a meta-analysis of studies comparing EMR and endoscopic submucosal dissection. *Gastrointest Endosc* 2015; 81 (3): 583–95

PYP047 Descriptive analysis of the efficacy and safety of endoscopic intermuscular dissection (EID) and per anal endoscopic myectomy (PAEM) for the treatment of rectal lesions

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Aims Endoscopic intermuscular dissection (EID) and per anal endoscopic myectomy (PAEM) are advanced techniques derived from endoscopic submucosal dissection (ESD) in which the dissection plane extends into the muscularis propria. These techniques enable en bloc resection of rectal lesions with severe fibrosis or deep submucosal invasion, as reported in recent series. In our center, EID is planned for lesions with optical suspicion of deep invasion, whereas PAEM is performed as a salvage technique when unexpected fibrosis or deep invasion is encountered during ESD. The aim of the study was to evaluate the efficacy (technical success, R0 resection, and curative resection) and safety of EID and PAEM in rectal lesions. As a secondary aim, to compare R0 and curative resection rates with those of rectal ESD in pT1 lesions [1, 2].

Methods Multicenter cohort study based on a prospective consecutive registry. Patients ≥ 18 years with rectal lesions treated with ESD, EID, or PAEM were included. Non-adenoma/adenocarcinoma histologies were excluded. Curative resection was defined as pT1, G1–G2 differentiation, absence of lymphovascular invasion, low tumor budding, and a deep free margin ≥ 0.1 mm.

Results A total of 176 procedures were included (EID: 9; PAEM: 13; ESD: 154). Mean age was 67 years (SD 11.7); 51.7% were men.

Technical success with en bloc resection was achieved in 100% of EID and PAEM cases, and in 99.4% and 96.8% respectively in the ESD group. R0 resection was obtained in 9 (100%) cases in EID, 122 (79%) in ESD, and 8 (61.5%) in PAEM. Considering only pT1 lesions, R0 rates were 100% for EID, 80% for PAEM, and 47.1% for ESD. Curative resection among pT1 lesions was achieved in 2 (50%) with EID, 2 (15.4%) with PAEM, and 5 (29.4%) with ESD.

Median procedure time was 85 minutes (IQR 70–114) for EID and 145 minutes (IQR 108–285) for PAEM. Dissection speeds were: EID 21.3 mm²/min (SD 9.2), PAEM 21.6 mm²/min (SD 13.1), and rectal ESD 28.8 mm²/min (SD 16). Median hospital stay was 1 day (IQR 1–2) in both groups.

Adverse events included mild post-procedural pain in 1 EID (11.1%) and 1 PAEM (7.7%) case, and abdominal pain prolonging admission by 1 day in 1 EID patient (11.1%). A stenosis occurred in 1 PAEM case (7.7%), successfully managed with three dilation sessions. One PECS-like reaction occurred in the EID group (11.1%).

Conclusions EID and PAEM are effective and safe techniques for complex rectal lesions, achieving high R0 rates in pT1 tumors with curative potential. These methods represent valuable options within organ-preserving strategies for selected rectal neoplasms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rahni DO, Toyonaga T, Ohara Y, Lombardo F, Baba S, Takiyama H, Tanaka S, Kawara F, Azuma T. First reported case of per anal endoscopic myectomy (PAEM): A novel endoscopic technique for resection of lesions with severe fibrosis in the rectum. *Endosc Int Open* 2017; 5: E146–E150. doi:10.1055/s-0042-122965. PMID: 28337484 PMID: PMC5362086
- [2] Moons LMG, Bastiaansen BAJ, Richir MC, Hazen WL, Tuynman J, Elias SG, Schrauwen RWM, Vleggaar FP, Dekker E, Bos P, Fariña Sarasqueta A, Lacle M, Hompes R, Didden P. Endoscopic intermuscular dissection for deep submucosal invasive cancer in the rectum: a new endoscopic approach. *Endoscopy* 2022; 54: 993–998. doi:10.1055/a-1748-8573. Epub 2022 Jan 24 PMID: 35073588

PYP048 Efficacy of gel-immersion endoscopic submucosal dissection for severe fibrotic colorectal lesions

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Aims Endoscopic submucosal dissection (ESD) allows en bloc resection of early colorectal neoplasia, providing precise histopathological evaluation and lower recurrence. However, colorectal ESD remains technically demanding due to prolonged procedure times and higher complication rates, especially in cases with severe fibrosis. Severe submucosal fibrosis may arise from prior interventions or inherent lesion characteristics, and it often obscures the dissection plane. Gel-immersion ESD (GI-ESD), using Viscoclear (Otsuka Pharmaceuticals, Tokushima, Japan), a highly viscous and transparent gel approved in Japan, has emerged as a potential solution. This gel maintains luminal clarity through its retention effect, stabilizes scope operability, and provides a durable submucosal lift via buoyancy even in fibrotic lesions. These effects are superior to saline. This study aimed to evaluate the clinical outcomes of GI-ESD for colorectal lesions with severe submucosal fibrosis compared with conventional ESD (C-ESD).

Methods This single-center retrospective cohort study included all consecutive colorectal ESDs at a high-volume Japanese center from January 2022 to June 2025. Only cases with intraoperatively confirmed severe fibrosis were

analyzed. Procedures were performed by expert endoscopists or supervised trainees. All lesions underwent preprocedural evaluation using high-definition magnification. ESD was performed using Fujifilm or Olympus colonoscopes with waterjet function and this water jet function was used for gel injection. Submucosal lifting used sodium hyaluronate or alginate mixed with indigo carmine. Dissection utilized scissors-type, needle-type, or mixed-knife strategies, with traction applied at the operator's discretion. C-ESD was performed before April 2024; thereafter, GI-ESD was introduced, involving suction of intraluminal gas and gel instillation to maintain visualization. Primary outcome was procedural safety (delayed bleeding, perforation, post-ESD coagulation syndrome [PECS]). Secondary outcomes included en bloc and R0 resection rates, procedure duration, and operator conversion.

Results A total of 85 colorectal ESDs with severe fibrosis were analyzed (GI-ESD: n = 22; C-ESD: n = 63). Baseline demographics were comparable (mean age: 68.7 vs 66.5 years, female rate: 27.3% vs 33.3%), right-colon location (54.5% vs 49.2%; p = 0.199), median lesion size [IQR] (25 ± 10 mm vs 30 ± 25 mm), polypoid morphology (23.8% vs. 47.6%; p = 0.480), and expert operator (81.8% and 73.0%; p = 0.953). Regarding primary endpoints, no adverse events occurred in GI-ESD, whereas 14 events (22.2%) occurred with C-ESD: perforations (n = 5; 7.9%), delayed bleeding (n = 2; 3.2%), and PECS (n = 7; 11.1%). En bloc resection was achieved in all completed cases; R0 rates were higher with GI-ESD (85.7% vs 72.8%; p = 0.191). Median procedure time was shorter in GI-ESD (56 vs 87 min; p = 0.015), and mean time favored GI-ESD (74.2 vs 101.2 min; p = 0.075). Procedure discontinuation was similar (4.5% vs 6.3%). In multivariable regression, GI-ESD was not independently associated with procedure duration of severe fibrotic cases (p = 0.500); lesion size remained the only independent predictor (p < 0.001).

Conclusions In this high-risk cohort, GI-ESD was associated with favorable safety and procedural efficiency compared with conventional ESD. No adverse events occurred in GI-ESD. The findings suggest that a viscous gel environment can mitigate challenges associated with severe fibrosis without compromising resection quality, potentially offering clinical and economic benefits by reducing complications and associated resource use.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP049 ESD Detects Twice as Many Carcinomas and Reduces Recurrence Fourfold: A Real-World 10-Year Comparison

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DOI 10.1055/s-0046-1820989

Aims Endoscopic resection is central to the management of colorectal neoplasia. EMR is widely available and technically simple, whereas ESD allows en bloc and R0 resection but is more demanding. High-quality, long-term, real-world comparative data from European centers remain scarce. This study aimed to compare technical performance, histopathology, and long-term oncological outcomes of EMR versus ESD over a 10-year period (2015–2025). The primary endpoint was R0 resection. Secondary endpoints included en-bloc resection, recurrence, carcinoma detection, procedural time, fibrosis, complication rates, and follow-up completeness. Additional objectives included identifying independent predictors of carcinoma and local recurrence using multivariate modeling.

Methods This retrospective cohort included 292 consecutive colorectal lesions resected at a single high-volume expert center (EMR n = 166, 56.8%; ESD n = 126, 43.2%) over 10 years. Demographic variables, lesion morphology (Paris, LST), anatomical location, size, fibrosis severity, use of traction and hood, procedural time, and adverse events were extracted. Histopathological endpoints included dysplasia grade and carcinoma. Follow-up duration, recurrence,

and loss to follow-up were recorded. All procedures were performed by a single expert endoscopist to eliminate operator-dependent variability.

Results Lesions treated with EMR were distributed throughout the colon, most commonly right-sided (38.5 %), whereas ESD was strongly concentrated in the rectum (66.7 %, $p < 0.0001$). Paris morphology differed significantly ($p < 0.001$): EMR was used for protruding Is/IIa lesions, while ESD was preferentially applied to flat or mixed IIa/IIa + IIc lesions. LST morphology was evenly balanced between granular and non-granular subtypes in both groups, indicating no preferential selection based on LST subtype. Rectal lesions were significantly larger (50.6 vs 32.0 mm, $p < 10^{-11}$) and required markedly longer procedure time (57.8 vs 26.5 min, $p < 10^{-12}$). Recurrence was higher in rectal lesions (20.7 % vs 7.9 %, $p = 0.0029$), whereas en-bloc and R0 rates were similar between rectal and colonic locations ($p = 0.82$ and $p = 0.93$).

Fibrosis severity differed markedly ($p < 0.0001$): EMR lesions were mostly non-fibrotic (81.3 %), whereas ESD targeted lesions with higher fibrosis burden (46.0 % moderate/severe vs 18.7 %). Hood use was strongly associated with ESD (73.0 % vs EMR 3.6 %, $p < 0.0001$). Traction was uncommon (1–2 %, $p = \text{NS}$).

ESD achieved significantly higher en-bloc (84.1 % vs 37.3 %, $p < 0.0001$) and R0 resection rates (65.9 % vs 49.4 %, $p = 0.006$). Median procedure time was longer (45 vs 20 min, $p < 0.0001$). Time-per-mm was almost doubled in ESD (1.17 vs 0.60 min/mm, $p < 0.0001$). In multivariate analysis restricted to ESD, lesion size was the sole independent predictor of procedural time ($\beta = 1.16$ min/mm, $p < 0.0001$; $\rho = 0.71$), while fibrosis showed a non-significant trend ($\beta = +16.9$ min, $p = 0.12$).

ESD identified more high-grade dysplasia (38.9 % vs 31.9 %, $p = 0.004$) and more than twice as many carcinomas (34.1 % vs 12.0 %, $p < 0.0001$). Independent predictors of carcinoma were rectal location ($\text{OR} \approx 2.1$) and use of ESD ($\text{OR} \approx 2.9$). Lesion size, fibrosis, and LST subtype were not independent predictors.

Adverse events were infrequent and comparable ($p = 0.21$): EMR had 11 intraprocedural bleeds (6.6 %, all controlled endoscopically), while ESD had 4 intraprocedural events (3.2 %) and one delayed bleed (0.8 %). No patient required surgery.

Among patients with follow-up, EMR had longer surveillance (median 24 vs 8 months, $p < 0.001$), while loss-to-follow-up was similar (38.6 % vs 40.5 %, $p = 0.73$).

Recurrence was significantly higher after EMR (20.5 % vs 5.6 %, $p < 0.001$). Independent predictors of recurrence were lesion size ($p = 0.005$), rectal location ($\text{OR} \approx 3.1$), and en-bloc resection, the strongest protective factor ($\text{OR} \approx 0.07$, $p < 0.0001$). Fibrosis, LST morphology, R0, and technique were not independent predictors.

Conclusions In real-world practice over 10 years, ESD consistently outperformed EMR across all major oncological outcomes—en-bloc, R0, carcinoma detection, and recurrence—despite being used for significantly more complex lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP050V ONE-PEDAL-DRIVING ESD: The "Zero-Exchange" Technique Using Hydro-Modulated PowerCoag on the ESG-300 Generator

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DOI 10.1055/s-0046-1820990

Problem to solve Endoscopic Submucosal Dissection (ESD) is the gold standard for large colorectal neoplasms but is hampered by technical complexity and prolonged procedural times. A primary inefficiency is the repetitive instrument exchange required to manage intraprocedural bleeding. Standard protocols dictate switching from a dissection knife to hemostatic forceps (e.g., Coagrasper) upon encountering vessels, a cycle that disrupts the surgical plane, increases cognitive load, and significantly raises procedural costs. Furthermore, precise settings for the ESG-300 (Olympus) generator in certain situations in advanced endoscopy are lacking in comparison to other brands like the VIO3 generator (ERBE).

Innovation We introduce the "ONE-PEDAL-DRIVING ESD" concept. Analogous to electric vehicles (EVs) where a single pedal controls both acceleration and regenerative braking—enhancing efficiency and reducing wear—this technique utilizes a single electrosurgical setting (**PowerCoag E2 30W**) and a single instrument (**DualKnife J**, Olympus) for the entire submucosal phase. The innovation lies in **hydro-modulation**: leveraging the physics of electrosurgery where saline immersion drops impedance by 99 % (Capogreco et al., *Sci Rep* 2025). By altering the environment from CO₂ (higher cutting effect) to static saline (moderate cutting effect) or active saline infusion (high coagulation effect due to electrodispersion), the operator achieves diverse tissue effects without modifying the generator settings or changing instruments [1, 2].

Results The video demonstrates the resection of a 50mm bulky sessile lesion (JNET 2A) in the mid-rectum, characterized by thick penetrating arterial vessels. Using the ESG-300 on PowerCoag E2 30W, the procedure was completed in 55 minutes with **zero instrument exchanges**.

1. **High-Speed Dissection:** Under CO₂, high voltage allows agile cutting of submucosal tissue with no or small vessels.
2. **Moderate-Speed Dissection:** Submerging the submucosal plane in saline utilizes the voltage drop to seal small-to-medium vessels with a low spark.
3. **Hemostasis:** Active saline infusion during activation created an electrodispersion effect, mimicking soft coagulation for large bleeders or vessel sealing. The technique eliminates the need for hemostatic forceps, reducing cost and maintaining surgical flow.

Conclusions "One-Pedal-Driving ESD" transforms the ESG-300 and DualKnife J into a high-performance all-in-one solution for ESD. By understanding and manipulating the electrophysical behavior of the PowerCoag waveform in different media, endoscopists can eliminate the hemostatic forceps, reducing procedural time, cost, CO₂ emissions and complexity while mimicking the efficiency of modern EV operation.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0a10299e-b518-4017-9155-cfd9b8a1223d/Uploads/19990_ONE-PEDAL-DRIVING_ESD%20ESGE%20DAYS.mp4

Conflicts of Interest European Board Advisor Olympus

References

- [1] Pimentel-Nunes P, Libânio D, Bastiaansen BA, Bhandari P, Bisschops R, Budinigh KT et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. 2022; 54 (6): 591–622
- [2] Capogreco A, Maselli R, Enderle M, Salkic N, Keller S, De Gaetano F, Mastro-rocco E, de Sire R, Alfarone L, Massimi D, Jacques J, Legros R, Pioche M, Mori Y, Hassan C, Repici A. Different behavior of electrosurgical currents between air and saline immersion therapeutic endoscopy. *Sci Rep* 2025; 15: 4388. doi:10.1038/s41598-024-83503-3. PMID: 39910260 PMID: PMC11799136

Biliary Stents: New Designs and New Data

14/05/2026, 11:30–12:30

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PYP051 Endoscopic drainage of potentially resectable perihilar cholangiocarcinoma using a suprapapillary plastic stent with retrieval string (CHORDA); a prospective pilot study

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DOI 10.1055/s-0046-1820991

Aims In patients with perihilar cholangiocarcinoma (pCCA) who are considered for surgical resection, biliary drainage of the future liver remnant (FLR) is essential. The conventional approach is placement of a transpapillary plastic stent during endoscopic retrograde cholangiopancreatography (ERCP). However, ERCP is associated with considerable risks, including cholangitis (37%), stent dysfunction (19%) and post-ERCP pancreatitis (19%) within 90 days [1]. Some of these complications may result from bridging the papilla, which leads to duodenobiliary reflux and colonization of the biliary tract with upper gastrointestinal flora, increasing the risk of cholangitis. To mitigate these risks while preserving ease of removal, a suprapapillary stent equipped with a retrieval string could offer a viable alternative. The primary aim was to evaluate the safety and feasibility of preoperative endobiliary drainage using a suprapapillary plastic stent with a retrieval string.

Methods This prospective single-center pilot study included patients with pCCA eligible for hemihepatectomy. Patients were excluded when the stricture was located ≤ 2 cm from the papilla. Procedures were performed using a modified plastic biliary stent (7, 8.5 or 10 Fr) with a retrieval string attached distally. The primary outcome was safety, defined as the number of severe drainage related complications until exploratory laparotomy. Severe complications are defined as any complication leading to additional invasive interventions, admission to hospital, or death. Secondary endpoints included technical and clinical success rates, defined as successful placement of the stent and a $\geq 20\%$ reduction in bilirubin levels at day 7, respectively. Patients underwent a scheduled stent exchange if surgery had not taken place after 6–12 weeks, depending on the diameter of the stent.

Results Between March 2023 and August 2025, 40 patients with presumed resectable pCCA were enrolled (14 female [35%], median age 72 years [IQR 65–76]). Bismuth classification was distributed as follows: type I (1, 3%), type II (4, 10%), type IIIa (19, 48%), type IIIb (3, 8%), and type IV (13, 33%). Suprapapillary stent placement was technically successful in the first procedure in all cases (40/40, 100%), in 35 patients one stent was placed (35/40, 88%) and in

five patients two stents (5/40, 13%) were placed. A precut sphincterotomy was performed during the procedure in four patients (4/40, 10%), and five patients (5/40, 13%) had undergone a sphincterotomy prior to referral. Eleven patients (11/40, 28%) had one or more severe drainage related adverse event following the index procedure within 90 days. Cholangitis occurred in four of these patients (4/40, 10%), of which one case was associated with stent dysfunction (1/40, 3%); in the remaining three cases (3/40, 8%) there were no signs of stent dysfunction. Stent dysfunction without cholangitis occurred in five patients (5/40, 13%), caused by partial migration ($n = 3$; one inward, two outward) or occlusion with debris ($n = 2$). Four patients (4/40, 10%) developed post-ERCP pancreatitis. Clinical success was achieved after the initial procedure in 34/39 (87%) patients, with a minimum follow-up of two weeks. In one patient, clinical success could not be evaluated due to death within two weeks, resulting from rapid clinical deterioration. Overall, 29 patients underwent surgical exploration or scheduled stent exchange without the need for an unplanned re-intervention (29/40, 72%). Nineteen patients (19/40, 48%) ultimately underwent surgical resection. One patient remains under evaluation for liver transplantation. Surgery was not performed in 20/40 (50%) included patients. In 14 patients this was due to locally advanced or metastatic disease, in two patients due to inadequate FLR volume, in one due to patient withdrawal, and three patients died prior to surgery.

Conclusions This prospective pilot study demonstrates that endoscopic biliary drainage using a suprapapillary plastic stent with a retrieval string is both technically feasible and appears safe in patients with potentially resectable pCCA. Most patients did not require any unplanned re-intervention, and the incidence of cholangitis was substantially lower compared with previous studies [1]. Larger comparative trials are warranted to further evaluate its efficacy, and define its role within the preoperative management strategy for pCCA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Coelen R.J.S. et al. Endoscopic versus percutaneous biliary drainage in patients with resectable perihilar cholangiocarcinoma: a multicentre, randomised controlled trial. *The Lancet Gastroenterology & Hepatology* 2018; 3 (10): p 681–690

PYP052 Clinical outcomes of a novel tapered-and-flared fully covered self-expandable metal stent for malignant distal biliary obstruction: a multicenter retrospective study

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Aims Conventional fully covered self-expandable metal stents (FCSEMS) for malignant distal biliary obstruction (MDBO) are typically cylindrical in shape. Recently, a newly designed tapered-and-flared FCSEMS (K-papilla stent; SB Kawasumi Co., Ltd., Tokyo, Japan) has become available. This stent features a tapered waist toward the distal end and a large distal flare. Its design is expected to reduce stent migration and sludge formation. This multicenter retrospective study evaluated the clinical outcomes of this novel stent.

Methods Forty patients (median age: 76 years; 19 males and 21 females) who underwent placement of a 10-mm K-papilla stent for unresectable MDBO between May 2023 and July 2024 at five institutions in Japan were retrospectively analyzed.

Results The underlying diseases were pancreatic cancer in 32 patients, cholangiocarcinoma in 5, and others in 3. Reasons for unresectability were distant metastasis ($n = 20$), locally advanced disease ($n = 9$), and poor general condition

or patient refusal ($n = 11$). Twenty-seven patients received chemotherapy. The procedure was performed as primary drainage in 13 cases and as reintervention in 27. Pancreatic duct obstruction was present in 26 cases. Regarding the gallbladder, 3 patients had undergone cholecystectomy, 11 had cystic duct invasion, and 26 did not. The technical success rate was 100% (40/40). Stent lengths of 8, 7, and 6 cm were used in 16, 3, and 21 cases, respectively. The clinical success rate was 98% (39/40); one patient failed due to bleeding, which improved after replacement with a 12-mm FCSEMS. Early adverse events included mild pancreatitis ($n = 4$), cholecystitis ($n = 1$), and bleeding ($n = 1$), all of which were resolved conservatively or endoscopically.

Among the 39 patients with clinical success, recurrent biliary obstruction (RBO) occurred in 10 cases during a median observation period of 271 days. The median time to RBO (TRBO) was 539 days (95% CI: 389–NR). The non-RBO rates at 3, 6, and 12 months were 94% (33/35), 71% (20/28), and 61% (11/18), respectively. The causes of RBO were sludge impaction ($n = 6$), overgrowth ($n = 2$), and stent migration ($n = 2$). In addition, three asymptomatic migrations were observed. Late adverse events other than RBO included non-obstructive cholangitis ($n = 5$) and liver abscess ($n = 1$), all managed conservatively without ERCP or drainage. The median overall survival was 252 days.

Conclusions Placement of a tapered-and-flared FCSEMS for unresectable MDBO demonstrated favorable outcomes with a low rate of migration and acceptable safety profile. This novel stent may represent a useful option, warranting further prospective evaluation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP053 What type of second biliary stent should be used after SEMS obstruction in malignant distal strictures? A multicenter retrospective study with competing risk analysis

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Aims Malignant distal biliary obstruction is a frequent complication of advanced pancreatic and biliary tract cancers. Endoscopic placement of self-expandable metal stent (SEMS) is the standard treatment, but dysfunction occurs in 19–40% of cases. The optimal management after SEMS occlusion remains unclear. The aim of this study was to assess and compare three types of second biliary stents (plastic (PS), covered SEMS (CSEMS) and uncovered SEMS (USEMS)) for treatment of primary SEMS occlusion in malignant distal biliary obstruction.

Methods We conducted a multicenter retrospective study in three hospital centers. All patients suffering from malignant distal biliary obstruction and treated for SEMS occlusion between January 2012 and December 2023 were enrolled. Patients with hilar obstruction or benign disease were excluded. All second stents were placed endoscopically using a “stent-in-stent” transpapillary technique. Stent obstruction, stent lifespan and overall survival were compared in patients with PS, CSEMS and USEMS. A competing risk analysis was performed to estimate the cumulative incidence of stent obstruction, taking into account death and surgery as competing events.

Results A total of 142 patients (median age 71.2; 64% male) were included; PS, CSEMS and USEMS were placed in 42, 40 and 60 patients, respectively.

Pancreatic cancer was the most common diagnosis (70.4%). Median time to stent obstruction did not differ significantly between groups, but occlusion rates were lower in the CSEMS group (25%) than in the PS (59.5%) or USEMS groups (45%) ($p = 0.007$). This result was confirmed in the competing risk analysis. In multivariable analysis, stent type was the only independent predictor of obstruction, with PS (SHR = 3.76, $p = 0.004$; ref: CSEMS) and USEMS (SHR = 2.32, $p = 0.042$) associated with stent obstruction. Median overall survival was 157 days and did not differ between groups, but was significantly lower in patients with metastatic disease, best supportive care, and higher bilirubin levels. Adverse event rates were low and similar across groups.

Conclusions As new chemotherapy protocols increase survival of patients with pancreatic cancer and cholangiocarcinoma, the issue of managing biliary stent obstruction is crucial. This study is the largest series evaluating the type of second biliary stent following obstruction of a first SEMS and provides important insights. Compared to USEMS or PS, using CSEMS reduces the risk of second stent occlusion in patients with malignant distal biliary obstruction treated by trans papillary drainage. Second stent type was the only significant predictor of obstruction but did not improve patient overall survival which was mainly determined by the underlying malignant disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP054 Biodegradable Biliary Stents in Benign Biliary Disease: A Systematic Review of Effectiveness and Safety

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Aims Benign biliary strictures and bile leaks remain challenging clinical conditions, frequently managed with plastic or metal stents, which require endoscopic retrieval [1]. Biodegradable biliary stents (BDBS) offer an innovative, non-removable alternative, potentially reducing the need for repeat procedures [2]. This systematic review aimed to evaluate the effectiveness and safety of BDBS in managing benign biliary strictures and post-cholecystectomy bile leaks, identifying pooled success and complication rates, and assessing the quality of existing evidence.

Methods A systematic literature review was performed using PubMed, Scopus, and Web of Science databases, covering studies from January 2000 to March 2025. Search terms included “biodegradable stents,” “benign biliary stricture,” and “bile leak.” Inclusion criteria comprised original human studies reporting outcomes of BDBS in benign biliary conditions. Excluded were animal studies, case reports, editorials, and studies on malignant strictures. Four eligible studies met inclusion criteria, encompassing both prospective and retrospective designs. Key outcomes extracted were clinical success (defined as resolution of stricture or leak without need for reintervention) and complication rates (e.g., stent migration, occlusion, incomplete degradation). This systematic review has been prospectively registered in PROSPERO (Registration number: CRD420251084759) (► Table 1).

► Table 1

Study	Design	Population	N (Patients)	Success Rate	Complication Rate
Giménez et al. (2016) ³	Prospective	Benign biliary strictures	13	84.6 %	15 % (migration)
De Gregorio et al. (2020) ⁴	Prospective Registry	Benign biliary strictures	40	88 %	12 % (occlusion)
Ahmad et al. (2022) ⁵	Retrospective multicenter	Post-cholecystectomy bile leaks	52	90 %	10 % (migration)
Mauri et al. (2013) ⁶	Preliminary Experience	Benign biliary strictures	10	82 %	18 % (incomplete degradation)

Results A total of 115 patients were included across four studies. The pooled clinical success rate for biodegradable biliary stents was 85.07 % (95 % CI: 77.68%–92.45 %), with no significant heterogeneity ($I^2 = 0$ %), suggesting consistency across studies. The pooled complication rate was 14.81 % (95 % CI: 7.54%–22.09 %), reflecting a moderate but acceptable safety profile. The most common adverse events reported included stent migration (10–15 %) and incomplete degradation (up to 18 %). Importantly, no major procedure-related mortality was reported across any of the included studies. Subgroup analysis revealed a slightly higher clinical success rate in post-cholecystectomy bile leak cases (90 %) compared to those with benign biliary strictures (ranging between 82 % and 88 %), although the sample sizes were limited.

Conclusions This review supports the clinical utility of biodegradable biliary stents as a safe and effective option for benign biliary strictures and bile leaks. With a high pooled success rate and acceptable complication profile, BDBS may reduce the burden of repeated endoscopic procedures. However, further high-quality prospective trials are needed to optimize stent design, reduce migration risk, and establish long-term outcomes across diverse patient populations. These findings may inform future guideline development and enhance biliary care pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mauri G, Michelozzi C, Melchiorre F, Poretti D, Tramarin M, Pedicini V et al. Biodegradable biliary stent implantation in the treatment of benign bilio-plastic-refractory biliary strictures: preliminary experience. *Eur Radiol* [Internet]. 2013;[cited 2025 Nov 26] 23 (12): 3304–10. Available from: https://europepmc.org/article/med/23842947?utm_source=chatgpt.com
- [2] Ahmad R, Prawiradiradja R, Ding M, Mohammed U, Farhan S, Asghar A et al. P135 Biodegradable biliary stents are a useful tool in endoscopic treatment of bile leaks. *Gut* [Internet]. 2022;[cited 2025 Nov 26] 71: (Suppl 1): A107–A107. Available from: https://gut.bmj.com/content/71/Suppl_1/A107.2
- [3] De Gregorio MA, Criado E, Guirola JA, Alvarez-Arranz E, Pérez-Lafuente M, Barrufet M et al. Absorbable stents for treatment of benign biliary strictures: long-term follow-up in the prospective Spanish registry. *Eur Radiol* [Internet]. 2020;[cited 2025 Nov 26] 30 (8): 4486–95. Available from <https://pubmed.ncbi.nlm.nih.gov/32221684/>
- [4] Giménez ME, Palermo M, Houghton E, Acquafresca P, Finger C, Verde JM et al. Biodegradable biliary stents: a new approach for the management of hepaticojejunostomy strictures following bile duct injury. Prospective study. *Arq Bras Cir Dig* [Internet]. 2016;[cited 2025 Nov 26] 29 (2): 112–6. Available from: <https://pubmed.ncbi.nlm.nih.gov/27438039/>
- [5] Song G, Zhao HQ, Liu Q, Fan Z. A review on biodegradable biliary stents: materials and future trends. *Bioact Mater* [Internet]. 2022;[cited 2025 Nov 26] 17: 488–95. Available from: <https://pubmed.ncbi.nlm.nih.gov/35415292/>
- [6] Byrne MF. Management of Benign Biliary Strictures. *Gastroenterol Hepatol (N Y)* [Internet]. 2008;[cited 2025 Nov 26] 4 (10): 694. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC3104180/>

PYP055 Treatment of biliary strictures with degradable metallic stents Safety and efficacy of a two-center case series

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DOI 10.1055/s-0046-1820995

Aims Benign biliary strictures (BBS) are commonly managed by progressive calibration using plastic or metallic stents. While fully covered metallic stents (FC-SEMS) enable immediate calibration to a larger diameter compared to plastic stents, they remain prone to migration and their use is limited in intrahepatic and peri-hilar strictures. We report on using uncovered expandable bioresorbable stents in a series of selected BBS patients.

Methods This retrospective bicentric case series included selected patients treated between 2023 and 2025 in two tertiary hospitals (Beaujon Hospital, Clichy, France and HEGP, Paris, France). All patients presented benign strictures not amenable to conventional stenting, due to inability to retrieve the stent because of altered anatomy or because of intrahepatic location (precluding FC-SEMS) with benign indication (precluding Uncovered SEMS).

The bioresorbable stents used (Unity-B, Q3 Medical, Germany) are fastened onto a balloon and expanded to the desired diameter (up to 10 mm). Complete resorption occurs over 3 months. All patients were followed for several months after the procedure. Technical success, clinical success, and adverse events were recorded.

Results 7 procedures were performed in 7 patients, with a total of 10 bioresorbable stents implanted.

- **Four patients** had altered anatomy with a stricture of a bilio-digestive anastomosis. All initially underwent external drainage with placement of an internal–external drain. Deployment of a Unity-B stent percutaneously enabled removal of the drain and internalization of biliary drainage while maintaining dilation of the anastomosis for an additional 3 months. Three of these patients received two Unity-B stents: two because of a right–left liver disconnection requiring a dual-access approach, and one because of a long stricture.
- **Two patients** were treated with extra-anatomical endoscopic drainage (one choledochojejunostomy and one hepaticogastrostomy) for an anastomotic bilio-digestive stricture after pancreaticoduodenectomy, associated with lithiasis. Placement of a bioresorbable stent allowed replacement of the lumen-apposing metal stent used to create the neo-anastomosis in one case and completed an antegrade lithotripsy in the second case. Both ensured calibration of the tract, and facilitated removal of the upstream bile duct stone.

- **One patient** was treated for dilation of an intrahepatic stricture following radiofrequency ablation, achieving a larger calibration than would have been possible with a plastic stent and while FC-SEMS of Uncovered SEMS were precluded. A follow-up ERCP showed no residual stricture and no remaining stent debris.

Technical success was achieved in all cases (100%). 86% had clinical success with one patient experiencing recurrence due to tumoral relapse. No per-procedural or long-term adverse events were reported.

Conclusions The use of bioresorbable UNITY-B stents appears feasible, efficient and safe for selected benign biliary strictures, including intrahepatic locations. Its use allowed calibration of strictures that would have been inaccessible with standard stents. Further studies are needed to confirm these preliminary findings

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP056 Clinical Outcomes of Metal Stents in Refractory Benign Biliary Strictures: A Multicenter Retrospective Study Comparing Initial Versus Rescue Therapy

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DOI 10.1055/s-0046-1820996

Aims Refractory benign biliary strictures (BBS) often require prolonged endoscopic treatment with multiple plastic stents (MPS), leading to repeated ERCP sessions and a high procedural burden. Fully covered self-expandable metal stents (FCSEMS) have been introduced as an alternative, but the optimal strategy—initial versus rescue FCSEMS—remains unclear. This study aimed to compare clinical outcomes of different stent strategies and to identify risk factors for stricture recurrence in patients with refractory BBS.

Methods In this multicenter retrospective cohort study, 150 patients with refractory BBS treated between 2016 and 2023 at four tertiary referral centers were analyzed. Patients were classified into three groups: plastic–plastic, plastic–metal (conversion to FCSEMS after plastic stents), and metal–metal (initial FCSEMS). Refractory BBS was defined as persistent stricture despite ≥ 12 months of plastic stenting or ≥ 6 months of FCSEMS. The primary outcome was stricture resolution; secondary outcomes included treatment duration, number of ERCP sessions, adverse events, and recurrence-free period. Predictors of recurrence were evaluated using multivariable logistic regression and ROC analysis.

Results Of the 150 patients, 32, 48, and 70 were assigned to the plastic–plastic, plastic–metal, and metal–metal groups, respectively. Initial FCSEMS significantly reduced treatment duration (297.8 vs. 581.4 and 600.7 days; $p < 0.01$) and the number of ERCP procedures (4.0 vs. 7.4 and 6.1; $p < 0.001$). Stricture resolution at 12 and 24 months was higher in the metal–metal group (80.0% and 92.9%) than in plastic-first strategies (37.5% and 73.8%; $p < 0.001$ and $p = 0.002$). Recurrence rates after stent removal were similar among groups (27.5–31.3%, $p = 0.786$). Early cholangitis, late cholangitis, and post-ERCP pancreatitis were significantly more frequent in the plastic–plastic group. Living donor liver transplantation (LDLT) (OR 4.13, $p = 0.003$) and stricture length ≥ 12 mm (OR 4.87, $p < 0.001$) were independent predictors of recurrence.

Conclusions In refractory BBS, an initial FCSEMS strategy shortens treatment duration, reduces ERCP burden, and improves stricture resolution without increasing recurrence, while plastic stents are associated with higher infectious complication rates. LDLT and longer strictures identify patients at high risk of recurrence. Early consideration of FCSEMS may represent an efficient therapeutic approach and should be further validated in prospective trials.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP057 Covered metal stents for endoscopic management of post-liver transplant biliary anastomotic strictures : a multicentric retrospective comparison between intraductal and transpapillary stents

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DOI 10.1055/s-0046-1820997

Aims Liver transplantation is the gold-standard treatment for irreversible liver failure. Biliary complications, particularly anastomotic choledcho-choledochal strictures, remain frequent and have a significant impact on patient survival. Endoscopic treatment with multiple plastic stents (MPS) is effective but is limiting due to the need for repeated procedures. Fully covered self-expandable metal stents (FCSEMS), especially transpapillary ones, reduce the number of procedures but have limitations, notably the risks of migration and post-ERCP pancreatitis. A new type of stent, the intraductal self-expandable metal stent (IDSEMS), has been designed to improve both safety and efficacy. The aim of this study was to directly compare transpapillary and intraductal covered metal stents in the management of post-liver transplantation anastomotic biliary strictures.

Methods We performed a retrospective bicentric study in two university hospitals between 2010 and 2024, including liver transplant recipients with anastomotic strictures treated with either a transpapillary or an intraductal covered metal stent. The primary endpoint was overall stricture resolution. Secondary outcomes included one-year success rate, recurrence, number of procedures needed, length of hospital stay and adverse events. Statistical analysis was based on comparative tests and Kaplan-Meier curves, with a significance threshold set at $p < 0.05$.

Results A total of 61 patients were included, 30 treated with FCSEMS and 31 with IDSEMS. The overall stricture resolution rate was achieved in 76.6% of FCSEMS cases versus 89.7% of IDSEMS cases, with no significant difference ($p = 0.299$). For secondary outcomes, one-year success was 86.2% with IDSEMS vs 70.0% with FCSEMS ($p = 0.209$). Calibration duration was similar (median 232.5 days for IDSEMS vs 203.0 days for FCSEMS, $p = 0.992$), as were the number of procedures (2 for IDSEMS vs 3 for FCSEMS, $p = 0.817$) and hospital stay (11 vs 12 days, $p = 0.567$). Recurrence occurred less frequently and later with IDSEMS (19.2% with a median delay of 301 days vs 27.3% and 164 days with FCSEMS), though without reaching statistical significance. Overall complication rates were comparable, however IDSEMS were associated with significantly fewer migrations (6.5% vs 26.7%, $p = 0.041$) and post-ERCP pancreatitis (6.5% vs 33.3%, $p = 0.11$).

Conclusions This is the first retrospective study comparing the two models of covered metal stents. Both demonstrated similar efficacy in treating post-transplant anastomotic biliary strictures. However, IDSEMS showed a clear favorable trend in overall resolution and recurrence rates. They also appeared better tolerated, with fewer migrations and episodes of pancreatitis, representing a promising alternative. Prospective, randomized, multicenter studies are warranted to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP058 Impact of coaxial double-pigtail stent placement on lumen-apposing metal stents for EUS-guided choledochoduodenostomy: an Italian multicenter study

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DOI 10.1055/s-0046-1820998

Aims Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) with lumen-apposing metal stents (LAMS) is an established technique for biliary drainage in malignant distal obstruction [1, 2]. Nevertheless, recurrent biliary obstruction (RBO) due to stent occlusion or migration remains a concern and the placement of a coaxial double-pigtail stent (DPS) has been proposed to improve long-term stent patency [3]. This multicenter Italian study compared RBO rates between EUS-CDS performed with LAMS alone and LAMS combined with a coaxial DPS.

Methods We conducted a retrospective analysis of consecutive patients who underwent EUS-CDS across eleven Italian tertiary centers between October 2023 and October 2025. Patients were stratified into two groups: LAMS-alone and LAMS-plus-DPS. The primary endpoint was the incidence of RBO after achieving clinical success. Secondary outcomes included technical and clinical success, adverse events (AEs), and reintervention rates.

Results A total of 192 patients were included (142 treated with LAMS alone and 50 with LAMS-plus-DPS). RBO occurred in 23/142 (16.2%) patients in the LAMS-alone group compared with 4/50 (8.0%) in the LAMS-plus-DPS group (risk ratio 2.02, 95% CI 0.74–5.57; $p=0.23$). Technical and clinical success rates exceeded 95% in both groups, and no significant differences were observed in adverse events or in the need for reintervention.

Conclusions In this Italian multicenter experience, EUS-CDS using LAMS with a coaxial DPS was associated with a lower rate of RBO compared with LAMS alone. Although the difference was not statistically significant, the data support further investigation in larger, prospective trials to better define the role of DPS in optimizing long-term stent patency.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Teoh AYB et al. Use of coaxial plastic stents to prevent LAMS dysfunction in EUS-guided biliary drainage. *Endoscopy*. 2020
- [2] Jacques J et al. Long-term outcomes of EUS-guided choledochoduodenostomy with LAMS. *Gut*. 2022
- [3] Paik WH et al. EUS-guided biliary drainage versus ERCP for first-line palliation of malignant distal biliary obstruction: a randomized trial. *Gastrointest Endosc*. 2018

PYP059 Transmural EUS-Guided Biliary Drainage Stent Dysfunction: Mechanisms, Management, and Long-Term Outcomes

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DOI 10.1055/s-0046-1820999

Aims EUS-guided biliary drainage (EUS-BD) has become an established therapeutic alternative to ERCP. While the efficacy of hepaticogastrostomy (HGS) and choledochoduodenostomy (CDS) is well-documented, the long-term management of their specific adverse events remains a challenge. Dysfunction of transmural stents is a clinically relevant problem, yet data concerning specific dysfunction mechanisms, optimal management strategies, and relative outcomes after reintervention HGS/CDS dysfunction are limited.

The primary objectives of this study are to describe the mechanisms of dysfunction following transmural EUS-BD (HGS or CDS) and their management. Secondary objectives include describing the time to dysfunction for primary stents and after the first biliary reintervention, comparing long-term performance of HGS vs CDS, and identifying independent predictors of recurrent dysfunction.

Methods We conducted a retrospective, multicenter study involving three Spanish tertiary referral centers over a 7-year period (2017-2024). The study population consisted of consecutive patients presenting with dysfunction of a previously placed EUS-guided biliary drainage.

We collected comprehensive data including patient demographics, etiology of obstruction, indication for the initial EUS-BD, and technical characteristics of the primary stents used.

Statistical analysis included descriptive statistics for demographic and clinical variables. Kaplan-Meier curves were generated to estimate the time to dysfunction (both primary and post-reintervention). A stratified Cox regression analysis was performed to identify independent predictors of recurrent dysfunction [1–3].

Results A total of 91 dysfunction events (70 HGS and 21 CDS) were analyzed in 61 patients. The cohort was 59.02% male with a mean age of 68.61 years ($SD \pm 10.26$). The etiology of biliary obstruction was predominantly malignant (78.43%), with tumors located mainly in the distal bile duct (50.98%) and hilar region (27.45%). The primary indication for the initial EUS-BD was failed ERCP cannulation (35.29%), followed by dysfunction of a prior indwelling transpapillary stent (25.49%). The most frequently used stents were 10x80-mm covered SEMS for HGS and 8 mm LAMS for CDS.

The median time to first dysfunction (primary stent failure) was 168.5 days (IQR 58-337.5). All patients underwent an endoscopic revision. The leading cause of dysfunction was obstruction by sludge and food debris (46.15%), followed by tissue ingrowth (16.48%), with no significant difference between access routes ($p=0.48$). However, technique-specific failure profiles were identified: gastric stent migration was a specific complication of HGS (15.71%), whereas duodenal obstruction and sump syndrome were specific to CDS (9.52%). Management strategies differed significantly between groups. In HGS dysfunction, stent exchange was the most common intervention (40.57%), whereas in CDS, clearance followed by coaxial pigtail insertion was the preferred strategy (55%).

Following the first biliary reintervention (BRI), the median time to recurrent dysfunction increased to 456 days (IQR 184–1363). Comparison between HGS and CDS showed no significant differences in the time to recurrent failure ($p = 0.79$). In the stratified analysis, for HGS, the presence of a distal malignant stenosis was the only independent risk factor associated with recurrent failure (HR 28.98; $p = 0.029$). Notably, no specific reintervention technique (cleaning, exchange, or coaxial stenting) demonstrated a statistically significant improvement in prolonging the time to dysfunction in either group.

Conclusions This is the first study to jointly analyze dysfunction in HGS and CDS. Although their failure profiles and initial management differ, their long-term patency after reintervention is comparable. Risk factors for recurrent failure are technique-specific. The finding that no single management strategy was superior suggests that a personalized approach, tailored to the specific cause of dysfunction, is required.

Conflicts of Interest Manuel Perez-Miranda, Belén Martínez-Moreno, and José R. Aparicio Tormo are Boston Sci consultants. Manuel Perez-Miranda is Olympus and M.I. Tech consultant. Manuel Perez-Miranda has received a speaker honorarium from Boston Sci, Olympus, and MI Tech.

References

- [1] Spanish Working Group on Endoscopic Ultrasound Biliary Drainage Sumalla-García A, Aparicio-Tormo JR, Pedraza-Sanz R, Sanchiz-Soler V, De-la-Serna Higuera C, Andujar X, Vazquez-Sequeiros E, Puigcerver-Mas M, Martínez-Moreno B, Barbera T, Capilla-Lozano M, Martínez-Ortega A, Foruny-Olcina JR, Luna-Rodríguez D, García-Lerma E, Peñafiel J, Busquets Barenys J, Laquente-Saez B, Perez-Miranda M, Videla S, Loras C, Gornals JB Lumen-Apposing Stents With or Without Pigtail in Endosonography-Guided Biliary Drainage for Malignant Distal Biliary Obstruction. *Clin Gastroenterol Hepatol*. 2025; S1542-3565 (25): 00611–1. doi:10.1016/j.cgh.2025.05.025 Epub ahead of print PMID: 40701486
- [2] Nakai Y, Sato T, Hakuta R, Ishigaki K, Saito K, Saito T, Takahara N, Hamada T, Mizuno S, Kogure H, Noguchi K, Ito Y, Isayama H, Koike K. Long-term outcomes of a long, partially covered metal stent for EUS-guided hepaticogastrostomy in patients with malignant biliary obstruction (with video). *Gastrointest Endosc*. 2020; 92 (3): 623–631.e1. doi:10.1016/j.gie.2020.03.3856 Epub 2020 Apr 9 PMID: 32278705
- [3] Vanella G, Bronswijk M, Dell'Anna G, Voermans RP, Laleman W, Petrone MC, van Malenstein H, Fockens P, Arcidiacono PG, van der Merwe S, van Wanrooij RLJ. Classification, risk factors, and management of lumen apposing metal stent dysfunction during follow-up of endoscopic ultrasound-guided choledochoduodenostomy: Multicenter evaluation from the Leuven-Amsterdam-Milan Study Group. *Dig Endosc*. 2023; 35 (3): 377–388. doi:10.1111/den.14445 Epub 2022 Nov 9 PMID: 36177532 PMID: PMC12136247

PYP060 Lumen Apposing Metal Stent vs Self-Expandable Metal Stent for EUS-guided choledochoduodenostomy: a network meta-analysis of randomized controlled trials

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Aims Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) has emerged as an alternative to endoscopic retrograde cholangiopancreatography (ERCP) for biliary drainage in patients with malignant distal biliary obstruction (MDBO). With cautery-enhanced lumen-apposing metal stents (CE-LAMS), EUS-CDS has become more feasible, yet concerns remain regarding stent patency and safety. Comparative data between CE-LAMS-based and conventional self-expandable metal stents (SEMS)-based EUS-CDS are lacking.

Methods A systematic review and network meta-analysis was conducted including randomized controlled trials (RCTs) comparing EUS-CDS using CE-LAMS or SEMS with ERCP in MDBO. Procedural outcomes were technical success defined as the rate of accurate placement of either LAMS, or SEMS within the CBD, with bile flowing through the stent, and mean procedure time, defined as the time (in minute) to reach the technical success. Clinical outcomes were clinical success defined as the pooled rate of patients with a $\geq 50\%$ reduction in serum bilirubin to < 3 mg/dL within two weeks (and clinical improvement in case of concomitant cholangitis), and overall adverse events. Pooled rate of cholangitis, was also assessed, it was defined and classified per the American Society for Gastrointestinal Endoscopy lexicon. Pairwise and network meta-analyses were performed using random-effects models. Ranking probabilities were assessed using the surface under the cumulative ranking curve (SUCRA).

Results Six randomized controlled trials, comprising 707 patients, were included in the analysis.

EUS-CDS with EC-LAMS significantly outperformed both EUS-CDS with SEMS (RR: 1.22; 95% CI: 1.10 to 1.36) and ERCP (RR: 1.18; 95% CI: 1.10 to 1.27) in achieving technical success. No significant difference was observed between EUS-CDS with SEMS and ERCP in either the direct (RR: 0.97; 95% CI: 0.89 to 1.05) or the indirect comparison (RR: 0.97; 95% CI: 0.89 to 1.05). SUCRA analysis identified EUS-CDS with EC-LAMS as the best-performing approach (SUCRA = 1.00), while EUS-CDS with SEMS ranked lowest (SUCRA = 0.12). In terms of procedure time, EUS-CDS with EC-LAMS demonstrated a significantly shorter duration compared to both EUS-CDS with SEMS (SMD: -0.78 ; 95% CI: -1.30 to -0.27) and ERCP (SMD: -0.84 ; 95% CI: -1.16 to -0.52). No significant difference in procedure time was found between EUS-CDS with SEMS and ERCP in either the direct (SMD: -0.05 ; 95% CI: -0.35 to 0.46) or the indirect comparison (SMD: -0.05 ; 95% CI: -0.35 to 0.46). SUCRA rankings again favored EUS-CDS with EC-LAMS as the most effective strategy (SUCRA = 1.00), while EUS-CDS with SEMS and ERCP ranked equally as the least favorable options (SUCRA = 0.25). On network meta-analysis, no difference was observed among the different techniques of performing EUS-CDS in terms of clinical success as

compared to ERCP or compared to each other. SUCRA analysis identified EUS-CDS with EC-LAMS as the best-performing approach (SUCRA = 0.68), while EUS-CDS with SEMS ranked lowest (SUCRA = 0.27). When focusing on safety, in the network meta-analysis, no significant differences in adverse event rates were observed among the various techniques of EUS-CDS compared to ERCP, nor among the EUS-CDS techniques themselves. According to SUCRA analysis, EUS-CDS with SEMS was identified as the safest approach (SUCRA = 0.85), while ERCP ranked lowest (SUCRA = 0.29). When specifically assessing the incidence of cholangitis, no significant differences were found among the different biliary drainage strategies [1–6].

Conclusions EUS-CDS with CE-LAMS offers superior procedural efficiency compared to ERCP and SEMS-based approaches with similar clinical success and safety, though concerns about cholangitis warrant further evaluation.

Conflicts of Interest A. F.: Consulting fees for Boston Scientific. A. R. has received fees for serving as a consultant from Fujifilm Co. Medtronic Co., and Olympus Corp. C. H. has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co.

References

- [1] Anderloni A, Spadaccini M, Binda C et al. Endoscopic ultrasound-guided choledochoduodenostomy vs endoscopic retrograde cholangiopancreatography in malignant distal biliary obstruction to prevent postprocedural pancreatitis: a randomized trial. *Gastroenterology*. 2025; Epub ahead of print.
- [2] Chen Y-I, Sahai A, Donatelli G et al. Endoscopic Ultrasound-Guided Biliary Drainage of First Intent With a Lumen-Apposing Metal Stent vs Endoscopic Retrograde Cholangiopancreatography in Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Study (ELEMENT Trial). *Gastroenterology* 2023; 165: 1249–1261.e5. doi:10.1053/j.gastro.2023.07.0
- [3] Teoh AYB, Napoleon B, Kunda R et al. EUS-Guided Choledochoduodenostomy Using Lumen Apposing Stent Versus ERCP With Covered Metallic Stents in Patients With Unresectable Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Trial (DRA-MBO Trial). *Gastroenterology* 2023; 165: 473–482.e2. doi:10.1053/j.gastro.2023.04.016
- [4] Park JK, Woo YS, Noh DH et al. Efficacy of EUS-guided and ERCP-guided biliary drainage for malignant biliary obstruction: prospective randomized controlled study. *Gastrointest Endosc* 2018; 88: 277–282. doi:10.1016/j.gie.2018.03.015
- [5] Paik WH, Lee TH, Park DH et al. EUS-Guided Biliary Drainage Versus ERCP for the Primary Palliation of Malignant Biliary Obstruction: A Multicenter Randomized Clinical Trial. *Am J Gastroenterol* 2018; 113: 987–997. doi:10.1038/s41395-018-0122-8
- [6] Bang JY, Navaneethan U, Hasan M et al. Stent placement by EUS or ERCP for primary biliary decompression in pancreatic cancer: a randomized trial (with videos). *Gastrointest Endosc* 2018; 88: 9–17. doi:10.1016/j.gie.2018.03.012

How to approach a pancreatic cyst: Integrating EUS features, molecular diagnostics and artificial intelligence

14/05/2026, 14:00–15:00

Emerald 3

PYP061 Can EUS Predict Malignancy in IPMN with MPD Dilatation? Insights from a Retrospective Cohort

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DOI 10.1055/s-0046-1821001

Aims Main pancreatic duct (MPD) dilatation in patients with intraductal papillary mucinous neoplasms (IPMN) is a known risk factor for malignancy, yet its predictive value remains debated, especially in non-resected patients. We aimed to evaluate whether endoscopic ultrasound (EUS) features of the MPD can predict malignancy in patients with cyst-associated MPD dilatation.

Methods We retrospectively analyzed 231 patients who underwent EUS for pancreatic cysts with MPD dilatation (≥ 5 mm). Malignancy was defined as high-grade dysplasia (HGD) or invasive carcinoma (IC) in resected patients, or progression to cancer/metastases during ≥ 12 months of follow-up. EUS features (diameter, wall thickening, content, course, nodules) were reviewed by two blinded endosonographers. Statistical analysis included logistic regression, ROC curves, and Kaplan–Meier survival estimates (► **Table 1**).

Results Among 231 patients, 88 underwent surgical resection and 141 were managed with surveillance. Malignancy was diagnosed in 70 patients (67 surgical, 3 during follow-up). Malignant patients were younger than non-malignant ones (65.2 ± 10 vs 68.7 ± 9.6 years, $p = 0.023$). On univariate analysis, several EUS features were significantly associated with malignancy: thickened MPD walls (30 % vs 16 %, $p = 0.034$), inhomogeneous ductal content (54 % vs 31 %, $p = 0.002$), tortuous ductal course (56 % vs 37 %, $p = 0.014$), and presence of nodules (23 % vs 7 %, $p = 0.003$). MPD diameter was higher in malignant cases (8.2 ± 3.3 mm vs 7.5 ± 4.4 mm), but not statistically significant ($p = 0.242$). In multivariate analysis, inhomogeneous content (OR = 2.10, $p = 0.054$) and nodules (OR = 2.53, $p = 0.086$) showed trends toward independent association with malignancy. The logistic regression model incorporating EUS features yielded an area under the ROC curve (AUC) of 0.783 (95 % CI: 0.556–1.00; $p = 0.014$), indicating good discriminative ability. In the surveillance subgroup, 3 patients progressed to advanced PDAC during follow-up. Kaplan–Meier analysis showed a gradual decline in progression-free survival, with approximately 30 % of patients experiencing progression at 36 months.

Conclusions EUS features such as inhomogeneous MPD content and nodules were associated with malignancy in IPMN patients with ductal dilatation. These findings suggest that detailed ductal morphology may enhance risk stratification beyond duct diameter alone, supporting its integration into clinical decision-making.

► Table 1

Variables	Malignant N = 70	Non-malignant N = 98	Univariate Analysis P value	Multivariate Analysis	
				P	OR (95 % CI)
MPD size	8.2 ± 3.3	7.5 ± 4.4	0.242		-
MPD walls					
Regular	49 (70 %)	82 (83.7 %)			
Thickened	21 (30 %)	16 (16.3 %)	0.034	0.678	0.814 (0.308-2.153)
MPD content					
Anechoic	32 (45.7 %)	68 (69.4 %)	0.002		
Inhomogeneous	38 (54.3 %)	30 (30.6 %)		0.054	2.100 (0.986-4.472)
MPD course					
Regular	31 (44.3 %)	62 (63.2 %)			
Tortuous	39 (55.7 %)	36 (36.8 %)	0.014	0.090	1.822 (0.910-3.649)
Nodules	16 (22.8 %)	7 (7.1 %)	0.003	0.086	2.531 (0.877-7.305)
Cyst size	27.6 ± 15.6	27.1 ± 15.6	0.844	-	
Atrophy					
Yes	18 (25.7 %)	20 (20.4 %)			
No	52 (74.3 %)	78 (79.6 %)	0.417	-	
Calcifications					
Yes	8 (11.4 %)	5 (5.1 %)			
No	62 (88.6 %)	93 (94.9 %)	0.151	-	

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP062 Branch-duct IPMNs measuring less than 10 mm exhibit a significantly lower risk of “worrisome features”: implications for endosonographic surveillance

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DOI 10.1055/s-0046-1821002

Aims Pancreatic carcinoma is among the malignant tumours with the highest mortality and remains associated with an extremely poor prognosis. Early identification and surveillance of premalignant lesions, such as intraductal papillary mucinous neoplasms (IPMNs), are therefore of central importance for preventing malignant transformation. According to the current Kyoto Guidelines, for small branch-duct IPMNs (BD-IPMNs) measuring less than 20 mm and lacking high-risk factors (“worrisome features”), endoscopic ultrasonography (EUS) surveillance every 18 months is recommended. However, it remains unclear whether BD-IPMNs smaller than 10 mm carry a comparable risk of progression and therefore require monitoring at the same interval. The aim of this study is to evaluate whether BD-IPMNs smaller than 10 mm exhibit a similar risk for the development of “worrisome features” as BD-IPMNs measuring between 10 and 20 mm.

Methods In this retrospective analysis, all patients who had undergone at least two endoscopic ultrasound (EUS) examinations at St. Josef-Hospital Bochum

between January 1, 2006, and September 30, 2025, were identified based on the coded ICD diagnoses K86.2 (“pancreatic cyst”) or D37.70 (“neoplasm of uncertain or unknown behaviour: pancreas”). Data were collected from the clinical information system, and a total of 843 patients were identified.

Results As part of an ongoing project, 131 of the 843 identified patients have been fully evaluated to date. Among them, 47 patients (35.9 %) presented with a BD-IPMN measuring < 10 mm at the time of initial diagnosis. The mean follow-up period was 7.6 ± 3.3 years, with an average of 12.9 EUS examinations per patient. For comparison, 39 patients (29.8 %) with BD-IPMNs measuring 10–20 mm were identified (mean follow-up period 7.0 ± 3.4 years; average of 13.4 EUS examinations). Lesions measuring 10–20 mm showed a 7.6-fold higher risk of developing “worrisome features” compared to lesions < 10 mm (6.4 % vs. 48.7 %, $p = 0.0005$). The most common worrisome features in patients with lesions < 10 mm were elevated CA19-9 levels ($n = 3$), followed by cyst growth ≥ 2.5 mm per year ($n = 2$). In contrast, the most common worrisome features in patients with BD-IPMNs measuring 10–20 mm were cyst growth ≥ 2.5 mm per year ($n = 14$), followed by a main pancreatic duct diameter of 5–10 mm ($n = 6$) and elevated CA19-9 levels ($n = 5$).

Conclusions The preliminary data indicate a significantly lower risk for the development of “worrisome features” in BD-IPMNs smaller than 10 mm compared to larger lesions (10–20 mm). In the extended analysis of the larger cohort, it will be assessed whether it is safe for this subgroup of patients to extend the surveillance interval or to omit further EUS follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP063 Through-the-needle biopsy revisited: How Patient Selection and Standardization Reduce Adverse Events in Pancreatic Cyst Evaluation

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DOI 10.1055/s-0046-1821003

Aims Pancreatic cystic lesions (PCLs) are increasingly detected due to the widespread use of cross-sectional imaging. Endoscopic ultrasound (EUS) is the preferred modality for evaluating their nature and malignancy risk, yet fluid analysis and cytology offer limited sensitivity. Through-the-needle biopsy (TTNB) has emerged as a more accurate diagnostic tool, though associated with higher adverse event (AE) rates. In 2021, our center implemented a selective TTNB protocol excluding frail or elderly patients and suspected IPMNs, and standardizing the procedure to two passes, complete cyst aspiration, and selective antibiotic prophylaxis. This study aimed to compare AE rates before and after protocol implementation, evaluate safety factors including antibiotic use, and assess TTNB adequacy and diagnostic accuracy (► **Table 1**).

Methods We retrospectively analyzed consecutive patients referred for TTNB at AOUI Verona between March 2016 and March 2025, dividing them into two groups: before (Group A) and after (Group B) protocol adoption. Patients not punctured due to technical issues, lack of indication, or presumed pseudo-cystic nature were excluded.

Results Of 970 patients evaluated by EUS, 190 underwent TTNB (100 in Group A, 90 in Group B). Lesions were mainly located in the pancreatic body or tail, with significantly larger size in Group B. Overall AE rate was 6.3%, significantly higher in Group A (11%) than in Group B (1%). Antibiotic prophylaxis was not associated with AE occurrence. TTNB adequacy was 88.9%, and diagnostic accuracy 75.3%. Among 68 surgical cases, TTNB was accurate in 79.4%.

Conclusions A selective and standardized TTNB approach significantly reduces AEs while maintaining high adequacy and diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP064 Longitudinal Analysis of DNA From Pancreatic Cysts Across Serial EUS With FNA

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Aims The ubiquity of imaging has increased pancreatic cysts detection. The Kyoto pancreatic cyst guidelines include concerning characteristics such size > 3 cm, mural nodule, and dilated main pancreatic duct. Mucinous pancreatic cysts are potentially malignant neoplasms. GNAS and K-ras mutations have demonstrated good specificity for pancreatic lesions but sensitivity remains limited. Repetitive FNAs (fine needle aspiration) could increase this specificity by analyzing cysts' DNA fluid longitudinally. We retrospectively analyzed patients who underwent pancreatic resections to assess their precursor cysts for their CEA and DNA.

Methods We performed a retrospective review of patients with pancreatic cysts who underwent multiple EUS with FNA from 2012-2024 at a single tertiary care center. Aspirated cyst fluid was analyzed using the molecular pathology test PancaGen. DNA transformation was defined as presence of GNAS and KRAS from previous negative DNA analysis. Odds ratio was used for statistical analysis. Patients that ultimately underwent pancreatic resections were also specifically analyzed.

► **Table 1**

Variables	Univariate analysis		Multivariate analysis	
	AEs Yes/no	p value	P value	OR (95% CI)
Group				
A	11/89			
B	1/89	0.004	0.023	11.5 (1.40-94.07)
Complete Aspiration				
Yes	5/127			
No	3/55	0.833	–	
Antibiotic administration				
Yes	6/143			
No	2/39	0.646	–	
Final diagnosis				
Mucinous	8/75			
Non-mucinous	2/96	0.062	0.025	(1.2 – 32.10)
Unknown	2/17			

Results 185 patients with pancreatic cysts underwent multiple EUS with FNA with a median of 4 (range 2 to 8). We observed GNAS and K-ras mutations at initial FNA in 22 patients (11.9%) with DNA transformation following serial EUS with FNA in 35 patients (18.9%). Among 82 patients with CEA > 192 ng/ml, 11 patients (13.4%) had GNAS and K-ras mutations at initial FNA with DNA transformation in 24 patients (29.3%). In contrast, among 103 patients with CEA < 192 ng/ml, only 11 patients (10.7%) had GNAS and K-ras mutations at initial FNA with DNA transformation in 24 patients (23.3%; OR: 3.46, $p < 0.05$). 33 patients (40.2%) underwent pancreatic resections. Surgical pathology revealed IPMN (intraductal papillary mucinous neoplasm) or MCN (mucinous cystic neoplasm) in 26 samples (78.8%) while 7 revealed serous pathology. 12 IPMN patients (46.2%) had KRAS mutations, but specificity of IPMN with positive KRAS mutations was 100%. None of the IPMN patients had GNAS mutations.

Conclusions GNAS and K-ras mutations can transform across repetitive EUS with FNA particularly when CEA is greater than 192 ng/ml. These findings can validate serial cyst surveillance by EUS with FNA in selected patients. The specificity of K-ras was 100% in IPMN surgical pathologies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP065 A promising diagnostic role of immunohistochemical expression of insulin-like growth factor II mRNA binding protein 3 (IMP3) in pancreatic lesions using endoscopic ultrasound -Guided -Fine Needle Aspiration (EUS-FNA) Cytology

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DOI 10.1055/s-0046-1821005

Aims This prospective work is to assess the diagnostic role of EUS-FNA combined with the immunohistochemical expression of IMP3 on different benign and malignant pancreatic lesions.

Methods The included pancreatic lesions ($n = 140$) were obtained by EUS-FNA technique and stained for IMP3 immunohistochemically. Paraffin blocks from patients who underwent excision ($n = 92$) or core biopsies ($n = 48$) were performed for confirming diagnosis [1, 2].

Results The combined method for diagnosis showed that IMP3 was positive in 78.7%, 91.7%, 100% PAC, mucinous neoplasm with high grade dysplasia, and IPMN with high grade dysplasia, respectively, while almost all benign lesions showed negative IMP3. Also, this method showed sensitivity (78.26%), specificity (95.83%), and accuracy (84.3%).

Conclusions EUS-FNA cytology with IMP3 could be a reliable diagnostic tool especially for assessment of malignant pancreatic lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Howlader N, Noone AM, Krapcho M et al (eds). SEER Cancer Statistics Review, 1975-2017, National Cancer Institute, Bethesda, MD https://seer.cancer.gov/csr/1975_2017/ based on November 2018 SEER data submission, posted to the SEER website, April 2019
- [2] American Cancer Society. Facts & Figures 2021. American Cancer Society. Atlanta, Ga. 2021

PYP066 Can we predict biopsy accuracy in iPMNs? Preoperative prediction of cytology-histology concordance combining EUS-FNA and a machine learning approach

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DOI 10.1055/s-0046-1821006

Aims Intraductal papillary mucinous neoplasms (IPMNs) are increasingly diagnosed due to rising life expectancy and widespread use of abdominal imaging. Despite the publication of several guidelines to drive the management of IPMNs, a significant proportion of patients still undergo surgical resection for lesions ultimately classified as low-grade dysplasia (LGD), while others managed conservatively may progress to invasive carcinoma (IC). Pancreatic surgery could have high perioperative morbidity and mortality, highlighting the need for improved preoperative stratification. Among the available tools, endoscopic ultrasound with fine-needle aspiration (EUS-FNA) represents a key diagnostic method for assessing the risk of malignancy in IPMN. This study aimed to evaluate the diagnostic accuracy of EUS-FNA in predicting histological dysplasia grade in surgically resected IPMNs.

Methods We retrospectively included patients who underwent both EUS-FNA and surgery at San Raffaele Hospital. Surgical diagnoses were classified into LGD, high-grade dysplasia (HGD), or IC, while cytological diagnoses also included "Negative for malignant cells" (NMC). We defined STRICT criteria (SC) as exact cytological-histological concordance (considering NMC as non-concordant), while LARGE (LC) considered NMC equal to LGD. Concordance was assessed using Fleiss' kappa (κ) and linear weighted κ . Uni- and multivariate logistic regressions were conducted to identify predictors of concordance. Diagnostic performance of EUS cytology in distinguishing LGD and HGD/IC was evaluated through sensitivity, specificity, PPV, NPV, and accuracy. A Random Forest classifier was developed to predict concordance before FNA utilizing three variables: patient age, main pancreatic duct (MPD) dilation, and IPMN subtype. The model was trained on the entire dataset with 100 decision trees and a fixed random state to ensure reproducibility (► Table 1).

► Table 1

Sensitivity	0.750
Specificity	0.892
PPV	0.931
NPV	0.647
Accuracy	0.798

Results Ninety-four patients were included (36% branch duct-, 41% main duct-, 23% mixed type-IPMN). The concordance using SC and LC criteria was moderate (Fleiss' κ respectively 0.41 and 0.36). The weighted κ was 0.55. When stratified, concordance was $\kappa = 0.52$ for LGD 0.437 for IC, and 0.109 for HGD. Univariate analysis identified diffuse MPD dilation ($p = 0.0016$ SC, $p = 0.0002$ LC), cyst wall enhancement ($p = 0.0955$ SC), grade of dysplasia ($p = 0.0809$ SC, < 0.00001 LC), and IPMN subtype ($p = 0.0433$ LC) as significant. Multivariate analysis confirmed cyst wall enhancement (OR = 0.128, $p = 0.0334$) and grade of dysplasia (OR = 0.239, $p = 0.0094$) as independent predictors using SC, while the latter one alone (OR = 0.354, $p = 0.0027$) when LC were considered. Diagnostic performance of EUS cytology in distinguishing LGD vs HGD/IC showed sensitivity 75%, specificity 89.2%, PPV 93.1%, NPV 64.7%, accuracy 79.8%. The Random Forest model demonstrated high predictive performance, achieving an accuracy of 94.7% and an area under the receiver operating characteristic curve (AUC) of 0.99. It correctly classified 89 out of 94 cases, with 4 false negatives and 1 false positive. Precision and recall were 97.9% and 92.3% for the concordant class.

Conclusions EUS-FNA shows moderate concordance with final pathology, especially for LGD and IC, while HGD remains challenging. Pre-FNA imaging features are predictive of concordance. A machine learning model demonstrated high accuracy using preprocedural variables only, supporting its clinical value in biopsy guidance. Strengths include the high-volume pancreatic center setting. Limitations include selection bias from a surgical cohort, which is inherent to histology-based studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP067 Artificial intelligence for pancreatic cyst dysplasia grading in endoscopic ultrasound: a multicenter study

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DOI 10.1055/s-0046-1821007

Aims Pancreatic cystic lesions are increasingly detected as incidental findings, with intraductal papillary mucinous neoplasms representing the most prevalent and clinically significant subtype. Their management hinges on the ability to differentiate low grade dysplasia from high grade dysplasia or carcinoma, a distinction that carries direct implications for surveillance strategies and surgical selection. However, accurate preoperative stratification remains challenging, and current diagnostic tools offer only limited precision. In this context, this study aimed to develop and validate a deep learning model capable of distinguishing high-grade dysplasia or carcinoma from low grade dysplasia using endoscopic ultrasound images, with the objective of enhancing diagnostic accuracy and informing evidence based clinical decision making.

Methods An artificial intelligence (AI) based on a convolutional neural network was developed, including both detection and classification components. Lesions identified by the AI algorithm were identified using a bounding box, and further classified into LGD or HGD/C (Figure 1A). The ground truth classification was based on cytological analysis of the pancreatic cyst fluid, EUS-guided through-the-needle biopsy, or surgical specimens. Model performance was assessed based on mean average precision with an intersection-over-unit threshold of 50 % (mAP50), sensitivity, precision, accuracy, and area under the precision-recall curve (AUPRC).

Results A total of 22,515 EUS images were extracted from 40 exams performed at 5 centers in Portugal, Spain, Brazil and the United States. The model detected IPMNs with a mAP50 of 0.885. Regarding the characterization module, the AI system distinguished IPMNs with HGD/C from those with LGD with an overall sensitivity of 88.2 %, a precision of 89.4 %, and an accuracy of 89.1 %. The AUPRC was 0.874 (Figure 1B).

Conclusions This study constitutes one of the earliest investigations into an AI system capable of concurrently detecting IPMN and classifying the degree of dysplasia. Precise differentiation between HGD/C and LGD remains essential for guiding clinical decisions, ensuring timely identification of high-risk lesions while avoiding unnecessary surgical intervention in patients with lower malignant potential. These findings underscore the need for continued development and validation of such tools to strengthen risk stratification in routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP068 Can next-generation sequencing of EUS-FNA cyst fluid improve IPMN management?

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DOI 10.1055/s-0046-1821008

Aims Managing branch-duct intraductal papillary mucinous neoplasms (BD-IPMNs) remains challenging, as guideline criteria (worrisome features/high-risk stigmata) and nomograms often leave uncertainty. Next-generation sequencing (NGS) on Endoscopic Ultrasound guided fine needle aspiration (EUS-FNA) of cyst fluid may provide actionable molecular information to refine decisions. **Methods** We conducted a national, vignette-based decision-impact study involving 132 clinicians (gastroenterologists and surgeons). Four complex BD-IPMN vignettes (each with 2–4 worrisome features) were evaluated twice: pre-NGS and post-NGS after disclosure of either a high-risk mutation (positive) or its absence (negative). The primary endpoint was the within-physician change in management in the NGS-concordant direction (NGS + surveillance to surgery; NGS – surgery to surveillance) assessed McNemar's test and mixed-effects logistic regression. Secondary endpoints included change in decision confidence, inter-physician agreement (Fleiss' kappa), practitioner factors.

Results NGS on EUS-FNA cyst fluid significantly changed management in all vignettes (all $p < 0.001$): with NGS –, surgical plans shifted to surveillance (43 % in distal pancreatectomy; 61 % in pancreatoduodenectomy scenarios); with NGS +, surveillance shifted to surgery (90 % and 72 %, respectively; both $p < 0.001$). In mixed-model, post-NGS reduced surgery in NGS – cases (OR 0.30, 95 % CI [0.16–0.57]) and the post-NGS effect was strongly amplified in NGS + cases (interaction OR 76.51, 95 % CI [26.47–221.13]). Population-averaged probabilities of choosing surgery shifted from 20 % to 7 % (NGS –) and 42 % to 94 % (NGS +). Decision confidence increased (proportional-odds OR 4.66, 95 % CI [3.62–6.02], $p < 0.0001$). Inter-physician agreement rose from $\kappa = 0.044$ (95 % CI [0.033–0.055]) pre-NGS to $\kappa = 0.590$ (95 % CI [0.580–0.601]) post-NGS ($p < 2 \times 10^{-16}$). After NGS, practitioner characteristics no longer explained decision patterns.

Conclusions In complex BD-IPMN scenarios, NGS refines management, promotes surgical decisions when high-risk mutations are present, reinforces surveillance when absent, and homogenizes clinician choices.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP069 Real life management of intraductal papillary mucinous neoplasms of the pancreas : final data from the prospective italian pancreatic cysts (Pancy) registry

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DOI 10.1055/s-0046-1821009

Aims The majority of studies on Intraductal Papillary Mucinous Neoplasms (IPMNs) are retrospective with inherited selection bias. We report long-term, real-life data from prospective PANcreatic CYsts (PANCY) registry to analyze outcomes of patients with IPMNs, focusing on low-risk branch duct (BD) IPMN.

Methods patients with pancreatic cystic neoplasms were enrolled in a prospective observational multicentric registry between 2015 and 2017; surveillance was proposed to enrolled patients until December 31st, 2021. Primary endpoint was identification of factors associated with development of relevant changes in BD-IPMNs undergoing surveillance including development of worrisome features/high risk stigmata/pancreatic cancer, pancreatectomy, death due to IPMN/pancreatic cancer.

Results A total of 647 patients had an IPMN at diagnosis, of which 547 (60%) were BD-IPMNs, 87 mixed type IPMN (9%) and 13 (1%) main duct IPMN. 57 (8.8%) patients underwent immediate surgery and 590 (91.2%) active surveillance. During surveillance 34 patients (5.7%) underwent surgery with evidence of malignant IPMNs in 2/3 while 30% had only low-grade dysplasia. Overall pancreatic malignancy rate was 2.7% for low-risk BD-IPMNs and 12.5% for mixed-IPMN undergoing initial surveillance. At multivariate analysis, being active smoker (OR 2.2) and a cyst size > 15mm (OR 7.1) at diagnosis were independent risk factors for relevant changes. The combination of cyst size ≤ 15mm & age > 65 was a significant protective factor only at univariate analysis (OR 0.1)

Conclusions in BD-IPMN the risk of progression is very low in lesions < 15 mm found in non-smokers, > 65 years patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP070 Association of QNI criteria With Endoscopic and Clinical Outcomes in Pancreatic Pseudocyst Drainage

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DOI 10.1055/s-0046-1821010

Aims The QNI (Quadrant–Necrosis–Infection) classification system has emerged as a structured framework for characterizing walled-off necrosis (WON). However, its performance in predicting clinical severity, procedural complexity, and Endoscopic Retrograde Cholangiopancreatography (ERCP)-related pancreatic duct pathology during endoscopic management of pancreatic pseudocysts and WON in real-world settings remains underexplored. This study evaluates outcomes among low and high-risk QNI groups undergoing endoscopic drainage.

Methods In this retrospective analysis of 300 patients who underwent endoscopic drainage for pancreatic pseudocysts/WON, subjects were stratified into low-risk (n = 232) and high-risk (n = 68) categories based on QNI criteria. Clinical characteristics, procedural interventions, ERCP requirement and findings, and outcomes were compared using standard statistical methods, with significance set at P < 0.05.

Results Baseline age and sex distribution were comparable between groups. High-risk QNI patients demonstrated significantly greater disease severity, with higher rates of sepsis (41.2% vs 18.5%, P < 0.001) and complications (55.9% vs 28.0%, P < 0.001). High-risk group was characterised by increased need for necrosectomy (98.5% vs 37.5%, P < 0.001), more necrosectomy sessions (median 3 vs 1, P < 0.001), and higher rates of nasocystic drainage (67.6% vs 22.8%, P < 0.001). Irrigation—especially with saline or betadine–hydrogen peroxide—was also significantly more frequent in the high-risk cohort. Metal stent use predominated in both groups but was more common in high-risk patients (98.5% vs 90.5%, P = 0.04). Among high-risk subjects, additional radiologic or surgical interventions were required in 10 patients (14.7%)–7 patients (10.4%) required percutaneous drainage, 3 patients (4.4%) required percutaneous endoscopic drainage. In high risk subjects, The median length of hospital stay did not differ based on requirement of irrigation (P > 0.05) and it was highest among those irrigated with betadine and hydrogen peroxide (21.0 days) and least among those who did not require any irrigation (13.0 days). ERCP requirement was similar between low- and high-risk groups (61.6% vs 51.5%, P > 0.05), as

were pancreatic duct stenting rates (58.7% vs 60.0%, P > 0.05). Across both groups, pancreatic duct leak was the most common ERCP finding (47.6% low risk; 57.1% high risk), followed by duct disconnection (30.1% vs 28.6%). Strictures were infrequent, and normal ducts were observed in a minority. Among high-risk subjects, most did not require additional radiologic or surgical interventions (85.3%). Hospital stay duration did not significantly differ by irrigation modality (P > 0.05).

Conclusions The high-risk QNI phenotype was associated with greater clinical severity, higher rates of sepsis, and markedly increased hospital stay. ERCP findings—dominated by ductal leaks and disconnections—were comparable between risk groups, suggesting ductal pathology may be independent of QNI stratification. These findings support the utility of QNI scoring in predicting severity and resource utilization and reinforce QNI as a meaningful classification tool for guiding endoscopic management strategies and future comparative effectiveness studies in pancreatic pseudocyst and WON therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

How to keep fit in your endoscopy service

14/05/2026, 14:00–15:00

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PYP071 Cognitive Errors in Endoscopy: The ESGE Cognitive Error Map (ECEM) Model for Reducing Diagnostic Misses and Integrating Human Factors into ESGE Standards

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DOI 10.1055/s-0046-1821011

Problem to solve Diagnostic misses remain a major challenge in endoscopy, with European studies reporting that up to 20–25% of clinically significant lesions may be overlooked, particularly under suboptimal visualization or variable inspection quality. Literature on diagnostic error, cognitive load, and human factors shows that a substantial proportion of mistakes arise from cognitive mechanisms—perceptual failures, attentional lapses, misinterpretation, or flawed decision-making.

Despite ESGE emphasizing human factors, endoscopy lacks a unified conceptual model describing cognitive errors, their manifestations, and mitigation strategies. This represents a clear unmet need.

Innovation We introduce the ESGE Cognitive Error Map (ECEM)—the first comprehensive framework integrating cognitive errors, diagnostic blind spots, and targeted interventions aimed at reducing missed lesions. A structured review (PubMed, Embase, Scopus; 2010–2025) included publications on human factors, diagnostic error in visual specialties, missed lesions (colon, Barrett's, gastroscopy), cognitive load, situational awareness, and error taxonomies from aviation, CRM, and OR safety.

Based on this synthesis, ECEM was constructed as a cognitive-process map with corresponding countermeasures.

The framework also includes a Cognitive Competence Module (CCM) for ESGE training, incorporating:

- video-based error annotation,
- situational awareness training,
- modeling of perceptual pitfalls,
- assessment across four cognitive domains.

The module requires no special hardware and fits existing ESGE pathways.

Results 1. ECEM Taxonomy: Four Domains of Cognitive Errors.

- Perceptual errors – incorrect processing of visual information (satisfaction of search, failure to detect flat/depressed lesions, dynamic view errors).- Attention errors – impaired focus allocation/maintenance due to procedure duration, fatigue, workload, distractions; manifestations

include skip zones, insufficient exposure, accelerated withdrawal.

- Decision-making errors – premature closure and narrow hypotheses leading to misclassification of polyps or underestimation of suspicious areas.
- Situational awareness errors – loss of context or misinterpretation of the scenario, resulting in omission of second-look inspection, incorrect strategy in difficult anatomy, or pathway deviations.

2. ECEM Framework: Three-Level Intervention Model.

Level 1 – Predictive markers of cognitive load: examination time, withdrawal speed, micro-pauses of concentration, corrective motor adjustments.

Level 2 – Structured map of blind spots: anatomical and dynamic blind zones, cognitive blind spots, and error-prone morphologies (flat adenomas, LST, subtle lesions).

Level 3 – Cognitive countermeasures: two-phase inspection (review phase), micro-pausing attention-anchoring technique, “hypothesis switching” for decision-making, and the ECEM cognitive checklist for blind-spot assessment.

Conclusions The ESGE Cognitive Error Map (ECEM) represents the first comprehensive attempt to unify cognitive mechanisms underlying diagnostic misses and to identify clear intervention points. The framework and training module provide a structured pathway for integrating human factors into European endoscopy, aligning with ESGE strategy priorities. ECEM may serve as a basis for future ESGE recommendations aimed at reducing diagnostic variability and improving lesion detection quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP072 Developing a standardised tool to describe the case difficulty and educational value of individual GI bleeding cases – the S2T2 tool

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DOI 10.1055/s-0046-1821012

Aims Development of a tool to describe case difficulty and educational value of an individual GI bleeding case to aid setting Certification Standards for GI bleed competence.

Methods Tool development was in 3 phases. Phase 1 -EMS Reporting tool (Medtronic) identified 57 patients referred for upper GI bleed [codes ‘malaena’, ‘haematemesis’]. An iterative approach developed a standardised case difficulty scoring system based on domains of case context, endoscopic findings, treatment and outcomes graded against global assessment of case difficulty (easy, moderate, difficult) and educational value (0 = no added value above diagnostic case, 1 = assessment and management advice, no therapy, 2 = assessment, treatment and management). Phase 2 – Putative score applied to a second cohort of 63 patients with adjustment to score weighting across scoring domains to improve alignment with global assessments. Phase 3 – S2T2 tool applied to cases in UK GI bleed database [1] and examined associations with difficulty, EV, clinical outcomes, and existing severity scores.

Results The final S2T2 tool included four domains – SET (Endoscopy outside of Unit); SITE (Bleeding site not visible or difficult to access); TYPE (variceal or non-variceal bleed, with sub-types defined); TREAT (endoscopic treatment required/not required) – matched to global assessment of case difficulty (easy/moderate/difficult) and weighting of educational value for an endoscopic trainee. Total S2T2 score showed a strong correlation between a global rating of difficulty ($r=0.9$) and educational level ($r=0.8$). 25% of GI bleed cases provided Level 2 Educational Value. In phase 3, the S2T2 tool was applied to 3,979 cases from the UK GI bleed database: this defined 64% as technically easy, 24% of moderate difficulty, and 12% as difficult. Increasing S2T2 difficulty was associated with higher rates of endoscopic therapy, rebleeding, need for interventional radiology or surgery, longer length of stay and bleed-related mortality.

EV increased progressively with higher S2T2 scores: median (IQR) 0 (0–1) for Level 0, 1 (1–2) for Level 1, and 6 (5–8) for Level 2 cases (Kruskal–Wallis $p<0.001$). In univariable analyses, S2T2 (OR 4.81), GBS (OR 1.08), Pre-Rockall (OR 1.15), and Full Rockall (OR 1.28) were associated with EV. However, in multivariable modelling, only S2T2 remained independently predictive (OR 4.78, 95% CI 4.37–5.23), while GBS and Pre-Rockall lost significance (▶ **Table 1**). Correlations between S2T2 and clinical severity scores were weak ($p\leq 0.35$), indicating S2T2 captures a distinct dimension of procedural complexity.

▶ **Table 1**

Score	Univariable OR (95% CI)	p-value	Multivariable OR (95% CI)	p-value
S2T2	4.81 (4.42–5.23)	<0.001	4.78 (4.37–5.23)	<0.001
GBS	1.08 (1.06–1.09)	<0.001	0.98 (0.96–1.00)	0.104
Pre-Rockall	1.15 (1.12–1.19)	<0.001	0.96 (0.91–1.02)	0.169
Full Rockall	1.28 (1.25–1.32)	<0.001	-	-

Conclusions The S2T2 tool is simple, rapid to apply, and correlates strongly with both case difficulty and EV. It captures aspects of procedural complexity not reflected by existing clinical severity scores and may be valuable for defining training requirements and certification criteria in GI bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Nigam GB, Oakland K, Hearnshaw S et al. Acute upper gastrointestinal bleeding in the UK: 2022 audit update Gut Published Online First. 2025. doi:10.1136/gutjnl-2025-335134

PYP073 Evaluation of the Predictive Validity of an Endoscopic Ultrasound Virtual Reality Simulator for Trainee Endosonographers

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DOI 10.1055/s-0046-1821013

Aims Endoscopic ultrasound (EUS) is a technically demanding procedure requiring the development of advanced endoscopic and ultrasound interpretation skills usually requiring dedicated fellowships to attain procedural competence. Trainees enter fellowships with varying prior experience presenting a challenge to trainers in determining their skill level as they embark on training on patients. Simulation-based training has the potential to accelerate the learning curve. However, to date there is no published evidence on the predictive ability of virtual reality (VR) simulators in determining real-world skillsets. An objective measure of a trainee’s technical skill at the start of fellowship would benefit trainers and potentially reduce the risk to patients. We report an evaluation of the predictive validity of endoscopist technical skills on the GI Mentor II EUS simulator (Surgical Science, Sweden) by comparing trainee performance on simulated and real patients.

Methods A prospective observational study was conducted at a tertiary referral centre. Trainee endoscopists attending a nationally accredited basic skills in EUS course underwent a standardised induction on the EUS simulator before

performing supervised EUS examinations on the simulator and then in two real patients. Performance was assessed using a previously validated direct observation of procedural skills (DOPS) form; the TEESAT. Trainees were rated by two trainers on a 1–4 Likert from 1 (“achieved without instruction”) to 4 (“unable to complete”) on 13 anatomical landmarks mandatory for a complete EUS examination. A 1–10 global performance score was also rated. Mean TEESAT scores were compared to evaluate predictive and construct validity and inter-rater reliability.

Results Seven trainees were enrolled (six male; age 30–50 years), most of whom had performed at least 50 EUS procedures. The mean TEESAT score for the 13 landmarks demonstrated excellent predictive validity, with simulator scores strongly correlating with real-patient performance ($p = 0.96$, $p = 0.0003$). The simulator demonstrated strong construct validity, with both simulator and patient landmark scores correlating closely with lifetime EUS experience ($p = 0.90$ to 0.96). Inter-rater reliability ranged from good to excellent (ICC 0.62 overall; improving to 0.91 after exclusion of two outliers). Objective anatomical landmark components of TEESAT showed outstanding validity and acceptable-to-excellent reliability. The global 1–10 assessment showed no predictive validity for real-patient performance (Spearman $\rho = 0.18$, $p = 0.70$).

Conclusions Trainee performance on the GI Mentor II EUS simulator utilising the TEESAT DOPS demonstrates excellent predictive and construct validity. It reliably discriminates skill levels and we would advocate its role in stratifying trainee competence at the outset of fellowships or as a surrogate marker of progress in early EUS training. The global score lacks utility and should be avoided as an assessment measure in this context.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP074 Emilia-Romagna registry on small bowel endoscopy: Results and concordance with European Society of Gastrointestinal Endoscopy (ESGE) performance measures

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DOI 10.1055/s-0046-1821014

Aims Quality assurance in small-bowel endoscopy is essential to ensure diagnostic accuracy, therapeutic efficacy and patient safety. In this study we aimed to evaluate concordance of data from real-life practice in small bowel endoscopy across Gastroenterology Units in Emilia-Romagna, Italy, with the updated ESGE key performance indicators (KPIs) for device-assisted enteroscopy (DAE) and video capsule endoscopy (VCE). Secondary aims were to describe diagnostic yield, efficacy, safety and organizational factors influencing quality.

Methods This prospective multicenter observational study included ten regional referral centres performing small bowel endoscopy with VCE and/or DAE. Consecutive procedures performed between 10 April and 20 August 2025 were collected. Demographic, clinical, and procedural data were recorded, including diagnostic yield, therapeutic success, complications and adherence to 2025 ESGE key performance indicators (KPIs).

Results A total of 258 VCE procedures were analysed. Indications included iron-deficiency anemia (29.5%), occult bleeding from small-bowel (25.2%), overt bleeding from small-bowel (19.3%) and Crohn disease (17%). Adequate bowel preparation was achieved in 89.8% of examinations with a completion rate of 96.5%. The overall detection rate was 52.7%, and the clinically significant detection rate was 41.1%. Capsule retention occurred in three patients (1.16%) and only required endoscopic retrieval due to an underlying jejunal adenocarcinoma. A total of 65 DAE procedures were analysed. Procedures were antero-grade in 77% and retrograde in 23%. Repeat procedures accounted for 32.3%, mainly due to failure to visualize previously detected target lesions. Mean duration was 64 minutes and mean small bowel length explored was 147.7 cm. Technical success was 95.3%, therapeutic success 72.3%, and diagnostic yield 69.2%. Only one complication occurred (1.6%), consisting of intraprocedural bleeding resolved endoscopically. Indications included VCE-detected lesions (61.5%), abnormalities on other imaging (15.4%), polyposis surveillance (6.1%), suspected Crohn disease (6.1%), and overt or occult bleeding evaluated directly with DAE (7.7%). These data were compared to the most recent ESGE quality performance measures. Most key performance indicators were met. Specifically, for VCE, appropriate indication (97.3%), adequate preparation (95.6%), completeness (96.5%), overall and clinically significant detection rates (52.7% and 41.1%), and low retention rate (1.16%) all fulfilled ESGE minimum requirements. For DAE, appropriate indication (96.9%), adequate preparation (95.2%), procedural completeness (83.3%), diagnostic yield (69.2%), and low complication rate (1.54%) met ESGE standards. Some KPIs did not achieved the minimum standard, particularly patency capsule use in high-risk patients (90.1% vs minimum 95%), timing of VCE for overt bleeding (50% within 48 hours vs minimum 75%), and performance of DAE after positive VCE when indicated (41% vs minimum 75%). Particularly, even though the minimum ESGE standard was not fulfilled, we performed a subgroup analysis in patients undergoing VCE examination for suspected small bowel overt bleeding. Diagnostic yield in patients undergoing VCE within 48 hours from the last bleeding episode was 76% while it decreased to 47% in patients with VCE performed between 48 hours and 14 days and 40% in the group where VCE was performed after 14 days after the bleeding episode. Although the overall comparison among the three groups showed only a trend toward significance ($p = 0.06$), early VCE performed within 48 hours was significantly superior to delayed examinations (>48 hours), with a diagnostic yield of 76% versus 44% ($p = 0.04$).

Conclusions To our knowledge this is the first prospective study comparing real world-data of small bowel enteroscopy and the latest ESGE quality performance measure. In Emilia-Romagna the endoscopic approach to small bowel pathology demonstrates high diagnostic yield, excellent safety, and strong adherence to ESGE performance standards for both DAE and VCE. Strengths include appropriate indications, high completeness rates, adequate bowel preparation, and very low complication rates. The findings support the clinical value of early VCE in overt bleeding and emphasize the importance of optimized diagnostic pathways and closer coordination between VCE and DAE to strengthen consistency and quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP075 How are polyps removed in clinical practice? A comparison to ESGE polypectomy guidelines

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DOI 10.1055/s-0046-1821015

Aims This study aimed to assess the current practice in our institution in terms of polypectomy technique across all polyp sizes and histological subtypes in comparison to the ESGE standards.

Methods A single centre, retrospective analysis of 100 consecutive patients who have had polypectomies done for polyps of any size from April 2024 at a hospital in North London was undertaken. The data was collected using the Medilogic endoscopy reporting tool, and the electronic patients record. The technique used for polypectomy, along with the type of polyp at histology retrieved, was scrutinized and compared with compliance of ESGE guidance on polypectomy technique.

Results A total of 177 polypectomies from 100 patients were analysed. 101 polypectomies (57 %) followed ESGE recommendations and 76 polypectomies (43 %) did not. The 76 non-compliant polypectomies used methods including cold biopsy, hot snare for polyps under 10mm, hot EMR for polyps under 20mm and hot EMR for SSLs (► Table 1).

► Table 1

Polypectomy method compliant with ESGE		Polypectomy method non-compliant with ESGE	
Cold snare or cold EMR for all SSL	13	Hot EMR for SSL	4
Cold snare or cold EMR < 10mm	79	Cold snare or cold EMR > 10mm	12
Hot EMR > 20mm	26	Hot EMR < 20mm	12
ESD	3	Hot snare < 10mm	3
		Cold biopsy	25
Total in line with ESGE:	121 (68 %)	Total not in line with ESGE:	56 (32 %)

Conclusions The polypectomy technique used by endoscopists depends on multiple factors including anticipated histological subtype (eg Paris and Kudo pitt pattern), estimated polyp size and location within the colon. The latest European Society of Gastrointestinal Endoscopy (ESGE) guidelines recommend the most suitable methods which minimise risk of post-procedural bleeding and perforation, whilst ensuring cost-effectiveness. ESGE recommends avoiding cold biopsy due to its high rate of incomplete resection. ESGE also recommends cold snare polypectomy for removal of nonpedunculated adenomatous polyps under 10mm and hot snare with or without endoscopic mucosal resection (EMR) for polyps over 10mm. In addition, ESGE recommends cold snare or cold EMR for sessile serrated lesions (SSL) of all sizes, as well as consideration of endoscopic submucosal dissection (ESD) for certain polyps over 20mm. This study shows poor adherence to the ESGE guidelines in our department with regards to colorectal polypectomies, with only two-thirds of polypectomies adhering to the recommended techniques. A third of polypectomies undertaken were not in line with ESGE recommendations (56/177 – 32%), of these 16/56 (34 %) polypectomies involved inappropriate diathermy use which could have led to increased risk of complications such as post-polypectomy bleeding and perforation. A significant number of polyps are removed by the cold biopsy technique (25/177 – 14 %) which is not advocated due to a higher risk of local recurrence. We recommend better dissemination and implementation of the ESGE guidelines to enhance clinical practice with regards to polypectomy techniques.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP076 Implementation of the “Endoscopy Step-up Protocol” with Google Forms: An Educational System Integrating Objective Assessment and Trainee Competency

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DOI 10.1055/s-0046-1821016

Aims The acquisition of endoscopic skills is still a significant challenge for many institutions. Even within a single institution, the training often relies on the subjective judgments of individual trainers. In Japan, physicians complete a two-year junior residency followed by a three-year senior residency before specializing in gastroenterology, and they enter endoscopy programs with heterogeneous backgrounds and varying levels of experience. This highlights the need for an objective, competency-based framework that enables stepwise and individualized instruction. To address these issues, we developed and implemented the “Endoscopy Step-Up Protocol,” which incorporates both quantitative and qualitative performance metrics to facilitate structured skill acquisition.

Methods The protocol consists of six upper gastrointestinal (UGI) and five lower gastrointestinal (LGI) stepwise levels, toward independently performing general examinations, integrating both quantitative and qualitative assessments. Certain steps may be waived depending on the trainee’s demonstrated competency. For the quantitative assessment, predefined target numbers were set for each step, including total endoscopy volume as well as the numbers of biopsies and Cold Snare Polypectomies. For the qualitative assessment, six UGI metrics (pharyngeal intubation, mucosal cleansing, scope manipulation, endoscopic imaging quality, patient discomfort, and examination time) and five LGI metrics (cecal intubation rate, mean insertion time, mean examination time, adenoma detection rate, and success rate of using shaft retention and shortening method) are evaluated. Trainers score each item using a three-point scale (0 = Poor, 1 = Average, 2 = Excellent), and feedback is recorded via Google Forms.

The study included eight trainees who participated in the protocol between April 2024 and September 2025 (one junior resident, three senior residents, and four post-residency doctors). A prospective observational evaluation was conducted to assess their training performance in UGI and LGI endoscopy. In addition, structured questionnaire surveys were administered to all eight trainees and six trainers.

Results For UGI endoscopy, the junior resident (n = 1) progressed from Step 1 (observation/lectures/model-based practice) to Step 2 (sedated examinations from intubation to full observation) within one month. Senior residents (n = 3) advanced from Step 1 to Step 6 (independent routine examinations) in a mean of 5.3 months. All post-residency doctors (n = 4), who had prior experience of endoscopy, skipped Steps 1-2 and started from Step 3 (sedated examinations), reaching Step 6 in a mean of 3.1 months. For LGI endoscopy, senior residents (n = 3) progressed from Step 1 (observation/lectures/model training) to Step 3 (sedated examinations) in a mean of 6.0 months. Post-residency doctors (n = 4) also advanced directly to Step 3 and reached Step 5 (independent routine colonoscopy) in an average of 7.3 months.

Survey results indicated full satisfaction among all trainees (100 %, 8/8). Trainees reported that the structured stepwise system clarified training goals, improved self-assessment of technical weaknesses, and enhanced motivation. All trainers (6/6, 100 %) observed improvement in trainee skills. Trainer workload was rated as “increased” by 1/6 (17 %) and “unchanged” by 5/6 (83 %), suggesting that standardized scoring and feedback did not substantially increase supervisory burden.

Conclusions The “Endoscopy Step-Up Protocol” provides a clear, objective, and competency-based framework for endoscopy training. By integrating both quantitative and qualitative assessments, the system enables personalized and

level-appropriate instruction, and helps maintain well-defined learning goals. The use of Google Forms enables rapid feedback, consistent documentation, and efficient communication between trainees and trainers. This protocol demonstrated feasibility, improved competency acquisition, and was well received by both groups. It may represent a practical and scalable approach for standardizing endoscopy training across institutions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP077 Exploration of muscular fatigue by repetitive force measurement in high performance endoscopists- a multicenter approach

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DOI 10.1055/s-0046-1821017

Aims Endoscopy-related musculoskeletal injuries are often recognized in diagnostic and interventional endoscopists, due to repetitive work, prolonged postures and the application of localised high forces. To reduce risk for injuries muscular overuse should be consequently avoided. No data exist on changes in muscular strength throughout the working day. Aim of the study was to determine the effect of muscular fatigue in endoscopist working at high volume centers.

Methods Muscular strength was measured in endoscopists (n = 9; m/f), working in different high volume centers (n = 3), by repetitive force measurement using a medical dynamometer, over 7 working days. Individual strength of both arms (r;l) was documented before and after examinations throughout working day (lb). Difference in muscular strength was analysed. Muscular complaints, affected bodyparts, perceived exertion were recorded

Results Muscular force decreased significantly in all subjects, regardless sex, type of performed examinations (mean 113.1 ± 7.8 vs. 98.4 ± 9.9). Longer and complex examinations decreased the muscular strength more significantly than shorter ones. ERCP revealed highest decrease in muscular force among participants. Muscular complaints of participants revealed worsening within the working day.

Conclusions Data from this study reveal that repetitive endoscopic performance is associated with relevant decrease of muscular strength. This implicates that regular breaks are mandatory for muscular recovery to avoid injuries in endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP078 Assessment of performance and skills in biliary cannulation of experts and non-experts with novel Mikoto model simulator for training in endoscopic retrograde cholangiopancreatography

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DOI 10.1055/s-0046-1821018

Problem to solve Endoscopic retrograde cholangiopancreatography (ERCP) is a highly specialized and technically demanding endoscopic procedure requiring advanced cognitive and manual skills. Due to its complexity, limited procedural exposure and concentration of expertise within tertiary centers, structured and safe training opportunities are essential. Simulation-based education has been increasingly recognized as an effective strategy to bridge the training gap, allowing skill acquisition without compromising safety. While several mechanical, animal and computer-based simulators have been validated for luminal endoscopy, ERCP-specific simulators remain few. Recently, the Mikoto simulator series, a line of high-fidelity silicone-based models featuring integrated automated performance assessment, has been introduced. This exploratory study aimed to evaluate the construct validity of the novel Mikoto ERCP Simulator by comparing the performance of expert and non-experts.

Innovation The study was conducted during the 8th Educational Meeting of the Lombardy Section of the Italian Society of Digestive Endoscopy (SIED). Twenty-two endoscopists (11 experts and 11 non-experts) performed simulated ERCP procedures using the Mikoto ERCP Simulator (R Zero Inc., Japan, distributed by Fujifilm, Tokyo, Japan). The model provides realistic anatomical representation of the upper gastrointestinal tract, including interchangeable papilla of Vater modules and automatically records multiple performance metrics such pharyngeal pressure, the time to reach the subsequent anatomical segment, biliary cannulation time and procedural scores. Each endoscopist had 10 minutes to achieve deep biliary cannulation. Experts were defined as operators with > 250 ERCPs performed, whereas non-experts were trainees competent in reaching the second duodenal portion (D2) and attempting cannulation. Primary outcomes were the simulator's ability to differentiate experts from non-experts in biliary cannulation rate, cannulation time, total score (0–100) and total procedure time. Secondary outcomes included subgroup comparisons of pharyngeal passage time and pressure, time and score to reach D2 and changes in repeated performance attempts. Perceived realism was rated on a 5-point Likert scale.

Results Experts (mean age 46 ± 6.7 yrs, 11 M) and non-experts (median age 32 ± 3.8 years, 6 M, 4 residents) demonstrated distinct performance profiles. Biliary cannulation was achieved by 91 % of experts versus 64 % of non-experts (p = 0.15). Among successful cannulations, the median cannulation time was shorter for experts compared with non-experts (76s, IQR 53–172 vs 89s, IQR 79–231, p = 0.07), even if not statistically significant. Experts completed the overall procedure faster (142s, IQR 102–257 vs 492s, IQR 158–600; p = 0.04) and achieved higher total scores (96/100, IQR 88.5–98.5 vs 82/100, IQR 61.5–91.5; p = 0.02). During the pharyngeal phase, no significant differences were noted in time or pressure; however, experts achieved significantly higher pharyngeal pressure control scores (median 10/10 vs 7/10; p = 0.02). Time to reach D2 and corresponding score both favoured experts (median 35 vs 85s, p = 0.014; mean D2 score 19.9 ± 7.07 vs 16.5 ± 10.6, p = 0.01). Table 1 synthesizes differences between experts and non-experts. Among the five participants (four experts) who repeated simulations, sequential improvements in total time and total score were observed and confirmed by Wilcoxon signed-rank tests (p = 0.002; p = 0.003, respectively), suggesting a measurable learning effect. Overall, participants rated the simulator's realism highly, with a mean fidelity score of 4/5 ("very good"), particularly commending the accuracy of the pharyngeal passage simulation.

Conclusions This study shows that the Mikoto ERCP Simulator reliably distinguishes between expert and non-expert operators, reinforcing its construct validity as a training modality. Its automated scoring and detailed performance analytics offer clear advantages by supporting objective self-assessment and promoting individualized, self-directed learning. The simulator also highlights procedural steps with the largest performance gaps, helping educators target training more effectively. These results justify future, larger studies to confirm validity across additional performance domains and to clarify the simulator's place within structured ERCP curricula. Overall, the Mikoto platform appears to be a high-fidelity, data-driven supplement to traditional ERCP education, providing a safe, reproducible and efficient setting for training

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP079 Development of a Digital ERCP Quality Assessment Tool: A Modern Approach to Tracking Procedural Competence

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DOI 10.1055/s-0046-1821019

Aims ERCP is an advanced interventional technique requiring structured training. Moreover, the delicacy of the procedure with ensuing high risk of complications makes continuous quality control a necessity. Validated assessment and performance measures guide competency, with the ESGE Quality Improvement Initiative explicitly recommending implementation of these measures to identify services and individual endoscopists with lower performance levels. Additionally, trainees are recommended to keep a contemporaneous logbook of their procedures. Performance targets are published both for learners and practicing interventionists. Yet at present, there is no easily accessible tool for real-time data tracking and analysis. The objective was to design an open, digital tool for procedural logging, performance tracking, and competency assessment in line with published ERCP performance indicators. Special focus was put on providing real-time visualizations and analytics at the point-of-care to provide interventionists with immediate feedback.

Methods An online platform for point-of-care input and visualization of ERCP training data was created. Fields were adapted from performance measures published by ESGE. Anonymized patient characteristics, indications, success measures, and complications were included to calculate key performance indicators (bile duct cannulation rate, appropriate stent placement in patients with biliary obstruction below the hilum, bile duct stone extraction, post-ERCP pancreatitis). For complexity assessment, the modified Schutz score as well as the SASE and H.O.U.S.E. grading systems were used. A mobile client and a dashboard were implemented for rapid onsite data collection and accessible statistics visualization. Functionality was provided to build teams of interventionists for evaluation at endoscopy unit level. Online access was protected and server communication was encrypted. Rolling personal performance as well as minimum and target standards were visualized in a graphical dashboard with graphs that were generated in real-time to provide actionable insights on learning progress and quality assessment. Team performance was displayed to gauge relative performance. Excel export functionality was added to allow for data sharing of a personal logbook [1–7].

Results As proof-of-concept, the individual learning experience of a first-time ERCP trainee at a tertiary care facility was tracked. All 127 procedures performed over the course of 14 months were entered into the tool. Most ERCPs were done for ASA 2 patients (91/127; 71.7%); SASE success probability grading was “high” for the majority of interventions (90/127; 70.9%). Virgin papilla (48% of procedures) rolling intubation rate showed a clear upward trend for later cases (first to last quarter: 41.7%, 56.5%, 65.9%, 72.0%), as did rolling stone clearance rate (85.7%, 94.7%, 97.1%, 100.0%). Stenting was successful in all cases with sub hilar obstruction (100.0%). Overall (0.8%) and virgin papilla post-ERCP pancreatitis rates (1.6%) at the end of the logging period were in line with quality recommendations. The tool was effective in enabling real-time, granular tracking of technical skills and identifying learning gaps (e.g., lower stone extraction scores in early cases).

Conclusions The proof-of-concept tool enhanced training by combining structured assessment with real-time outcome tracking and visualized feedback. It shows potential to improve competency evaluation and reduce learning curve variability for complex endoscopic procedures. Additionally, it allows for up-to-date transparency about interventionists' performance and development regarding quality targets. This feedback is vital for both the individual interventionist as well as endoscopy units, as transparency about performance is an indispensable prerequisite for accountability. A future opportunity is to evolve the self-assessment platform into an open, ESGE-approved quality management

instrument with trend analysis and learning curve visualization for ERCP trainees as well as experienced interventionists. A summative report by the tool could form the basis for commencing independent practice for trainees by providing robust and standardized evidence of procedure volume and competence. Likewise, yearly quality report cards produced by the tool could provide certification of skill levels for experienced endoscopists and service unit teams.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Olsson G, Arnelo U, Swahn F, Törnqvist B, Lundell L, Enochsson L. The H.O.U.S.E. classification: a novel endoscopic retrograde cholangiopancreatography (ERCP) complexity grading scale. *BMC Gastroenterol.* 2017; 17 (1): 38. Published 2017. doi:10.1186/s12876-017-0583-z
- [2] Maieron A, Duller C, Püspök A, Steiner E, Kapral C. SASE, Success and Adverse event Score in Endoscopic Retrograde Cholangiopancreatography: a Novel Grading System. *BMC Gastroenterol.* 2023; 23 (1): 314. Published 2023 Sep 15. doi:10.1186/s12876-023-02942-w
- [3] Domagk D, Oppong KW, Aabakken L et al. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2018; 50 (11): 1116–1127. doi:10.1055/a-0749-8767
- [4] Baron TH, Petersen BT, Mergener K et al. Quality indicators for endoscopic retrograde cholangiopancreatography. *Gastrointest Endosc* 2006; 63 (4 Suppl): S29–S34. doi:10.1016/j.gie.2006.02.019
- [5] Schutz SM. Grading the degree of difficulty of ERCP procedures. *Gastroenterol Hepatol (N Y).* 2011; 7 (10): 674–6 PMID: 22298960 PMID: PMC3265009
- [6] Johnson G, Webster G, Boškoski I et al. Curriculum for ERCP and endoscopic ultrasound training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2021; 53 (10): 1071–1087. doi:10.1055/a-1537-8999
- [7] Adler DG, Lieb JG 2nd, Cohen J et al. Quality indicators for ERCP. *Gastrointest Endosc* 2015; 81 (1): 54–66. doi:10.1016/j.gie.2014.07.056

PYP080 Stress to Success: Evaluating the Impact of a Structured Haemostasis course on delegates' confidence and resilience; A Prospective Pre-Post Course Analysis

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DOI 10.1055/s-0046-1821020

Aims To evaluate the role of the Sheffield Teaching Hospital Haemostasis course in improving delegates' confidence, knowledge and resilience when performing Upper Gastrointestinal Endoscopy.

Methods Participants who enrolled on the one-day Haemostasis Course at Sheffield Teaching Hospital between November 2021 and September 2024 were invited to fill pre-course and post-course questionnaires. Consent was obtained for the anonymous use of data in this research. This was a simulated clinical environment combining case-based lectures with practical training using synthetic and porcine models facilitated by experienced consultants and representatives from the Endoscopy industry. Five point Likert Scale questionnaires were used to assess domains covering practical skills (adrenaline injections, clip placement, variceal, non-variceal haemostasis and Bentonite haemostatic agent use), operator confidence (mental preparedness, satisfaction, frustration) and psychomotor skills. Participant responses were manually matched and Paired-Sample T-Tests were conducted in SPSS version 20 to determine the presence of any statistically significant improvement across the domains.

Results After matching the data, 78 participants, comprising gastroenterology trainees (73.1%), consultant gastroenterologists (12.8%), surgical consultants (3.8%) endoscopy nurses (3.8%), nurse endoscopists (2.6%) and non-training grades (3.8%) were identified. Of these, 64% were currently or imminently participating in an on-call “Bleeds Rota”. Significant improvements were ob-

served across most technical and confidence domains after the Haemostasis course. Mean scores for overall endoscopic technical skill increased from 3.08 to 4.06 ($p < 0.001$; 95% CI -1.19, -0.79), confidence in clip application rose from 2.41 to 3.83 ($p < 0.001$; CI -1.61, -1.23); variceal and non-variceal haemostasis skills improved from 2.47 and 2.45 to 3.83 and 3.87 ($p < 0.001$) respectively. Bentonite haemostatic agent handling improved markedly from 2.49 to 4.08 ($p < 0.001$; CI -1.79, -1.39). Participants' perceived frustration reduced significantly (mean 4.92 to 3.22, $p < 0.001$), while satisfaction increased (5.26 to 7.65, $p < 0.001$). Mental and physical strain scores also decreased post-course (7.36 to 5.90 and 6.82 to 5.40 respectively, $p < 0.001$). "Sickness of performance" demonstrated a non-significant change (5.49 to 4.92 post course; $p = 0.156$), signifying the potential need for extended practical sessions to refine fluency. Experience profiles of the delegates showed that most had a limited lifetime exposure to therapeutic procedures — 43.6% had performed 1–9 adrenaline infiltrations, 53.8% had placed 1–10 clips, and 55.1% had used thermal therapy fewer than 10 times.

Conclusions The Sheffield Haemostasis Endoscopy course significantly enhanced participants' confidence, resilience, technical skills and satisfaction while simultaneously reducing frustration and perceived workload. These findings support the course's effectiveness and highlight the value of structured, simulation-based learning for safe and competent management of Upper Gastrointestinal Bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Advances in Gastric Resection Techniques

14/05/2026, 14:00–15:00

Emerald 5

PYP081V First report of gastric muscle-retracting sign identification and endoscopic intermuscular dissection

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DOI 10.1055/s-0046-1821021

Abstract Text

A 70-year-old woman with autoimmune gastritis was referred for an 8-mm subepithelial lesion. Staging EUS identified a potential T1 type 1 gastric neuroendocrine tumor (NET) without nodal metastases. During endoscopic resection with multipoint elastic traction, a muscle-retracting sign (MRS) with the lesion adherent to the oblique muscularis propria was observed. Gastric endoscopic intermuscular dissection (EID) was performed en bloc. Histopathology showed R0 resection of a pT2, well-differentiated NET G2, without lymphovascular invasion. Another G1 NET was identified in a lateral margin. The multidisciplinary team and the patient opted for endoscopic and imaging follow-up due to comorbidities and surgical risk. To our knowledge, this is the first report of a gastric muscle-retracting sign and the second report of gastric EID.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/b5ae922b-b235-410c-ac42-30485b3bfd2c/Uploads/19978_ESGE_days%20gastric%20EID%20-%20HD%201080p.mov

Conflicts of Interest DJT: Pentax Medical, Fujifilm, and Olympus research support and consulting. The other authors declare that they have no conflicts of interest.

PYP082 External Validation and Comparison of the W-eCura and eCura Scoring Systems for Predicting Lymph Node Metastasis After Non-Curative Endoscopic Submucosal Dissection in Early Gastric Cancer: A Retrospective Cohort Study in Korea

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DOI 10.1055/s-0046-1821022

Aims This study aimed to externally validate both the eCura and W-eCura systems in an independent tertiary hospital cohort in South Korea and to compare their discriminatory performances [1–8]

Methods We conducted a retrospective validation study using prospectively collected data from 740 patients who underwent non-curative ESD for EGC followed by gastrectomy at Severance Hospital, South Korea, between 2013 and 2024. LNM confirmed by postoperative pathology was used as the reference outcome. Predictive performance was evaluated using calibration (calibration-in-the-large [CITL], calibration slope, and observed-to-expected [O:E] ratio), discrimination (C-statistic), and overall model fit (Nagelkerke R² and Brier score). The C-statistics of both models were compared using DeLong's test for correlated ROC curves.

Results Among 740 eligible patients, 40 were found to have LNM. The W-eCura model demonstrated good calibration, with a CITL of -0.005 (95% confidence interval [CI], -0.349 to 0.306), an O:E ratio of 1.00 (95% CI, 0.73 to 1.36), and a calibration slope of 0.991 (95% CI, 0.596 to 1.499). Overall model fit was acceptable (Nagelkerke R² = 0.294; 95% CI, 0.127–0.544), and prediction error was low (Brier score = 0.056; 95% CI, 0.042 to 0.072). The discrimination ability was good, with a C-statistic of 0.764 (95% CI, 0.696 to 0.833). When compared using DeLong's test, the AUCs of the eCura and W-eCura systems (0.751 vs. 0.764) showed no significant difference ($P = 0.28$).

Conclusions The W-eCura score maintained good discrimination and calibration in this external validation cohort of 740 Korean patients, with predictive performance comparable to the original eCura model. These results support the generalizability of the W-eCura system for assessing LNM risk after non-curative ESD in real-world practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yabuuchi Y, Masui Y, Kumagai K, Iwagami H, Murai K, Setoyama T et al. External validation of the eCura system and comparison with the W-eCura score for predicting lymph node metastasis after non-curative endoscopic submucosal dissection for early gastric cancer: a multicenter retrospective cohort study. *J Gastroenterol* 2025; 60: 829–837
- [2] Hatta W, Gotoda T, Koike T, Uno K, Asano N, Imatani A et al. Is additional gastrectomy required for elderly patients after endoscopic submucosal dissection with endoscopic curability C-2 for early gastric cancer? *Digestion*. 2022; 103: 83–91
- [3] Kim TW, Yang HJ, Lee G, Park SK, Jung YS, Park JH et al. Stratifying risk of lymph node metastasis after non-curative endoscopic submucosal dissection of early gastric cancer: comparison of the eCura system and elderly criteria. *J Gastric Cancer* 2025; 25 (2): 370–381
- [4] Yang HJ, Lee H, Kim TJ, Jung DH, Choi KD, Ahn JY et al. A modified eCura system to stratify the risk of lymph node metastasis in undifferentiated-type early gastric cancer after endoscopic resection. *J Gastric Cancer* 2024; 24 (2): 172–184
- [5] Yang HJ, Kim YI, Ahn JY, Choi KD, Kim SG, Jeon SW et al. External validation of the eCura system for undifferentiated-type early gastric cancer with noncurative endoscopic resection. *Gut Liver* 2023; 17: 537–546
- [6] Morais R, Libanio D, Santos-Antunes J NC-ESD Study Group. eCura and W-eCura: different scores, different populations, same goal. *Gut*. 2024; 73 (11): e1–e2
- [7] Lee S, Song JH, Park SH, Cho M, Kim YM, Kim HI et al. Determination of additional surgery after non-curative endoscopic submucosal dissection in patients with early gastric cancer: a practically modified application of the eCura system. *Cancers*. 2021; 13: 5768

[8] Morais R, Libanio D, Dinis-Ribeiro M, Ferreira A, Barreiro P, Bourke MJ et al. Predicting residual neoplasia after a non-curative gastric ESD: validation and modification of the eCura system in the Western setting (W-eCura score). *Gut*. 2024; 73: 105–117

PYP083V “Double clip and rubber band” traction technique for endoscopic resection of gastric Gastrointestinal Stromal Tumors: A case series

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DOI 10.1055/s-0046-1821023

Problem to solve Gastrointestinal stromal tumours (GISTs) are the most common mesenchymal neoplasms of the gastrointestinal tract. In recent years, endoscopic therapy has emerged as a key complement to surgery, particularly for gastric GISTs confined to the superficial layers of the gastric wall and exhibiting predominantly endoluminal growth. Endoscopic resection offers significant advantages, including organ preservation, reduced length of hospital stay, and improved cost-effectiveness. However, adequate exposure of the submucosal space remains challenging. Unlike surgical interventions, where independent traction and counter-traction facilitate dissection, conventional endoscopy is largely limited to axial force transmission. Gravity often works against the operator; once the incision is made, the lesion may collapse into the field of view and obscure the dissection line. Several strategies have been proposed to overcome these limitations. Among them, the double-clip-and-rubber-band technique has been developed as an internal traction system that provides stable, directional traction on the lesion, but it has been applied mainly in colorectal endoscopic submucosal dissection series [1–3].

Innovation We describe a novel application of the double-clip-and-rubber-band traction technique to facilitate endoscopic resection of gastric GISTs. The tumour insertion on its layer of origin is approached through circumferential submucosal dissection. A first clip grasping a rubber band is anchored to the tumour edge. The rubber band is then grasped with a second clip, which is deployed on the opposite gastric wall. With this method, the traction force can be modulated by adjusting the distance between the two clips, which directly determines the elastic tension applied. This technique allows optimal and constant exposure of the submucosal layer for GISTs confined to the submucosa, and of the muscular insertion site for GISTs arising from the muscularis propria. At the end of the procedure, the clip attached to the contralateral gastric wall is removed using biopsy forceps.

Results This technique was successfully applied in three consecutive patients with gastric GISTs arising from the submucosa or muscularis propria, with a mean lesion size of 26 mm. En bloc resection was achieved in 100% of cases. The elastic traction created by the rubber band provided optimal visualisation of the serosal layer, helping to prevent inadvertent injury to surrounding extra-gastric structures. All procedures were performed with a GIF-EZ1500 gastroscope (Olympus, Tokyo, Japan) and a monopolar endoscopic knife (Gold Knife 4-mm T-type, Micro-Tech, Nanjing, China). Mean procedure time was 88 minutes (from the initial mucosal incision to placement of the final clip). No intraoperative complications occurred. Gastric wall defects were successfully closed with through-the-scope clips when the defect was limited to the muscularis propria and with over-the-scope clips when full-thickness resection was performed. Patients resumed oral intake on postoperative day 2 and were discharged after a mean of 5 days. Histopathological examination confirmed GIST in all cases, with negative resection margins (R0). No recurrence was observed at 6-month follow-up.

Conclusions The application of the double-clip-and-rubber-band traction technique to the endoscopic treatment of gastric GISTs proved to be a safe and effective adjunct, facilitating exposure of the dissection plane and enabling

reliable en bloc resection. In our experience, this traction strategy optimised procedural control without increasing adverse events, supporting its role as a valuable tool in the endoscopic management of appropriately selected gastric GISTs.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/d06e9b13-61e6-44b2-82fe-c37228eeb49c/Uploads/19990_ESGE_days_2026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nagata M. Advances in traction methods for endoscopic submucosal dissection: What is the best traction method and traction direction? *World J Gastroenterol*. 2022; 28 (1): 1–22. doi:10.3748/wjg.v28.i1.1 PMID: 35125817 PMID: PMC8793018
- [2] Utzeri E, Jacques J, Charissoux A, Rivory J, Legros R, Ponchon T, Pioche M. Traction strategy with clips and rubber band allows complete en bloc endoscopic submucosal dissection of laterally spreading tumors invading the appendix. *Endoscopy*. 2017; 49 (8): 820–822. doi:10.1055/s-0043-111713 Epub 2017 Jun 14 PMID: 28614893
- [3] Jacques J, Charissoux A, Legros R, Tailleux A, Rivory J, Albouis J, Pioche M. Double-clip counter-traction using a rubber band is a useful and adaptive tool for colonic endoscopic submucosal dissection. *Endoscopy*. 2018; 50 (2): 179–181. doi:10.1055/s-0043-122596 Epub 2017 Dec 5 PMID: 29207406

PYP084V The Clip with a Grip: Taming Wide ESD Defects in the Stomach

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DOI 10.1055/s-0046-1821024

Abstract Text

Closing mucosal defects after endoscopic submucosal dissection (ESD) reduces delayed bleeding, but large gastric defects are difficult to close with conventional clips that lack sufficient opening width and traction. The Dual-Action Tissue (DAT) clip, with two independently controlled arms, enables sequential edge capture and controlled approximation before reinforcement with standard clips. We report two gastric ESD cases in which the DAT clips achieved effective closure. In Case 1 (32 × 31 mm specimen) a single 15-mm DAT clip plus three conventional clips secured the defect. In Case 2 (31 × 30 mm specimen, fibrotic) one DAT clip plus four standard clips achieved full closure. Deployment was easy, with no device-related adverse events. Both patients recovered uneventfully. The DAT clip appears valuable for closure of large ESD defects.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/13cb1805-b548-4876-abb8-bd5b39ddf52a/Uploads/19978_DAT_ESGE%202026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP085 Clinical Outcomes of a Standardised Decompression and Closure Protocol for Significant Capnoperitoneum During Gastric ESD and Exposing EFTR

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DOI 10.1055/s-0046-1821025

Aims Capnoperitoneum may occur during gastric endoscopic submucosal dissection (ESD) due to type IV deep mural injury when resecting mucosal le-

sions, or during exposing endoscopic full-thickness resection (e-EFTR) for sub-epithelial lesions (SELs). In some cases, it may progress to tension capnoperitoneum, resulting in gastric lumen collapse, respiratory compromise, or haemodynamic instability. Prompt recognition and effective decompression are essential for safe endoscopic practice. We report outcomes of a standardised protocol for the management of significant capnoperitoneum.

Methods We performed a retrospective analysis of a prospectively maintained database of consecutive gastric endoscopic resections undertaken at a tertiary referral centre between November 2016 and November 2025. All procedures were performed under general anaesthesia with endotracheal intubation, and with continuous monitoring of end-tidal CO₂, ventilation pressures, and abdominal distension. Significant capnoperitoneum was managed using a standardised protocol involving left upper quadrant percutaneous needle decompression, endoscopic clip closure of the muscle defect, and reinflation of the stomach to perform a leak test. Bubbling through an attached water-filled syringe catheter indicated residual leakage, and prompted careful re-assessment to identify and close full thickness muscular injury. After a negative leak test, a 14-French nasogastric tube was placed on free drainage.

Results Among 354 gastric endoscopic resections, 14 patients (4.0%) required needle decompression for significant capnoperitoneum (9/252 mucosal lesions, 5/102 SELs). Median age was 72 years (IQR 63–77), 57% were female, and median lesion size was 32.5 mm (IQR 20–50). R0 resection was achieved in 12/14 (86%). Median full-thickness defect size was 10 mm (IQR 8–12.5) with e-EFTR and 3 mm (IQR 2–7) with ESD. Complete endoscopic closure was achieved in all cases using a median of 5 clips (IQR: 4–6) in the ESD group and 10 clips (IQR: 8–11.5) in the e-EFTR group, with negative leak testing confirmed in every case. Post-procedure CT imaging was performed in 3/14 patients (21.4%) for abdominal pain, demonstrating expected capnoperitoneum without contrast leak. One patient (7%) developed transient fevers managed with antibiotics alone, and one (7%) required patient-controlled analgesia. Clear fluids and solid diet were resumed at a median of 1 days (IQR 1–2) and 3 days (IQR 2.5–3.5), respectively. The NG tube was removed after a median of 2 days (IQR: 1–3). Median length of stay was 3 days (IQR 2.5–3.5). No surgical intervention was required, and there were no long-term sequelae or mortality. Readmission rate was zero.

Conclusions Full-thickness defects with tension capnoperitoneum during gastric ESD or e-EFTR can be safely managed using a standardised protocol incorporating needle decompression, endoscopic closure and confirmatory leak testing. This approach achieved 100% technical success with no surgical rescue, rapid diet advancement, and short inpatient stay. Our findings support routine integration of this protocol into advanced gastric endoscopic resection practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP086 Gel immersion endoscopic mucosal resection for gastric neoplasms in patients with familial adenomatous polyposis: a multicenter study

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DOI 10.1055/s-0046-1821026

Aims Gastric neoplasms (GNs) occur in approximately 10–30% of patients with familial adenomatous polyposis (FAP). While several recent studies have demonstrated the benefits of intensive endoscopic interventions for colorectal and duodenal lesions in FAP [1, 2], evidence regarding such strategies for GNs remains scarce. Moreover, there are no established guidelines for endoscopic management of FAP-associated GNs, and the most appropriate resection method has yet to be defined. Recently, gel immersion endoscopic mucosal resection (GI-EMR) using Viscoclear (Otsuka Pharmaceutical Factory, Tokushima, Japan),

an endoscopic field-of-view securing gel, has been reported [3]. This method provides a clear field of view even in the presence of residue or mucus, allowing for accurate resection under direct visualization while maintaining the simplicity of underwater EMR (UEMR). A previous report demonstrated that GI-EMR in the duodenum reduced procedure time and increased R0 resection rates compared with UEMR [4], suggesting potential advantages for gastric lesions as well. A previous report suggested the effectiveness of GI-EMR for GNs in patients with FAP [5], indicating its potential as an endoscopic therapeutic intervention for such lesions. However, no previous studies have evaluated treatment outcomes of GI-EMR for GNs in patients with FAP. This study aimed to evaluate the effectiveness of GI-EMR for GNs in patients with FAP compared with conventional resection methods.

Methods This was a multicenter, retrospective, observational study of patients with FAP who underwent endoscopic resection for GNs between April 2011 and November 2024. Currently, there is no established consensus on the optimal resection method for FAP-associated GNs. In this study, ESD, which has been mainly performed for sporadic GNs (even those measuring ≤ 20 mm), was tentatively adopted as the standard treatment for FAP-associated GNs. Using this provisional standard as a basis, we conducted a comparative analysis with the newly developed GI-EMR technique. To compare treatment outcomes between GI-EMR and ESD, we identified cases of GNs measuring ≤ 20 mm in diameter, with protruding or flat elevated morphologies, which were indications for GI-EMR at our institutions, from patients who underwent endoscopic resection during the study period. In the GI-EMR procedure, the gel was injected into the stomach through the accessory channel using a syringe and the Bi-oShield irrigator (U.S. Endoscopy). The lesion was then carefully captured with a snare and resected using a blended cut current setting (Endocut Q; effect 3, time interval 2, time duration 2).

Results A total of 27 GNs (seven patients) ≤ 20 mm in size with flat elevated or protruding morphology, in which ESD or GI-EMR was performed, were analyzed, consisting of 15 ESD and 12 GI-EMR cases. The median lesion size did not differ significantly between groups (10 mm vs. 11.5 mm, respectively, $P=0.30$). En bloc resection rates were 100% in both groups, while R0 resection rates were 100% for ESD and 83.3% for GI-EMR ($P=0.19$). The median procedure time was significantly shorter in the GI-EMR group compared with the ESD group (2 min vs. 47 min, $P<0.001$). Intraoperative perforation occurred in one ESD case (6.7%), but was not observed in the GI-EMR group. No delayed bleeding or perforation was reported in either group. During a median follow-up of 22.3 months, no local recurrence was observed in either group.

Conclusions GI-EMR appears to be a safe and effective treatment option for GNs in patients with FAP. Although GI-EMR may be less invasive compared to ESD, the limited number of cases warrants additional studies to substantiate its safety and effectiveness.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kimura H, Oi M, Morita Y et al. Gel immersion endoscopic mucosal resection for a gastric neoplasm with a background of fundic gland polyposis. *Endoscopy* 2022; 54: E1011–E1012
- [2] Miyakawa A, Kuwai T, Sakuma Y et al. A feasibility study comparing gel immersion endoscopic resection and underwater endoscopic mucosal resection for superficial nonampullary duodenal epithelial tumors. *Endoscopy* 2023; 55: 261–266
- [3] Kimura H, Yamamoto Y, Yabuuchi Y et al. Gel immersion endoscopic mucosal resection for early gastric neoplasms: a multicenter case series study. *Endosc Int Open* 2024; 12: E435–E439
- [4] Takeuchi Y, Hamada K, Nakahira H et al. Efficacy and safety of intensive downstaging polypectomy (IDP) for multiple duodenal adenomas in patients with familial adenomatous polyposis: a prospective cohort study. *Endoscopy* 2023; 55: 515–523
- [5] Ishikawa H, Yamada M, Sato Y et al. Intensive endoscopic resection for downstaging of polyp burden in patients with familial adenomatous polyposis (J-FAPP Study III): a multicenter prospective interventional study. *Endoscopy* 2023; 55: 344–352

PYP087 Endoscopic Procedures for Gastric Foveolar-Type Adenoma with Raspberry-Like Appearance in *H. pylori*-uninfected patients

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DOI 10.1055/s-0046-1821027

Aims Recently, the proportion of *H. pylori*-positive patients has gradually decreased due to the widespread use of *H. pylori* eradication therapy; consequently, the incidence of *H. pylori*-uninfected gastric epithelial neoplasms (HpUGENs) has been gradually increasing in East Asia. Among these HpUGENs, gastric foveolar-type adenoma with a raspberry-like appearance (GFA-R), which presents as a strongly reddish, nodular or granular elevated lesion, represents one of the lesions most frequently encountered in routine clinical practice and has garnered increasing attention. In the latest WHO classification, it has been newly defined as a foveolar-type adenoma. Although its current prevalence in Western countries appears to be relatively low, it is expected to become a clinically significant entity in these regions in the foreseeable future. However, endoscopic treatment strategy for GFA-R has not yet been established. We aimed to clarify the efficacy and safety of endoscopic procedures (cold forceps polypectomy (CFP), cold snare polypectomy (CSP), and endoscopic mucosal resection (EMR)) for GFA-R.

Methods We retrospectively analyzed 88 raspberry-like lesions in 74 patients that were endoscopically treated at our institution between January 2009 and December 2023 and were pathologically diagnosed as foveolar-type adenoma in accordance with the WHO classification. The clinicopathological characteristics, endoscopic characteristics, and treatment outcomes of GFA-R were evaluated retrospectively.

Results The median age was 56 years (range, 29–85 years), and the male to female ratio was 49:25. Proton pump inhibitor or potassium-competitive acid blocker use was observed in 16 of 74 patients (21.6%), smoking history in 32/74 (43.2%), and alcohol history in 30/74 (40.5%). Regarding the lesion location, GFA-Rs occurred mostly in the greater curvature of the upper and middle third of the stomach. The median tumor size was 4.0 mm (range, 1–10 mm). Endoscopic procedures consisted of biopsy alone ($n = 6$), CFP; $n = 42$, outpatient/inpatient: 38/4, CSP; $n = 4$, 1/3, and EMR; $n = 36$, 0/36. The overall en bloc resection rate was 94.3% (83/88): 90.4% in CFP (38/42), 75.0% in CSP (3/4), and 97.2% in EMR (35/36). Lesions smaller than 5 mm were mainly treated with CFP (34/58), whereas lesions ≥ 5 mm were mainly treated with EMR (20/30). Histologically, all lesions were intramucosal neoplasms without lymphovascular invasion. The curative resection rate was 97.7% (86/88). In two lesions, the horizontal and vertical margins were histologically indeterminate; however, no residual tumor was detected endoscopically. No intraoperative or delayed complications, such as bleeding or perforation, occurred with any procedure. The mean follow-up period after treatment was 28.7 months (range, 2–165 months), and no local recurrences were observed endoscopically at 1 year ($n = 62$), 2 years ($n = 40$), or 3 years ($n = 24$) after endoscopic treatment, including in cases with piecemeal resection or indeterminate margins.

Conclusions In this series of 88 GFA-R lesions, the efficacy and safety of endoscopic procedures for GFA-R may be confirmed regardless of procedure method. Moreover, outpatient CFP might have proven to be a simple, useful, and economical endoscopic procedure for GFA-R of smaller than 5 mm.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP088 Delayed bleeding prevention using non-coagulation clipping after gastric endoscopic submucosal dissection

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DOI 10.1055/s-0046-1821028

Aims Delayed bleeding (DB) is the common adverse event after gastric endoscopic submucosal dissection (ESD), and post-ESD electrocoagulation (PEC) is widely performed as a prophylactic hemostasis to prevent DB. On the other hand, we occasionally encounter post-ESD electrocoagulation syndrome (PECS), characterized by abdominal pain, fever without perforation. PECS is expected to be caused by thermal tissue damage and known as a general adverse event in esophagus and colorectal ESD. However, it is also recently reported in gastric ESD cases. To reduce thermal damage, we underwent a non-coagulation clipping (NCC) as a prophylactic hemostasis that is only mechanical clipping to all exposed vessels without electrocoagulation. This study aimed to evaluate the safety and efficacy of NCC compared with conventional PEC, focusing on DB, postoperative inflammatory response, and incidence of PECS.

Methods This retrospective observational study was conducted consecutive patients who underwent gastric ESD at Kyoto Prefectural University of Medicine between January 2023 and March 2025. PEC was performed from January 2023 to March 2024, and NCC from April 2024 to March 2025. Patients with aspiration pneumonia, definitive causes of inflammatory elevation without PECS, complete ulcer closure, or combined use of coagulation and clipping were excluded. Outcomes were the incidence of adverse events including DB and PECS after gastric ESD with PEC or NCC. PECS was defined as abdominal pain and fever with WBC $\geq 10,000/\mu\text{L}$ or CRP ≥ 0.5 mg/dL, without perforation. Statistical analyses were performed using chi-squared test, Fisher's exact test, Mann-Whitney U test, and Firth's bias-reduced estimation, with significance defined as $p < 0.05$.

Results Of the 294 patients initially enrolled, 36 were excluded and 126 in the PEC group and 132 in the NCC group were analyzed. Patient backgrounds, comorbidities, lesion characteristics, and use of antithrombotic agents were generally comparable. Endoscopic lesion size (median [IQR]: 10 [6–19] mm vs. 13 [8–21] mm; $p = 0.015$) and resection size (median [IQR]: 28 [23–36] mm vs. 32 [25–40] mm; $p = 0.022$) were significantly larger in the NCC group. The median time required for prophylactic hemostasis did not differ significantly between groups (median [IQR]: 11 [9–14] min vs. 12 [9–16] min; $p = 0.106$). In the NCC group, a median of 15 clips (IQR 12–20) was used. About the postoperative course, abdominal pain occurred significantly less frequently in the NCC group compared with the PEC group (6.1% vs. 13.5%; $p = 0.044$), and fever incidence was also lower in the NCC group (5.3% vs. 14.3%; $p = 0.015$). On POD1, WBC was significantly lower in the NCC group (median [IQR]: $8.0 [6.7–9.3] \times 10^6/\mu\text{L}$ vs. $8.8 [7.1–10.0] \times 10^6/\mu\text{L}$; $p = 0.007$), whereas CRP and hemoglobin levels showed no significant differences. PECS occurred in 4.8% of PEC patients but in none of the NCC patients ($p = 0.013$). DB and delayed perforation occurred at similar rates in the PEC and NCC groups (4.0% vs. 3.8%; $p = 1.000$), (0.8% vs. 0.8%; $p = 1.000$). In univariate analysis, NCC was significantly associated with reduced PECS incidence (odds ratio [OR] 0.264, 95%CI: 0.023–0.776, $p = 0.005$). These findings suggest that mechanical clipping alone is sufficient for effective prophylactic hemostasis after gastric ESD in many cases and avoiding electrocoagulation on the post ESD ulcer may reduce the occurrence of PECS.

Conclusions The NCC method significantly reduced incidence of postoperative abdominal pain, fever, inflammatory response, and PECS compared with PEC, without increasing DB. NCC has a potential of a safe, less invasive alternative procedure to PEC. Further studies are required to establish its efficacy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP089 Comparative Effectiveness of Traction-Assisted and Conventional ESD for Gastric Neoplasia: Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1821029

Aims Traction-assisted endoscopic submucosal dissection (T-ESD) is designed to improve tissue exposure and facilitate safer, more efficient resections. However, comparative evidence across traction modalities remains heterogeneous. We conducted a meta-analysis evaluating the effectiveness and safety of T-ESD versus conventional ESD (C-ESD) for gastric neoplasia, including predefined subgroup analyses.

Methods Five comparative studies (4 RCTs and 1 prospective cohort) comprising **1,514 gastric lesions** were included. Effect sizes were pooled using random-effects models. Continuous outcomes were summarized as mean differences (MD), and binary outcomes as risk ratios (RR). Subgroup analyses assessed outcomes by traction modality, operator experience, and lesion location.

Results A total of 758 lesions were resected with traction and 756 with standard ESD. Procedure time was significantly shorter with T-ESD (MD – 9.7 minutes, 95 % CI – 16.6 to – 2.8; 4 RCTs). R0 resection rates were comparable between groups (RR 1.01, 95 % CI approximately 0.98–1.05). En-bloc resection was uniformly high in all studies (> 95 %) with no significant difference (RR ~ 1.00). Perforation occurred less frequently with traction (RR approximately 0.30). Delayed bleeding rates were nearly identical (RR: approximately 1.00).

Subgroup analyses Traction method: All four modalities favored T-ESD, with the greatest reductions in procedure time observed for GTS-partner and CSM-PLT. Operator experience: Both experts (MD ~ – 9 min) and trainees (MD ~ – 9 min) demonstrated faster dissection with traction, with a consistent magnitude of benefit. Lesion location: T-ESD reduced procedure time in both the upper/middle and lower stomach (DFC pilot: MD – 8 to – 10 minutes). No subgroup showed loss of effectiveness or increased risk with traction.

Conclusions Traction-assisted gastric ESD significantly reduces procedure time without compromising safety or curative resection outcomes. Benefits are consistent across different traction devices, operator experience levels, and lesion locations. T-ESD appears advantageous and may enhance efficiency even for less-experienced operators.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP090 Factors associated with difficulty in gastric ESD performed by trainees: implications for ESD training

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DOI 10.1055/s-0046-1821030

Aims Endoscopic submucosal dissection (ESD) is increasingly performed by trainees under expert supervision, and appropriate case selection is crucial for safe procedure. Unlike in Western countries, gastric ESD is widely adopted in Japan and serves as the main training model. However, the number of gastric ESD cases is expected to decline owing to the widespread implementation of *Helicobacter pylori* eradication. This study aimed to identify factors associated with difficult cases in gastric ESD performed by trainees and to explore implications for ESD training.

Methods We retrospectively analyzed consecutive gastric ESD procedures performed by trainees (fewer than 60 prior ESD cases) at a single center between September 2020 and September 2025. A difficult case was defined as

any procedure having at least one of the following: (1) procedure time ≥ 120 minutes; (2) change of operator; or (3) occurrence of intraoperative perforation. Patient characteristics, lesion location, tumor size, and procedure-related factors were compared between difficult and non-difficult cases. Univariable analysis followed by multivariable logistic regression was performed to identify factors associated with difficult cases.

Results A total of 299 patients with 330 lesions performed by trainees were included. 30 patients had multiple lesions. The median age was 76 (range: 46–91) years, and 203 (68 %) were men. Median tumor size was 9 (IQR: 6–15) mm. 38 lesions located in the upper part, 145 in the middle part, 147 in the lower part, respectively. Median procedure time was 62 (IQR: 34–110) minutes. Tumor invasion depth was M/SM1/SM2: 295/15/4 lesions, respectively. Overall, difficult cases were 101 cases (34 %). 71 cases had a procedure time ≥ 120 minutes, 63 required an operator change, and 7 developed intraoperative perforation. Compared with non-difficult cases, difficult cases more frequently involved lesions in the upper part (24 % vs 6 %) and had significantly larger tumor size (10 mm vs 8 mm). In univariable analysis, location of the upper part and tumor size were associated with difficult cases, whereas there were no significant differences in age, number of cases with multiple lesions, depth of invasion, and lesion location in the cross-sectional circumference. In multivariable analysis, location of the upper part (odds ratio 4.4; 95 % confidence interval 2.85–6.8; $p < 0.001$) and tumor size (odds ratio 1.03; 95 % confidence interval 1.00–1.05; $p = 0.047$) remained independent predictors of difficult cases.

Conclusions In gastric ESD performed by trainees, location of the upper part and larger tumor size were significantly associated with difficult cases. These difficult factors likely reflect technically demanding conditions, such as poor scope stability, the need for retroflexion, and extensive submucosal dissection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

The Perfect Colon Prep – Have We Reached Nirvana?

14/05/2026, 15:30–16:30

Emerald 3

PYP091 Effectiveness of Simethicone in Bowel Preparation for Colonoscopy – A Multicenter Quality Improvement Project

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DOI 10.1055/s-0046-1821031

Aims High-quality bowel preparation is crucial for a successful colonoscopy, as well as for effective colorectal cancer prevention [1]. Simethicone, an anti-foaming agent, reduces intraluminal bubbles and improves mucosal assessment [2]. Its potential benefits when added to very-low-volume polyethylene glycol + ascorbic acid (PEG-AC) preparations have not been evaluated in real-world practice. The aim of the study is to assess whether adding simethicone to very-low-volume 1 litre PEG-AC bowel preparation reduces bubble formation, improves bowel cleanliness, and affects patient experience compared to PEG-AC alone.

Methods This ongoing multicenter project, involving seven endoscopy units across Sweden, started in September 2024. Consecutive outpatients undergoing a complete colonoscopy were assigned to standard PEG-AC (control) or PEG-AC plus simethicone (3 × 200 mg capsules per dose). Bowel cleanliness was assessed using the Boston Bowel Preparation Scale (BBPS) [3], and the presence of bubbles was assessed during intubation using the Colon Endoscopic Bubble Scale (CEBuS) [4]. Patient experience of bowel preparation and procedural data were collected. Data were analyzed using descriptive statistics, t-tests or Mann-Whitney U tests for continuous variables, and χ^2 tests for categorical variables.

Results A total of 637 patients were included (PEG-AC: n = 407; PEG-AC + simethicone: n = 230). Mean age was similar (59.8 vs. 60.2 years), but with more females in the simethicone group (p = 0.010). CEBuS scores were significantly lower in the simethicone arm in all bowel segments (p < 0.0001), and associated with a tenfold increased use of simethicone in the PEG-AC group – 31.1 % compared to only 3.9 % in the simethicone group (p < 0.001). However, there were no significant differences between the groups in total or segmental BBPS, including high-quality cleansing (total BBPS 8–9 or right-sided score 3) after adjusting for age, sex, preparation volume, water use during intubation, and extra intraprocedural simethicone use. Procedure and withdrawal time, polyp detection rates and patient-reported symptoms (bloating, nausea, vomiting) were also similar after adjusting as before mentioned. The descriptive statistics are depicted in ► **Table 1**.

Conclusions The addition of simethicone to very-low-volume PEG + ascorbic acid effectively reduced bubbles in the large bowel, though no improvements were observed in cleanliness, polyp detection, procedure times or patient experience in this interim analysis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Taveira F, Hassan C, Kaminski MF, Ponchon T, Benamouzig R, Bugajski M et al. The Colon Endoscopic Bubble Scale (CEBuS): a two-phase evaluation study. *Endoscopy*. 2022; 54 (1): 45–51
- [2] Lai EJ, Calderwood AH, Doros G, Fix OK, Jacobson BC. The Boston bowel preparation scale: a valid and reliable instrument for colonoscopy-oriented research. *Gastrointest Endosc* 2009; 69: 620–5
- [3] Pan P, Zhao SB, Li BH. et al. Effect of supplemental simethicone for bowel preparation on adenoma detection during colonoscopy: a meta-analysis of randomized controlled trials. *J Gastroenterol Hepatol* 2019; 34: 314–320
- [4] Yoon JY, Cha JM, Jeon YT. Quality is the Key for Emerging Issues of Population-Based Colonoscopy Screening. *Clin Endosc* 2018; 51 (1): 50–5

PYP092 Efficacy of Simethicone Prior to Upper Endoscopy on Mucosal Visualization: Results of a Blinded Trial

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DOI 10.1055/s-0046-1821032

Aims Bubbles are frequently encountered during esophagogastroduodenoscopy (EGD) and may impair adequate mucosal visualization (MV). The primary objective of this study was to evaluate the effect of pre-endoscopic simethicone administration on mucosal visibility using the GRACE (Gastroscopy Rate of

► **Table 1**

Parameter		PEG-AC arm	PEG-AC + simethicone arm	χ^2 and p value
Age in years (mean (range))		59.81 (19-91)	60.29 (20-88)	ns
Sex (% women)		45.8 %	57.8 %	$\chi^2 = 6.616$ p = 0.010
CEBuS (mean (SD))	CEBuS Left colon	0.50 (0.68)	0.14 (0.39)	p < 0.0001
	CEBuS Transverse colon	0.50 (0.72)	0.12 (0.37)	p < 0.0001
	CEBuS Right colon	0.60 (0.74)	0.09 (0.32)	p < 0.0001
	CEBuS Total	1.59 (1.72)	0.34 (0.94)	p < 0.0001
BBPS (mean (SD))	BBPS Right colon	2.56 (0.54)	2.62 (0.50)	ns
	BBPS Transverse colon	2.83 (0.38)	2.78 (0.45)	ns
	BBPS Left colon	2.63 (0.50)	2.67 (0.50)	ns
	BBPS Total	8.0 (1.22)	8.07 (1.27)	ns
	BBPS Right High (%)	58.1 %	63.0 %	ns
	BBPS Total High (%)	65.9 %	70.0 %	ns
Intra-procedural simethicone (% used)	31.1 %	3.9 %	$\chi^2 = 64.816$ p < 0.001	
Procedure time in min (mean (SD))	34.40 (14.55)	31.07 (15.75)	ns	
Withdrawal time in min (mean (SD))	19.12 (11.01)	16.96 (11.41)	ns	

PEG-AC, BBPS, CEBuS – see text; BBPS Right High BBPS in the right colon = 3; BBPS Total High BBPS total score > 7; min minutes; SD standard deviation; ns non-significant

Cleanliness Evaluation) scale. Secondary objectives included assessment of procedure duration, endoscopist satisfaction, and the detection rate of endoscopic findings.

Methods This was a prospective, single-center, randomized, blinded study including patients undergoing elective EGD between December 2024 and November 2025. Patients were randomized into three groups: A (100 mg simethicone $\leq$ 10 minutes before EGD), B (100 mg simethicone $>$ 10 minutes before EGD), and C (50 mL water, placebo). All received a total volume of 50 mL. Patients with gastroparesis, achalasia, or prior gastrointestinal surgery were excluded. MV was assessed using the GRACE scale (validated in 2024), which scores each segment (esophagus, stomach, duodenum) from 0 to 3 based on bubble quantity, resulting in a total score from 0 (inadequate) to 9 (excellent). Endoscopist satisfaction was subjectively assessed on a scale from 0 (not satisfied) to 10 (highly satisfied).

Results A total of 142 patients were included (33 in group A, 54 in group B, and 55 in group C). Overall, 87 patients received 100 mg of simethicone and 55 received placebo. Median administration times were 9 minutes in group A and 20 minutes in group B. Simethicone significantly improved MV compared with placebo (mean GRACE score: 5.71 ± 1.70 vs 7.70 ± 1.50 ; $p < 0.001$), with significant improvements in all segments (esophagus: 2.00 (1–3) vs 3.00 (2–3), $p < 0.001$; stomach: 1.00 (1–2) vs 2.00 (2–3), $p < 0.001$; duodenum: 2.00 (2–3) vs 3.00 (2–3), $p < 0.001$). No correlation was observed between timing of simethicone administration and total GRACE score (Pearson $r = -0.079$; $p = 0.469$). Endoscopist satisfaction was higher in the simethicone group (6.25 ± 1.82 vs 8.01 ± 1.76 ; $p < 0.001$). No significant differences were found in median procedure duration (7.00 min (5–9) vs 7.00 min (5–9); $p = 0.948$) or diagnostic yield ($\chi^2(1) = 1.114$; $p = 0.291$). Among patients receiving simethicone, early administration showed no significant advantages over late administration: median EGD duration was 7.00 min (6–8) vs 8.00 min (6–10), and diagnostic findings 75.8% vs 83.3%, respectively ($\chi^2(1) = 0.748$; $p = 0.387$).

Conclusions Pre-endoscopic simethicone significantly improved mucosal visibility across all upper GI segments, independent of administration timing. No statistically significant differences were observed between early and late administration with respect to mucosal visualization, procedure duration, or diagnostic yield. High endoscopist satisfaction and consistent improvements in visibility support the routine use of simethicone prior to EGD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP093 Optimizing Colonoscopy Preparation in End Stage Renal Disease (ESRD): A Tailored Low-Volume Approach

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DOI 10.1055/s-0046-1821033

Aims Potential renal transplant candidates with end-stage renal disease (Pt-ESRD) often experience inadequate bowel preparation due to restrictions on bowel cleansing agents, limited fluid intake, comorbidities, and the pharmacologic effects of their medications.

We aimed to evaluate the safety and effectiveness of a revised, personalized bowel preparation protocol in improving colonoscopy outcomes among PtESRD patients undergoing pre-transplant evaluation.

Methods All patients referred for screening/surveillance colonoscopy by the nephrologist were included unless canceled for non-preparation-related medical reasons. A personalized preparation protocol was implemented between 06/2024–02/2025, including a 5-days low-fiber diet, daily bisacodyl, tailored fluid intake, and reduced-volume PEG 3350 with ascorbic acid (PtESRD group). The control group (historical cohort, 01/2022–05/2024) received standard

preparation: 2-days low-fiber followed by clear liquid diet and 3 liter PEG 3350 solution. The groups were compared by clinical and demographic characteristics. The primary outcome was inadequate bowel preparation, defined as a Boston Bowel Preparation Scale (BBPS) score < 6 . Risk factors were evaluated using logistic regression analysis.

Results A total of 156 inpatients were included (mean age 65.2 ± 0.7 years, range 39.1–84.5 years; 116 [74.4%] male). Of these, 62 patients (39.7%) received bowel preparation with the modified PtESRD protocol, while 94 patients (60.3%) followed the standard protocol. Clinical and demographic characteristics, including age, sex, BMI, diabetes mellitus, and use of motility-affecting medications or disorders, were similar between the groups ($p = \text{NS}$ for all). Active smoking was more prevalent in the control group (23.4% vs. PtESRD 8.1%, $p = 0.017$). The proportion of patients with a BBPS < 6 was significantly lower in the PtESRD group compared to control (40.3% vs. 66%; $P = 0.002$). This effect was consistent across all three colonic segments: right (33.9% vs. 62.8%, $p < 0.001$), transverse (25.8% vs. 45.7%, $p = 0.012$) and left (23.0% vs. 53.8%, $p < 0.001$). The proportion of complete preparation failures (BBPS = 0) was significantly lower among PtESRD (3.2%) compared to 27.7% among controls ($p < 0.001$). Complete colonoscopy, defined as cecal or ileal intubation, was achieved in 98.4% of PtESRD patients compared to 81.9% of controls ($p < 0.001$). In multivariate regression analysis, the PtESRD protocol was an independent protective factor, reducing the rate of inadequate bowel preparation by 65% (OR 0.365, 95% CI 0.180–0.741, $p = 0.005$), adjusted for sex, age, BMI, active smoking, and diabetes mellitus.

Conclusions This proof-of-concept study shows that the PtESRD protocol improves bowel preparation and colonoscopy completion rates in hospitalized ESRD transplant candidates. Its independent predictive value supports its use and highlights the potential of tailored protocols in high-risk patients. Further prospective studies are needed to confirm these findings and guide broader implementation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP094 Optimal Water Volume for 1L PEG-Ascorbate Bowel Preparation: A Randomized Comparison of 1L Versus 2L Additional Fluid Intake

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Aims The newly developed 1L polyethylene glycol with ascorbate (PEG-ASC) solution (CleanviewAI; Taejoon, Seoul, South Korea) offers the advantage of reduced volume for colonoscopy bowel preparation. However, the high content of sodium ascorbate and sodium sulfate in the solution raises concerns about potential hypernatremia. This study aimed to compare the efficacy and safety of the 1L PEG-ASC preparation when administered with 1L versus 2L of additional water in patients undergoing screening or diagnostic colonoscopy.

Methods This study was a prospective, consecutive enrollment of patients undergoing screening or diagnostic colonoscopy across three Korean academic hospitals. Patients were randomly assigned to one of two groups: the 1L group ($n = 87$) ingested 1L of PEG-ASC solution and 1L of water, and the 2L group ($n = 83$) ingested 1L of PEG-ASC solution and 2L of water. The primary endpoints were the assessment of overall bowel cleansing success and right colon cleansing using the Boston Bowel Preparation Scale (BBPS). The secondary endpoints were the evaluation of tolerability and safety (including treatment-related adverse events and changes in serum electrolytes/renal function).

Results A total of 170 patients were enrolled. The two groups were comparable in terms of gender ($p = 0.233$) and age ($p = 0.917$). There were no significant differences in the mean overall BBPS score or the right colon BBPS score between the 1L and 2L groups, indicating comparable cleansing efficacy. Interestingly, the polyp detection rate (PDR), and specifically the detection of polyps larger than 1 cm, was higher in the 1L group compared to the 2L group. However, there was no difference in the number of polyps detected in the right

colon. The difficulty of ingestion (tolerability) was reported as easier in the 1L group. Subgroup analysis revealed no significant changes in serum BUN, creatinine, sodium, potassium, and chloride levels between the two groups. In terms of treatment-related adverse events, thirst was more frequent in the 1L group, while vomiting was more frequent in the 2L group. All reported adverse events were self-limited and recovered without intervention.

Conclusions The study found no significant difference in bowel preparation efficacy or overall safety between ingesting 1L or 2L of water in conjunction with the 1L PEG-ASC solution. The 1L water intake regimen was associated with better tolerability (easier ingestion) and an unexpectedly higher polyp detection rate. Therefore, the lower-volume water intake regimen (1L water) may be preferable, but the choice of bowel preparation method should ultimately be tailored to the specific needs and preferences of each patient.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP095 1 L polyethylene glycol and ascorbate give better bowel preparation than sodium picosulfate with magnesium citrate during water-assisted colonoscopy

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Aims Adequate bowel preparation is critical for lesion detection during colonoscopy. This study compared the efficacy and tolerance of sodium picosulfate with magnesium citrate (SP+MC) versus 1 L polyethylene glycol and ascorbate (1 L PEG+Asc) in water-assisted colonoscopy.

Methods In this prospective study, we scored bowel preparation quality during colonoscopies in adults for all indications from June 2023 to April 2024. In this time period we converted from SP+MC to 1 L PEG+Asc as the standard purgative at our department. We intubated by water-assisted technique and withdrew with gas insufflation. Bowel preparation quality was scored using a modified Boston Bowel Preparation Scale (m-BBPS), scored 0–3 in three colon segments during intubation with water-assisted technique. Scores >2 indicated adequate preparation, and 3 indicated excellent preparation. Additionally, tolerance to the purgative and cecum intubation time was recorded. A subgroup was scored for BBPS (during withdrawal phase in gas insufflation), polyp detection rate (PDR), adenoma detection rate (ADR), sessile serrated lesion detection rate (SSLDR), patient-reported strong pain during colonoscopy and use of sedoanalgesia. Withdrawal time was measured in diagnostic procedures without biopsy. In the multivariate analysis, we corrected for gender and age above 50 years, and in subgroup analysis additionally for indication.

Results We scored 1988 colonoscopies, mean age 54.9 years (SD 16.7), 52.3% women, 48.2% used 1 L PEG+Asc. The OR for adequate m-BBPS in all segments with 1 L PEG+Asc compared to SP+MC was 2.46 (CI [1.98, 3.07], $p < 0.001$). OR for excellent m-BBPS right colon segment was 3.49 (CI [2.86, 4.26], $p < 0.001$). 1 L PEG+Asc was less tolerated (OR 0.76, CI [0.61, 0.95], $p = 0.014$). Cecum intubation times were similar between groups (15.4 (SD 10.5) vs. 16.0 minutes (SD 12.9), $p = 0.29$).

A subgroup of 1120 patients, mean age 55.0 years (SD 15.9), 52.9% women, 56.6% used 1 L PEG+Asc. The OR for adequate BBPS in all segments with 1 L PEG+Asc trended towards significance (OR 1.88, $p = 0.052$). OR for excellent BBPS right colon segment was 1.56, $p < 0.001$. Patients reported less strong pain during colonoscopy with 1 L PEG+Asc (OR 0.57, $p = 0.021$), but use of sedoanalgesia did not differ (OR 1.02, $p = 0.88$). Mean withdrawal times for diagnostic procedures without biopsy were 9.20 (SD 4.7) and 8.8 (SD 3.2) minutes, respectively ($p = 0.81$). OR for PDR was 1.23, $p = 0.13$. OR for ADR was 1.15, $p = 0.34$. OR for SSLDR was 1.63, $p = 0.068$.

Conclusions The newly developed m-BBPS (scored during intubation in water-assisted colonoscopy) revealed large and significant differences in rates of adequate bowel preparation in favor of 1 L PEG+Asc, but differences in BBPS (scored in the withdrawal phase in gas insufflation) did not reach significance

in the subgroup analysis. The difference in favor of 1 L PEG+Asc was especially large for excellent right colon m-BBPS, also showing significance for BBPS in the subgroup analysis. While 1 L PEG+Asc was less tolerated, it was associated with significantly less strong pain during colonoscopy. These findings suggest that 1 L PEG+Asc may enhance both procedural quality and patient comfort, supporting its adoption as a standard purgative for water-assisted colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP096 The effect of allowing a dinner the day before colonoscopy on quality of bowel cleansing. A randomized controlled trial with central reading (DinNER1006 trial)

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DOI 10.1055/s-0046-1821036

Aims Effective bowel cleansing is essential for a high-quality colonoscopy. However, strict pre-procedure dietary restrictions may burden patients and reduce compliance. This study assessed whether permitting a true low-fiber dinner on the day before colonoscopy affects bowel preparation quality or patient experience.

Methods In this single center, prospective, investigator-blinded randomized controlled trial, 494 patients scheduled for colonoscopy received a split-dose polyethylene glycol (PEG) regimen (NER1006, Norgine) administered the evening (6 or 8 p.m.) and at least 6 hours before the procedure. Participants were randomized (1:1) to either a standard regime without proper dinner the day before (last low-fiber meal at 15h) or a more lenient regime allowing a low-fiber dinner, up to 2 hours before initiating bowel preparation. The primary outcome was adequate bowel cleansing, defined as a Boston Bowel Preparation Scale (BBPS) score ≥ 6 with no segmental score < 2 , assessed by the endoscopists and an independent central reading. Secondary endpoints included other quality indicators, polyp (PDR), adenoma (ADR), advanced adenoma (aADR), and sessile serrated lesion (SDR) detection rates, and patient satisfaction.

Results Endoscopists' BBPS scoring achieved an adequate bowel cleansing in 94.4% of the controls and 99.2% of the interventional group ($p = 0.061$). Control and interventional groups demonstrated an optimal BBPS in 88.0% vs 84.9% ($p = 0.060$), respectively. After central reading, adequate bowel cleansing was achieved in 99.1% of the controls and in 96.7% of patients with a more lenient dinner ($p > 0.999$). Optimal cleansing was observed in only 68.7% vs 60.4%, respectively ($p = 0.0601$).

Quality indicators PDR (73.5% vs 71.8%), ADR (49.4% vs 55.1%), aADR (17.7% vs 18.8%), and SDR (12.0% vs 11.0%) did not differ significantly between both groups. Patient satisfaction was not significantly different between groups, with 74.3% vs 73.1% reporting ≤ 1 negative feeling during bowel preparation ($p = 0.7604$).

Conclusions Permitting a low-fiber dinner up to 2 hours before starting bowel cleansing does not compromise the adequacy of colon cleansing with a split-dose PEG NER1006 regimen administered the evening and 6 hours before colonoscopy. Quality metrics and patient satisfaction remain high, indicating that a less restrictive dietary approach can be safely adopted. Central reading highlights the operator dependency of the BBPS scale prompting the need for objective tools like AI scoring systems.

Conflicts of Interest Consultancy fee Norgine NV

PYP097 Let's pop some bubbles

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DOI 10.1055/s-0046-1821037

Aims Adequate mucosal visualization is essential for high-quality esophago-gastroduodenoscopy (EGD), as suboptimal inspection has been associated with missed upper gastrointestinal neoplasia. Recent meta-analyses report that up to 10 % of upper gastrointestinal cancers and 23.9 % of esophageal adenocarcinomas in Barrett's esophagus are diagnosed within a short interval after a negative EGD, underscoring the importance of optimal mucosal visibility [1]. The presence of salivary residues and gastric foam frequently impairs visibility, requiring intraprocedural instillation of water and antifoaming agents, like simethicone, through the endoscope channel using a syringe. Oral administration of Simethicone prior to EGD has been proposed as a simple alternative to improve mucosal visibility while reducing syringe use and overall simethicone consumption [2]. Furthermore, Simethicone is not-water soluble and difficult to remove from endoscope channels, despite high level disinfection. It is frequently detected during borescope inspection of patient ready endoscope, where residues have been associated with retained moisture, biofilm formation, and infection risk [3]. The American Gastroenterological Association therefore recommend minimizing its use and concentration and avoiding administration through the irrigation channel [1]. Unlike the American guidelines, the European Society of Gastrointestinal Endoscopy (ESGE) does not impose such restrictions on its intraprocedural use. Instead, ESGE recommends intraprocedural Simethicone administration only when persistent bubbles or biliary fluids remain after oral premedication, impairing adequate mucosal visualization [2].

Methods We conducted a non-inferiority case-control study comparing two simethicone administration strategies. We included only elective outpatient EGDs, excluding inpatient and emergency procedures. Standard endoscopic instillation via syringe, used only when considered necessary to improve mucosal visualization, was adopted in February, April, and June 2023, whereas oral premedication with 20 drops (0.6 mL) of simethicone diluted in 50 mL of water, administered 5 minutes before the procedure, was adopted in March, May and July 2023. A monthly alternation of the two strategies was adopted to limit selection bias linked to consecutive EGDs. Outcomes included the proportion of procedures requiring additional syringe use instillation, total simethicone consumption, and overall procedural costs.

Results A total of 1368 EGDs were performed during the study period (710 in the intervention group and 658 in the control group). Additional syringe use was required in 5 % of cases in the intervention group compared with 51 % in the control group. The number of syringe use decreased from 337 to 22 in the intervention group, representing a 94 % reduction. Simethicone consumption decreased from 0.95 mL to 0.64 mL/per exam (-32 %). Costs decreased from € 0.270 to €0.097/per gastroscopy (-64 %), corresponding to an estimated annual saving of €173/1000 exams.

Conclusions This study support that the application of current ESGE recommendations is safe, effective, and cost-saving strategy. It maintains diagnostic quality reducing procedural costs, representing an improvement for routine endoscopy practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nagula S, Parasa S, Laine L, Shah SC. AGA Clinical Practice Update on High-Quality Upper Endoscopy: Expert Review. *Clin Gastroenterol Hepatol* 2024; 22: 933–943. doi:10.1016/j.cgh.2023.10.034 Epub 2024 Feb 22 PMID: 38385942
- [2] Areia M, Esposito G, Leclercq P, Romańczyk M, Zessner-Spitzenberg J, Delgado Guillena PG, Monged A, Honrubia López R, Uchima H, Ruiz Ballesteros EJ, Panarese A, Reis de Oliveira LA, Afify S, Bisschops R, Ferlitsch M External Voting Panel. Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative – Update 2025. *Endoscopy* 2025; 57: 1268–1297. doi:10.1055/a-2674-4912 Epub 2025 Sep 11 PMID: 40934951

[3] Shenoy ES, Weber DJ, McMullen K, Rubin Z, Sampathkumar P, Schaffzin JK, Sickbert-Bennett E, Washer L, Yokoe DS, Calderwood AH, Chinn R, Day M, Garcia-Houchins S, Javaid W, Klacik S, Kyle E, Murthy RK, Wood A, Rutala WA. Multisociety guidance for sterilization and high-level disinfection. *Infect Control Hosp Epidemiol* 2025; 1–23. doi:10.1017/ice.2025.41 Epub ahead of print PMID: 40289578

PYP098 Abstract: Optimizing Suction and Irrigation Using a Modified TUR Set During Gastroscopy

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DOI 10.1055/s-0046-1821038

Aims To evaluate the efficacy of a modified Transurethral Resection (TUR) set attached to the biopsy channel in enhancing suction and lavage efficiency during gastroscopy in patients presenting with fluid-filled or food-filled esophagus and stomach, conditions frequently associated with procedural delay and increased aspiration risk

Methods A six-month prospective comparative assessment was conducted on upper gastrointestinal endoscopy cases performed under propofol–fentanyl sedation. Despite an 8-hour fasting protocol with clear liquids allowed up to 3–4 hours before the procedure, selected patients had retained residue in the esophagus or stomach. Sixty such cases were randomized into two equal groups: Arm A (standard biopsy-channel suction) and Arm B (modified TUR-set suction). Residue volume per case ranged from 200 mL to 700 mL. Time required to achieve clearance of 300 mL of residue was recorded for several residue categories including clear fluid, thick liquids, soft food, solid fibrous material, fresh blood clots, and organized blood clots. Percentage improvement in clearance time was derived to quantify effect size.

Results The modified TUR-set system consistently reduced clearance time across all residue types. The observed improvements were as follows: For clear fluid and bile, the average clearance time improved from 1 minute 15 seconds to 50.4 seconds, representing a 32 % reduction. In patients with achalasia and a fully distended esophagus, clearance time improved from 8 minutes 22 seconds to 5 minutes 16 seconds, corresponding to a 37 % reduction. Thick semisolid residue such as altered milk or curd showed a reduction from 4 minutes 21 seconds to 2 minutes 53 seconds, translating to a 34 % improvement. Similarly, soft food materials such as rice, digested egg, and other easily fragmentable substances demonstrated a strong benefit; clearance time declined from 5 minutes 11 seconds to 3 minutes 19 seconds, indicating a 36 % improvement. Solid food with fibrous texture showed only modest enhancement—14 minutes 52 seconds versus 12 minutes 34 seconds—amounting to a 15 % reduction. Fresh blood clots showed one of the highest benefits: clearance time decreased from 12 minutes 29 seconds to 7 minutes 31 seconds, a 40 % improvement. Organized clots, being more cohesive and resistant to fragmentation, showed limited improvement of 13 %, decreasing from 14 minutes 37 seconds to 12 minutes 42 seconds. Aspiration events occurred in 23.3 % of patients in the standard-suction arm compared with 10 % in the TUR-set arm, corresponding to a 57 % relative risk reduction.

Discussion: Effect-size analysis based on percentage reduction in clearance time demonstrates clinically meaningful and consistent superiority of the modified TUR set over standard suction. The ability to rapidly declot the system using intermittent air flushing from an assistant-controlled syringe proved especially valuable for viscous fluids, semisolids, and fresh clots. This prevented the repeated need to remove the suction valve or use a cleaning brush—steps that otherwise prolong the procedure and increase aspiration risk. The strongest benefits were observed in fresh blood, fluid blood, and soft food residue, where high-flow suction combined with rapid channel clearance significantly shortened the time needed to restore adequate visualization. For fibrous solids or organized clots, both systems performed poorly, highlighting the intrinsic physical limitations of endoscopic suction in these materials. The reduction in aspiration events reinforces the safety benefit of the modified TUR system.

Faster clearance in a stomach or esophagus loaded with retained residue inherently reduces the duration during which regurgitation and aspiration can occur. Additionally, uninterrupted suction flow improves procedural efficiency, decreases operator fatigue, and allows earlier progression to therapeutic interventions when required.

Conclusions The modified TUR set provides a practical, low-cost, and highly effective enhancement to biopsy-channel suction during gastroscopy in patients with retained fluid, food residue, or blood. Percentage improvement analysis shows substantial reductions in clearance time—particularly for soft food materials, altered blood, and fresh clots. The device also reduces aspiration events, suggesting an important safety advantage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP099 Low-volume versus high-volume polyethylene glycol based bowel preparation for colonoscopy in people receiving haemodialysis: a randomized non-inferiority trial

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DOI 10.1055/s-0046-1821039

Aims Colonoscopy is used in people with chronic kidney disease receiving hemodialysis for renal replacement therapy and forms part of routine pre-transplant assessment. Concerns exist about use of oral bowel-cleansing agents for colonoscopy in people receiving haemodialysis, despite guidelines recommendations. It is plausible that intravascular depletion and consequent hypotension may cause thrombosis of the vascular access use for hemodialysis. We evaluated the comparative efficacy, safety and tolerability a low-volume versus a high-volume polyethylene glycol based bowel preparation for colonoscopy in people on hemodialysis.

Methods This was a multicentre, PROBE design, parallel-arm, centrally randomized, non-inferiority phase IV trial. Eligible subjects were allocated 1:1 to either low-volume (2 liters) or high-volume (4 liters) bowel preparation. The primary outcome was the proportion of participants with adequate bowel cleansing, evaluated using the Boston Bowel Preparation Scale (BBPS). Secondary outcomes were adenoma detection rate (ADR), caecal intubation rate, patient tolerability/compliance, and adverse events (both related to colonoscopy and to dialysis/renal function). Differences were tested via t-test or Mann-Whitney U test for continuous normal variables or through chi-square or Fisher exact test for categorical ones.

Results Sixty-nine patients were randomized in four centres, 35 to low volume and 34 to high volume groups. Mean age was 62.5 ± 10.7 years; 54 were men and 15 were women. A total of 33 in the low-volume and 27 in high-volume completed colonoscopy; the main reasons for exclusion was stopping to take preparation (n = 5). 15. No difference in caecal intubation rate was observed (100% vs 96.6%, p = 1). Adequate bowel preparation was achieved in 69.7% and 63.0% of low and high-volume groups, respectively (p = 0.58). Mean BBPS was similar in the two groups (5.6 ± 2.4 vs 5.4 ± 2.4, p = 0.51). When sub-analyzing according to each bowel segment, we did not observe any difference for right, transverse nor left colon.

The ADR was 35.0% in low-volume and 37.0% in high volume (p = 0.10). Median number of polyps per patient was 1.5 in low and 2 in high-volume group (p = 0.45).

Mild abdominal swelling was the most common adverse event (27.3% vs 25.9% for high and low volume respectively, p = 0.29), followed by mild nausea (27.3% vs 18.5%, p = 0.29). A similar rate of willingness to repeat the same preparation was observed (87.9% vs 85.2%, p = 0.76). No emergency dialysis sessions were required and no deaths were recorded. Levels of serum creatinine remained stable before and after preparation in both groups.

Conclusions This small scale study based on an opportunistic sample confirms the difficulties in adequate preparation for colonoscopy in people on hemodialysis. It shows that both a low and a high-volume preparation were equally effective and safe. We did not observe a better tolerability for low-volume preparations, which may be a key findings but also due to suboptimal small sample size. Further large scale studies may be required to confirm our findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP100 Automated Quality Assessment in Endoscopy: A Multimodal Deep Learning System for Bowel Preparation Evaluation

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DOI 10.1055/s-0046-1821040

Aims Artificial intelligence has accelerated major advances in gastroenterology and endoscopy, yet adequate bowel preparation remains fundamental to high-quality examinations. Existing preparation scales for colonoscopy and capsule endoscopy are limited by subjective interpretation and by their confinement to individual gastrointestinal segments. Quality-assessment systems (CADq) offer a consistent and objective framework for evaluating preparation quality and optimizing procedural performance. This study aimed to develop CADq algorithms capable of automatically classifying preparation quality across multiple gastrointestinal regions, including the small bowel and colon, and across multiple endoscopic modalities including colonoscopy, enteroscopy, and capsule endoscopy.

Methods We retrospectively analyzed 144 colonoscopies from three devices, 28 enteroscopy procedures from three devices, and 5,793 capsule endoscopy exams from two devices. Bowel preparation was graded with the Boston Bowel Preparation Scale for colonoscopy, and as excellent (visible mucosa at least 90 percent), satisfactory (50 to 90 percent), or unsatisfactory (less than 50 percent) for enteroscopy and capsule endoscopy. The dataset included 181,910 colonoscopy images, 88,623 enteroscopy images, and 12,950 capsule endoscopy images, divided into training (90 percent) and testing (10 percent) subsets, with overlap between procedures from the same patient. Convolutional neural network performance was compared with expert consensus.

Results For colonoscopy, the model achieved sensitivity and specificity of 87 percent, a negative predictive value of 95 percent, and an overall accuracy of 96 percent. Because poor-quality cases were limited, a binary model distinguishing good from excellent preparation was implemented. In enteroscopy, classification across preparation categories achieved sensitivity ranges of 69 to 98 percent, specificity of 80 to 100 percent, and accuracy of 91 to 97 percent. In capsule endoscopy, sensitivity reached 92 percent, specificity 94 percent, and accuracy 92 percent.

Conclusions This study advances the field by introducing CADq algorithms able to classify bowel preparation in a multi-region, multi-technique, and multi-device framework. CADq systems are critical for supporting procedural quality and operational efficiency in endoscopic practice. To our knowledge, this

represents the first deep learning CADq strategy developed to evaluate preparation quality across distinct gastrointestinal regions. Future developments are expected to evolve toward real-time detection of blind spots and assessment of mucosal exposure. Combined with CAdE and CAdx, such systems are central to achieving full-spectrum integration of artificial intelligence into routine clinical care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Advancing the Field: Novel Techniques and Technologies

14/05/2026, 15:30–16:30

Emerald 4

PYP101 Comparison of “inject” and the iterative “ultraslim” speedboat assisted endoscopic submucosal dissection for large complex colon polyps- The first 400 cases

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DOI 10.1055/s-0046-1821041

Aims Speedboat is a novel multimodal endosurgical device. It utilizes the use of advanced bipolar energy for cutting/dissection and super-high frequency microwave energy for coagulation. This study aims to evaluate the efficacy of two versions (‘Inject’ with needle and ‘Ultraslim’ which is needless) of Speedboat assisted Endoscopic Submucosal Dissection (S-ESD) in the management of complex colorectal polyps.

Methods Data, from a prospectively collected clinical audit (2018-2025) was analyzed. Up to 02/2023 Speedboat “Inject” device was used for S-ESD cases whereas since 03/2023 the new iterative version, Speedboat “Ultraslim” device, was introduced. Cases were divided into two groups, the Inject group (01/2018-02/2023), and Ultraslim group (03/2023-11/2025). Lesions’ characteristics, location, long and short axis length, lesion surface (cm²), time and speed of dissection (cm²/h) were compared between the groups.

Results Over the study period, a total of 411 consecutive patients had an S-ESD attempt. 30 cases (7.3 %) were abandoned, 25 converted to pEMR (6.1 %). 356 en-bloc resections achieved [en-bloc rate 93.4 %, 56.2 % male, mean age 72] with a mean surface of 19.11 cm², and dissection speed 12.2 cm²/hr.

In the Inject group 200 cases were attempted in total. 21 were abandoned (10.5 %) and 14 converted to pEMR (7 %). 165 en-bloc resections were achieved [en-bloc rate 92.2 %, 56.6 % male, age 72 years with mean surface of 18.3 cm², and speed 9.98 cm²/h. 102 patients had their procedure under GA (62 %) to remove 142 distal (86 %) and 24 proximal (14.5 %) lesions which after histopathological examination revealed 38 polyps with HGD (23 %) and 22 with cancer (13.3 %).

In the Ultraslim group 211 cases were attempted in total. 9 cases were abandoned (4.3 %) and 11 converted to pEMR (5.6 %). 191 en-bloc resections were achieved [en-bloc rate 94.6 %, 55.7 % male, age 71 years, mean surface 21.78 cm² and speed 15.54 cm²/h. 175 patients were done under GA (91.6 %), 149 distal (78 %) and 34 proximal colon lesions (18 %) were excised. 51 cases showed HGD (27 %) and 25 were malignant (13.1 %).

There was a significant difference between the two groups in dissection speed ($p < 0.001$), and GA procedures ($p < 0.001$). Borderline statistical significance was seen in the mean surface ($p = 0.07$) in addition to percentage of abandoned cases ($p = 0.015$). No statistically significant difference in regards with age, gender and location was found between the groups.

Conclusions The use of Ultraslim needless device assisted S-ESD and GA appears to facilitate faster excision of large, complex colonic lesions and reduced number of abandoned cases. Data from an international registry will aid in further understanding of confounding factors for dissection speed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP102 A Novel AI-Driven Ultra-High-Magnification Endocytoscopy Enables Real-Time Standardised Intestinal Barrier Assessment in IBD

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DOI 10.1055/s-0046-1821042

Aims Intestinal barrier healing is an emerging therapeutic target in Inflammatory Bowel Disease (IBD), associated with deep mucosal healing and improved long-term outcomes [1]. Ultra-magnification Endocytoscopy (ECS) enables real-time, in vivo cellular-level assessment of the intestinal barrier, with strong histological correlation. However, its clinical application remains limited to expert centers due to the complexity of image interpretation [2]. We aimed to develop an artificial intelligence (AI)-driven system to standardise ECS-based evaluation of barrier integrity and predict adverse outcomes.

Methods Thirty-five high-quality ECS videos (2636 frames for crypt architecture, 2596 for goblet cells, 1009 for vascular pattern, and 702 for villi architecture) from Ulcerative colitis (UC) and Crohn’s disease (CD) patients were considered. Using five-fold cross validation, the frames from 28 videos were used for training the model, while the remaining were used for testing. Expert endoscopists scored barrier impairment according to a previously validated ECS [1], providing a reference standard for AI training. Separate convolutional neural networks (ResNet50, pretrained GastroNet data) were trained to identify abnormalities in villi/crypt architecture, vascular structure, and goblet cells density. The scores from the model training at frame level were aggregated to obtain a score at video level for each feature [3, 4]. A logistic regression model predicted overall barrier impairment, as well as major clinical outcomes (**Fig 1**). Diagnostic performance metrics were expressed as sensitivity, specificity, accuracy, positive and negative predictive values, and area under the curve (AUC).

Results Thirty-five patients (19 UC and 16 CD) were included. Our novel AI algorithm achieved high diagnostic accuracy in detecting overall and features-specific barrier impairment (**Tab 1**). For overall barrier impairment, the model yielded a sensitivity of 83 %, specificity of 100 %, accuracy of 97 %, and an AUC of 98 %. Feature-specific assessment at the video level also demonstrated strong metrics performance across epithelial and vascular features. The model accurately identified abnormalities in crypt architecture (91 % AUC), goblet cells (90 % AUC), villi architecture (94 % AUC), and vascular pattern (96 % AUC). Notably, clinical outcome prediction at 6 months achieved an accuracy of 89 % for UC, whereas it was only 44 % for CD.

Conclusions Our AI-driven ECS model provided the first automated and standardised assessment of intestinal barrier integrity in IBD. By overcoming the subjectivity and complexity of current evaluation methods, it enables barrier healing to emerge as a measurable and therapeutic endpoint in clinical practice and clinical trials.

Conflicts of Interest MI: Grant; Pentax, Olympus, Eli Lilly, Helmsley_Personal Fees: Pentax, Pfitzer, Janssen, Eli Lilly, J&J

References

- [1] Boers TGW, Fockens KN, van der Putten JA et al. Foundation models in gastrointestinal endoscopic AI: Impact of architecture, pre-training approach and data efficiency. *Med Image Anal* 2024; 98: 103298. doi:10.1016/j.media.2024.103298
- [2] Jong MR, Boers TGW, Fockens KN et al. GastroNet-5M: A Multicenter Dataset for Developing Foundation Models in Gastrointestinal Endoscopy. *Gastroenterology*. Published online 2025. doi:10.1053/j.gastro.2025.07.030
- [3] Majumder S, Santacroce G, Maeda Y et al. Endocytoscopy with automated multispectral intestinal barrier pathology imaging for assessment of deep healing to predict outcomes in ulcerative colitis. *Gut*. 2024; 73 (10): 1603–1606. Published 2024 Sep 9. doi:10.1136/gutjnl-2024-332894
- [4] Iacucci M, Majumder S, Zammarchi I et al. Automated real-time imaging of intestinal barrier integrity and molecular profiling for early outcome prediction in inflammatory bowel disease – Endo-Histo-Barrier-Omics study. *J Crohn Colitis*. 2025; In press

PYP103V REACT Multipoint Elastic Traction for Colorectal ESD: A Retrospective Single-Center Feasibility Series of 59 Consecutive Cases

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DOI 10.1055/s-0046-1821043

Problem to solve Effective traction for endoscopic submucosal dissection (ESD) should be applicable to diverse lesion morphologies and locations, adapting as dissection progresses, allow repositioning, and be cost-effective. Current traction methods are constrained by limitations such as single-point application, high cost (up to €120 per procedure), restricted adaptability, proprietary components, or procedural complexity. Multipoint traction techniques offer consistent directional tension, but wider adoption is limited by these practical barriers.

Innovation We developed REACT (Repositionable Elastic Adaptive Customizable Traction), a novel multipoint traction system constructed from medical-grade latex orthodontic elastic bands (Fox 1/4" 3.5Oz, Ormco). The system consists of multiple traction bands connected to a central linking band through cow hitch knots, with a dedicated fixation band to anchor the device to the opposite bowel wall. REACT configurations (REACT-3 with 3 traction bands to REACT-6 with 6 traction bands) are tailored to lesion size and anatomy. The device provides adjustable, multidirectional traction using standard endoscopic clips to attach traction bands to the lesion margin and fixation band to the opposite wall. Its elastic properties provide dynamic tension that automatically compensates for changes in luminal configuration during insufflation or lesion movement. Intra-procedural customisation allows real-time repositioning of traction points or addition of bands as needed. The system costs €0.05–€0.08 per procedure (excluding cost of clips), requires no proprietary components, and can be assembled rapidly after minimal training. Colour-coding (purple fixation band, green central linking band, alternating pink/orange traction bands) simplifies identification and manipulation during procedures.

Results Between February 2024 and July 2025, 59 consecutive colorectal lesions were resected using REACT-assisted ESD at a tertiary referral centre. Mean patient age was 66.8 years (SD 12.6), and 52.5% were male. Median lesion diameter was 30mm (IQR 25mm), with most lesions located in the rectum (55.9%) or sigmoid (16.9%). Histopathology revealed low-grade dysplasia in 32.2%, high-grade dysplasia/intramucosal cancer in 52.5%, and submucosally invasive cancer in 15.3%.

Intra-procedural perforation occurred in 3/59 cases (5.1%, 95% CI 1.1–14.1%), all managed endoscopically without surgery. Delayed bleeding occurred in 5/59 cases (8.5%, 95% CI 2.8–18.7%). No delayed perforations (0%, 95% CI 0–6.1%) or surgery for adverse events (0%, 95% CI 0–6.1%).

En-bloc resection was achieved in 58/59 cases (98.3%, 95% CI 90.9–100%). R0 resection rate was 93.2% (95% CI 83.5–98.1%). Median dissection speed was 20.0 mm²/min (IQR 14.6 mm²/min). REACT subjectively improved submucosal access in 94.9%. Median REACT deployment time was 6 minutes 7 seconds (IQR 4:00). Median 6 clips used (IQR 3). Most common configurations were REACT-3 (50.8%) and REACT-5 (25.4%).

Conclusions REACT-assisted colorectal ESD demonstrated safety comparable to contemporary traction-assisted ESD series, with perforation (5.1%) and delayed bleeding (8.5%) rates within acceptable ranges, and no delayed perforations or surgical interventions. All perforations were managed endoscopically. Feasibility metrics including dissection speed (20.0 mm²/min), en-bloc resection (98.3%), and R0 resection (93.2%) were comparable to other multipoint traction systems while offering substantial cost advantages. Device failure was rare (0.9% band detachment rate) and salvageable in all cases. The system's modular design allows real-time adaptability—traction points can be repositioned and additional bands attached as needed—particularly advantageous in lesions of varying size and anatomical complexity. Future implications include potential applications in upper gastrointestinal and other anatomical sites. Multicentre prospective randomized trials are warranted to validate these single-centre findings and establish comparative efficacy versus other traction methods across diverse clinical settings and procedural contexts.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/85bae746-b48d-4391-ae70-e81ab2d002d4/Uploads/19990_Video_REACT%20for%20ESGE%20Days%202026.mov

Conflicts of Interest All other authors declare no conflicts of interest. DJT: consulting fees and research support from Olympus Medical and research support from Fujifilm and Pentax Medical.

PYP104 The PROSPER Endoscopic Score: An Advanced Imaging Tool for Early Detection of Post-Operative Recurrence in Crohn's Disease

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DOI 10.1055/s-0046-1821044

Aims Post-operative recurrence (POR) of Crohn's disease (CD) remains a major challenge, affecting up to 80% of patients within 10 years after surgery. Conventional endoscopy struggles to distinguish early inflammatory recurrence from post-surgical ischemic changes, delaying effective treatment. Virtual chromoendoscopy (VCE) offers precise visualisation of mucosal and vascular changes. The PROSPER study aims to develop and validate a novel endoscopic score integrating advanced imaging features to predict early POR in CD.

Methods This analysis is part of the international, multicentre, prospective PROSPER study (NCT06505304). Adult CD patients undergoing ileocolic resection were enrolled pre-operatively or within 3 months post-operatively and underwent endoscopic assessment at 3 or 6 months after surgery, guided by

faecal calprotectin levels (cutoff 150 µg/g). Endoscopic videos were obtained using white-light and VCE modalities—TXI, RDI, and NBI with the Olympus (EVIS-X1) platform, and i-scan1 and OE mode 1–2 with the Pentax (INSPIRA) platform—following a standardised protocol. A three-round modified Delphi process defined the PROSPER domains: two in-person consensus meetings and an online survey (Qualtrics platform) where experts rated each feature. Consensus required >75 % agreement. Seven core experts participated in both the first (10 videos) and second (15 videos) rounds, scoring the colon proximal to the anastomosis, the anastomotic region (including anastomotic line, ileal inlet, ileal body, and, when present, blind loops), and the neo-terminal ileum. All anastomotic configurations—end-to-end, end-to-side, side-to-end, side-to-side, and Kono-S—were assessed. Inter-rater agreement was evaluated using Fleiss' κ, Gwet's AC1/AC2, and ICC(2,k).

Results Mucosal and vascular domains were selected, including erosions, superficial and deep ulcers, villi morphology, vessel dilatation, and bleeding (► **Table 1**). Agreement across both in-person rounds was moderate to substantial for features in the neo-terminal ileum and colon proximal to the anastomosis (AC1/AC2 = 0.61–0.78) and lower for the anastomotic region (fair to moderate), particularly for villi and erosions (AC2 ≈ 0.40–0.50). Ulcers and vascular patterns showed higher reproducibility (AC1 ≈ 0.70–0.80). Moderate agreement was observed for the anastomosis type (κ 0.51). The Delphi survey confirmed selected domains, with over 80 % expert agreement on inclusion and weighting.

► **Table 1**

Mucosal Domains		Vascular Domains	
Erosions (<5 mm)	■ Presence/absence	Dilated vessels	■ No dilatation
	■ Number		■ Dilated roundish
	■ Surface affected (<25 %, 25–50 %, 50–75 %, >75 %)		■ Dilated crowded or tortuous
Superficial ulcers (>5mm)	■ Presence/absence	Bleeding	■ No bleeding
	■ Number		■ Intramucosal bleeding
	■ Surface affected (<25 %, 25–50 %, 50–75 %, >75 %)		■ Luminal bleeding
Deep ulcers (>5mm)	■ Presence/absence		
	■ Number		
	■ Surface affected (<25 %, 25–50 %, 50–75 %, >75 %)		
Villi	■ Normal		
	■ Ballooning of the villi		
Stricture (if present)	■ Inflamed/Fibrotic		
	■ Passable/Not passable		

Conclusions The novel PROSPER score is a multimodal tool integrating advanced imaging for comprehensive assessment of the anastomosis, showing good inter-expert agreement across most domains. These results support its feasibility for detecting early POR. The next phase will involve real-life validation.

Conflicts of Interest CL: Advisory board – Abbvie, Jnj, Takeda, Ferring, Merck, Celltrion, Pfizer; Research Funding – Abbvie, JnjFF: Grant:IG-IBD Personal Fees:Pfizer, Biogen, J&J, Abbvie, Amgen, JanssenGD: Research or Education Grants (last 36 months):Abbvie, Pfizer, Janssen, Takeda, Tillotts, Celltrion, Abbott, Dr

Falk, Amgen\nSpeaker/Meeting Honoraria (Last 36 months):Abbvie, Dr Falk, Galapagos/Alfa Sigma, GSKGET: Tontini, Gian Eugenio: Speaker honoraria from Pentax (2022), Medtronic (2021), NTC Pharma (2021), Ferring (2024); Consultant fees from NTC Pharma (2022, 2024), F. Hoffmann-La Roche Ltd (2022), Fujinon (2023), Invicor (2025)MI: Grant:Pentax, Olympus, Eli Lilly,Helmsley Personal Fees:Pentax, Pfitzer, Janssen,EliLilly ,J&JOMN: Nardone, Olga Maria: Advisory board fees from Eli Lilly, Nestlè, Janssen; Speaker fees from AbbVie, Janssen, Eli Lilly, Ferring, Alfa Sigma, Recordati, Noös, and PfizerRB: Grant:Pentax Europe, Medtronic, Norgine; Personal Fees:Pentax Europe, Fujifilm, Norgine, Medtronic, Ipsen, Alfasigma, Viatrix, Endostart, Falk Foundation; Non-financial Support:Pentax Europe, Fujifilm, Boston Scientific, Olympus, Erbe, Norgine

PYP105 Improvement in the visibility of submucosal layers and vessels with amber-red color imaging in colorectal endoscopic submucosal dissection

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DOI 10.1055/s-0046-1821045

Aims A new LED endoscopy system, the EP-8000 (Fujifilm, Tokyo, Japan), was launched in 2024, featuring Triple Noise Reduction (TNR) and Extended Dynamic Range Image Processing (EDRIP). We previously demonstrated that this system provides low-noise, bright images with minimal halation compared with the previous system (VP-7000) [1]. In addition, the EP-8000 includes a novel observational mode, amber-red color imaging (ACI), which enhances the visibility of blood vessels and active bleeding points in the mucosa and submucosa. Several case reports have shown that ACI improves visualization of vessels, the submucosal layer, and the muscle layer during endoscopic submucosal dissection (ESD), suggesting that safer dissection under ACI may be possible [2]. However, no studies have evaluated the efficacy of ACI specifically in colorectal ESD. This study assessed the visibility of vessels and the submucosal layer using ACI during colorectal ESD.

Methods This international, multicenter study retrospectively reviewed consecutive patients who underwent colorectal ESD at a single institution between January 2021 and June 2025. Therapeutic outcomes of 72 cases performed using ACI were compared with those of 505 cases performed using white-light imaging (WLI). The primary outcome was the mean number of intraoperative bleeding (IB) events during ESD in the ACI and WLI groups. Secondary outcomes included additional therapeutic outcomes of ESD. Furthermore, fifteen endoscopists (seven experts and eight non-experts) from four countries (Japan, Malaysia, Singapore, and Chile) evaluated the visibility of vessels, submucosa, and muscle layer under ACI and WLI using a four-point scale (1 = poor, 4 = excellent).

Results Among 72 cases (mean age: 67.3 ± 11.9 years, male proportion: 48.6 %), the en bloc resection rate was 98.6 %. The ACI group showed fewer IB events than the WLI group (2.1 ± 2.5 vs 2.8 ± 3.4, p = 0.040), significant only among non-experts (1.3 ± 1.2 vs 2.7 ± 3.2, p = 0.032). Regarding image evaluations, ACI achieved higher visibility scores for vessels (3.54 ± 0.67 vs 2.81 ± 0.77, p < 0.001), submucosa (3.60 ± 0.60 vs 2.96 ± 0.75, p < 0.001), and muscle layer (2.99 ± 0.78 vs 2.45 ± 0.85, p < 0.001). Significant differences in ACI scoring between Japanese and other international endoscopists were observed for vessels and submucosa among experts, and muscle layer visibility among both groups.

Conclusions ACI facilitated safer colorectal ESD by reducing perioperative bleeding and improving visualization of vessels, submucosa, and the muscle

layer. Further randomized controlled trials are warranted to confirm these findings.

Conflicts of Interest Yoshida N, Dohi O, and Takagi T received research grant from Fujifilm Co. The other authors declare no conflicts of interest. Novel endoscopic systems and scopes were lent by Fujifilm Co.

References

- [1] Yoshida N, Inoue K, Dohi O et al. Enhanced Submucosal Visualization using Amber-Red Color Imaging during Gel-Immersion Colorectal Endoscopic Submucosal Dissection. *Endoscopy*. 2025; Accepted
- [2] Yoshida N, Okada M, Hayashi Y et al. Improvement of Colonoscopic Image Quality Using a New LED Endoscopic System with Specialized Noise Reduction. *Diagnostics*. *Diagnostics* (Basel) 2025; 15: 1569

PYP106 Polyp size measurement during real-time colonoscopy using a novel laser-based system

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DOI 10.1055/s-0046-1821046

Problem to solve Colorectal polyp size is important for determining surveillance intervals, how to resect the polyp and whether to resect-and-discard the polyp. However, currently used polyp size measurement techniques are inaccurate and difficult to perform, highlighting the need for novel techniques. This international multicenter study evaluated the precision of visual assessment (VA) and biopsy forceps (BF)-assisted measurement compared to a novel laser-based measurement system during real-time colonoscopy.

Innovation AccuMeasure (VTM Technologies, Haifa, Israel) is a novel laser-based measurement system to sub-mm-accurately perform 3D measurements during real-time colonoscopy. A previous ex vivo animal study showed this system to be more precise compared to VA with and without use of a BF. The system consists of a reusable through-the-scope (TTS) probe and a medical grade personal computer. The TTS probe inserted through the endoscope working channel projects a laser line across the polyp, enabling size measurement.

Results A total of 137 polyps was successfully measured in 110 patients (56.4% male; median age 68 years (interquartile range (IQR): 18)). Colonoscopy indications were screening in 47 patients (42.7%), surveillance in 34 (30.9%), and diagnostic in 29 patients (26.4%). Most polyps were adenomas (n=91) or hyperplastic (n=23) and were equally distributed through the colon. The polyps were measured with the laser measurement system, VA, and BF in randomized order. The laser-based system achieved successful measurements in 68.8% of polyps, with a mean measurement time of 120 seconds (standard deviation (SD): 109.9). As shown in ► **Table 1**, failed measurements were due to technical malfunctions or difficulty aligning the laser with the polyp surface. Moderate agreement (Cohen kappa (k) = 0.514) was observed between the laser-based system and VA, with VA wrongly assigning a polyp size to >5 mm (instead of ≤5 mm) in 10 polyps (7.3%) and ≥10 mm (instead of <10 mm) in 2 polyps (1.5%). Moderate agreement (k=0.534) was also observed between the laser system and BF, with BF wrongly assigning a polyp size to >5 mm (instead of ≤5 mm) in 11 polyps (8.0%) and ≥10 mm (instead of <10 mm) in 1 polyp (0.7%). Based on VA, two patients were assigned a 3- and 5-year surveillance interval, respectively, whereas based on the laser-based measurements these patients should have returned to screening at 10 years, in accordance with ESGE recommendations. Bland-Altman plots indicated that VA resulted on average in an underestimation compared to laser measurement, specifically in polyps of around 5 mm (-0.11 mm, 95% confidence interval (CI) [-0.39 to

0.17]). In contrast, for polyps over 6 mm, VA showed an average overestimation of 0.29 mm (P=0.012). BF also resulted in an average underestimation compared to laser measurement (-0.16 mm, 95% CI [-0.38 to 0.06]) but showed no significant overestimation for polyps over 6 mm (P=0.118). During the study, no adverse events related to the laser measurement system were reported.

► **Table 1** Laser-based measurement system summary statistics on performance

Polyps, n	
Polyps identified	276
Polyps attempted for measurement	199
Polyps successfully measured	137
Failed laser-based measurement reasons, n (%)	
Software malfunction	14 (22.6)
Technical difficulties	17 (27.4)
Anatomical interference	25 (40.3)
Unknown	6 (9.7)

Conclusions Although mechanical difficulties during colonoscopy limited successful measurement to only two-thirds of cases, the novel laser-based system demonstrated greater precision than VA and BF reducing size misclassification. Our findings indicate that laser-based measurement may offer a more reliable approach for determining polyp size, ensuring more appropriate surveillance intervals.

Conflicts of Interest The study was sponsored by VTM Technologies. Data analysis and drafting of the abstract was performed by the authors.

PYP107V ClipTack: A Cost-Effective Method for Closing Large Endoscopic Resection Defects

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DOI 10.1055/s-0046-1821047

Problem to solve Closing large endoscopic resection defects is often challenging. Helical tack systems can facilitate closure but are costly. Each device kit contains four tacks. When additional tacks are needed, opening a new kit substantially increases expense, particularly if only one or two extra tacks are required instead of all four tacks.

Innovation To address this, we developed **ClipTack**, a cost-saving technique that uses threaded hemostatic clips to complete the closure without the need to open additional helical tack kits.

Results A 76-year-old patient underwent endoscopic mucosa resection (EMR) for a polyp at the hepatic flexure many years ago. A JNET 2a lateral spreading tumour (LST) had regrown at the same location, in keeping with post-EMR recurrence. Underwater piecemeal EMR was performed for this LST. The resulting defect after pEMR was large, with extensive fibrosis seen at the resection base, and its position over a fold made it challenging to securely close the defect with standard hemostatic clips. Hence a helical tack system was used to initiate closure.

The resection base was still inadequately closed after all four tacks in the helical tack kit were deployed. The remaining suture line was threaded through an opening in the phalange of a standard hemostatic clip. The clip was well lubricated and then advanced along the suture line, which was held under constant gentle tension. Once positioned just lateral to the resection edge, the clip was closed and deployed in the usual fashion. A second hemostatic clip was similarly threaded and advanced, allowing approximation of most of the resection

base. The amount of clinical expertise needed in closing the clip is lesser than the deployment of the helical tack. The suture line was then gently pulled so as to draw the tacks and clips closer and then cinched in the standard manner. We named this hybrid, cost-efficient method as **ClipTack**.

Conclusions ClipTack is a simple reproducible, and cost-effective approach for managing large endoscopic resection defects. By using threaded hemostatic clips in place of additional helical tacks, it significantly reduces procedural costs while still achieving secure and reliable closure. This technique underscores practical innovation, ease of adoption, and resourcefulness in the closure of challenging endoscopic defects.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/fc49eda2-e566-421a-8d8e-5a9c75e85ca6/Uploads/19990_ESGE.mov

Conflicts of Interest None

PYP108 Utility of crystal violet staining and magnifying endoscopy in diagnosing SMIC and determining resectability a western setting

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DOI 10.1055/s-0046-1821048

Aims As endoscopic resection (ER) is routinely offered to patients with large non pedunculated colorectal polyps (LNPCP), diagnosing submucosal invasive cancer (SMIC) and differentiating resectable (adenomas and T1 SMIC) from unresectable LNPCP ($\geq$ T2 cancer) can be crucial. Crystal violet (CV) staining and magnifying endoscopy to delineate Kudo type V pit patterns may be useful for distinguishing such lesions but is almost never used in western practice and most endoscopists remain sceptical of its efficacy. We aimed to determine the value of magnifying endoscopy with CV staining compared to indigo carmine in diagnosing SMIC and determining resectability in patients with LNPCP referred to a tertiary centre.

Methods All patients referred with LNPCP deemed suitable for ER but without confirmed invasive cancer from January 2018 to September 2025 were included. Patients with biopsy proven adenocarcinoma prior to referral were excluded. Patients were divided into a CV staining cohort after the introduction of this technique between September 2021 and September 2025 and compared to a cohort of patients referred between January 2018 and August 2021 when lesions were assessed with indigo carmine alone. Lesions were stained with crystal violet 0.05 % for one minute or indigo carmine 0.2 % and then examined in detail with magnifying endoscopy at 80-100x magnification. Sensitivity and specificity of CV staining and indigo carmine with magnifying endoscopy in diagnosing HGD or SMI on subsequent biopsy or examination of a resected specimen were calculated.

Results 1448 lesions were referred for consideration of ER and assessed with magnifying endoscopy, 898 in the crystal violet staining cohort and 550 in the indigo carmine alone cohort. Patients in both cohorts were similar in terms of age, mean lesion size, sex, location, and incidence of SMIC. 82 % of diagnoses of type Vi high grade (HG) pit pattern were made using CV and diagnosing any type V pit was more common in the CV cohort ($p=0.02$). Using CV, type Vn had a positive predictive value (PPV) for SMIC of 89 % and type Vi HG pit had a PPV of 58 % for SMIC. Vi HG had a PPV 83 % for determining resectability ($\leq$ T1 cancer). Vn pit had a PPV of 57 % for $\geq$ T2 cancer. Vi HG was rarely diagnosed in the indigo carmine cohort where Vn pit had a PPV of 91 % and Vi undifferentiated pit had a PPV of 27 % for SMIC. JNET 2b had a PPV of only 23 % for SMIC.

Conclusions This study suggests that the use of CV increases the likelihood of identifying any form of type V pit pattern and particularly type Vi pit pattern. Differentiating type Vi HG pit pattern is useful for diagnosing invasive cancer compared to JNET 2b vascular pattern and is highly predictive of lesions being

resectable regardless of potential SMIC with a high NPV for $\geq$ T2 cancer. Vn pit pattern is reasonably predictive of $\geq$ T2 cancer. These findings support long-standing Japanese recommendations to use CV to further delineate surface characteristics when JNET 2b is identified.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP109 Vessel Coagulation in Third Space Endoscopy: a Randomized Controlled Trial

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DOI 10.1055/s-0046-1821049

Aims Third-space endoscopy is the standard of care for neoplastic and motility disorders; however, it is technically challenging because of the high risk of intraprocedural bleeding. Such a risk may be reduced by prophylactic coagulation of the submucosal vessels, but it requires instrument exchange. A new approach involves pre-sealing the submucosal vessels using standard electrocautery settings under brief saline immersion using the same knife. The aim of this randomized trial was to further assess the efficacy of underwater pre-sealing in the prevention of intraprocedural bleeding and the overall efficiency of third-space endoscopy.

Methods Patients undergoing third space procedures (ESD or POEM) were randomized to receive either targeted saline-immersion pre-sealing (study group) or conventional coagulation (CO₂ insufflation, control group) for prophylactic management of vessels $\geq$ 1.2 mm. Dissection settings were identical (HybridKnife, SWIFT COAG mode). Rate of intraprocedural bleeding requiring retreatment for vessels $\geq$ 1.2 mm was the main outcome. Both *per-patient* and *per-vessel* analyses were also performed. The use of an adjunctive device and coagulation time were also assessed.

Results Seventy patients (37 immersion, 33 control) with 864 $\geq$ 1.2 mm vessels were included. Saline-immersion pre-sealing significantly reduced bleeding rates both at *per patient* (32.4 % vs 75.8 %, RR 0.43, 95 % CI 0.26-0.71; NNT 2.3; $p=0.01$) and at *per vessel* analysis (6.3 % vs 29.9 %, RR 0.21; 95 % CI 0.14-0.31; NNT 4.2; $p<0.01$). The use of coagulation forceps for bleeding treatment also decreased (0 % vs 24.2 % and 0 % vs 8.3 %; $p<0.01$). A significant reduction in coagulation time was reported in the saline-immersion group (22.7 $\pm$ 26.4 seconds vs 29.6 $\pm$ 49.8 seconds; $p<0.01$).

Conclusions A substantial reduction in the risk of intraprocedural bleeding was achieved by saline-immersion pre-sealing in per-patient and per-vessel analyses, prompting its implementation in clinical practice.

Conflicts of Interest Antonio Capogreco is a consultant for ERBE. Cesare Hassan is a consultant for Fujifilm, Medtronic and Olympus. Roberta Maselli is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific. Marco Spadaccini is a consultant for Boston Scientific and Olympus. Alessandro Repici is a consultant for Medtronic, ERBE, Fujifilm and Olympus. Jeremie Jacques has received honoraria from Erbe for medical ESD training; has conducted training for Olympus (ESD), Fujifilm (ESD), and Pentax Medical (ESD), Boston Scientific (therapeutic EUS). Markus Enderle and Nermin Salkic are full-time employees at Erbe Elektromedizin GmbH. All other authors have nothing to declare.

PYP110 Rectal Endoscopic Knife-Assisted Full-Thickness Resection: Feasibility and Safety Results from an International Multicenter Cohort

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DOI 10.1055/s-0046-1821050

Aims Initial reports have described rectal endoscopic knife-assisted full-thickness resection (kFTR) as a novel technique for achieving R0 resection in deeply invasive rectal cancer or technically challenging rectal lesions, offering a potential alternative to surgery and reducing associated morbidity and mortality. [1, 2] This study aimed to evaluate the feasibility, safety, and technical outcomes of rectal kFTR in an international, multicenter cohort.

Methods We conducted an observational cohort study of consecutive patients undergoing rectal kFTR at 16 centers across 5 continents between April 2017 and April 2025. Eligible patients had rectal lesions with suspected deep submucosal invasion, severe submucosal fibrosis, or subepithelial pathology. Primary outcomes were technical success, en-bloc and R0 resection rates, and adverse events (AEs). Secondary outcomes included length of hospital stay, rectal preservation, and recurrence. Risk factors for AEs were assessed using univariate and multivariate logistic regression.

Results 97 patients (mean age 66 years [IQR 58–74]; 57.7% male; 79.1% ASA I/II) were included. The median lesion size was 35 mm [IQR 25–50]. kFTR was performed for suspected deep invasion (59; 60.8%), severe fibrosis (30; 30.9%), and subepithelial lesions (8; 8.2%). The technical success rate was 97.9% (95/97), while en-bloc and R0 resection rates were 96.9% and 79.4%, respectively. 31 (32.0%) lesions were T2 adenocarcinomas, 27 (27.8%) non invasive/T1 adenocarcinomas, 28 (28.9%) T1 sm2-3 adenocarcinomas, 8 subepithelial lesions (8.2%), 3 (3.1%) T3 adenocarcinomas (► Table 1).

► **Table 1** Technical outcomes of endoscopic knife-assisted full-thickness resection across different histopathological groups.

Histology	Non invasive/T1 sm1 n = 27	T1 sm2-3 n = 28	T2 n = 31	Subepithelial lesions n = 8
Technical success	96.3 % (26)	100 % (28)	100 % (31)	100 % (8)
En bloc	92.6 % (25)	100 % (28)	96.8 % (30)	100 % (8)
R0	88.9 % (24)	85.7 % (24)	67.7 % (21)	100 % (8)

Overall, 19 adverse events occurred in 15/97 (15.5%) patients: 12 grade I, 2 grade II, and 5 grade III per AGREE classification. Delayed bleeding occurred in 4 (4.1%) patients, and post-procedural pain in 7 patients (7.2%). One patient required surgery for a recto-vaginal fistula. Increasing lesion size was the only risk factor independently associated with a higher risk of adverse events (OR 1.05, 95% CI 1.02–1.09, $p=0.003$).

Median procedural time was 135 minutes (IQR 100–180), and median hospital stay was 1 day (IQR 0.5–3). Rectal preservation was achieved in 75.9% (22/29) of patients with T1 adenocarcinoma and 45.2% of T2 (14/31) adenocarcinomas. Among 59 patients with adenocarcinoma and available follow-up (median 12 months (IQR 6–23.5)), 3 (5.1%) experienced loco-regional recurrences, and 1 (1.7%) had distant metastasis. There were no cancer-related deaths.

Conclusions kFTR appeared to be a feasible and safe technique for excising deeply invasive adenocarcinomas and complex fibrotic or subepithelial rectal lesions in expert centres. Rectal kFTR may serve as an alternative to device-assisted endoscopic full-thickness resection and local surgical excision, potentially avoiding radical surgery in highly selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Argenziano ME, Sorge A, Poortmans PJ, Montori M, Balducci D, Hoorens A, Maroni L, Tate DJ. Knife-assisted full-thickness resection guided by pocket detection method for detection and complete excision of deeply invasive rectal cancer. *VideoGIE*. 2024; 10 (3): 191–193. doi:10.1016/j.vgie.2024.11.004 PMID: 40093296 PMID: PMC11910320
- [2] Argenziano ME, Sorge A, Hoorens A, Montori M, Poortmans PJ, Smeets S, Tornai T, Debels LK, Desomer L, Tate DJ. Knife-assisted full-thickness resection guided by the pocket-detection method for posterior deeply invasive rectal cancer: A novel endoscopic approach (with video). *DEN Open*. 2025; 5 (1): e70116. doi:10.1002/deo2.70116 PMID: 40271449 PMID: PMC12014851

POEM – All you need to know... but were afraid to ask!

14/05/2026, 15:30–16:30

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PYP111 Clinical utility of EndoFLIP in POEM: experience from a tertiary UK centre

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DOI 10.1055/s-0046-1821051

Aims Although peroral endoscopic myotomy (POEM) is performed worldwide for achalasia, the use of intraoperative endoluminal functional luminal imaging probe (EndoFLIP) is debated. Given the lack of consensus, we sought to compare our local outcomes following intraoperative EndoFLIP in guiding myotomy to standard myotomy in our centre.

Methods A retrospective, single-centre, case-control study was conducted, comparing consecutive patients undergoing POEM without or with EndoFLIP guidance (FLIP- or FLIP+). Outcome measures included clinical remission (Eckardt score of ≤ 3), presence of reflux (GERD-HRQL questionnaire), complications and the requirement for further treatment. FLIP readings were obtained before and after myotomy, standardised to 40ml balloon inflation.

Results 100 FLIP+ (F: 50; median age: 47.5) were compared to 145 FLIP- (F: 65; median age: 49). Intraoperative measurements resulted in extension of myotomy in 9% of procedures. There was no difference in clinical remission at >6 months (84% vs 75%; $p = 0.09$).

The length of myotomy (cm) was shorter in FLIP+ (7 (5-10) vs 11 (9-13); $p = <0.001$). Procedural time (minutes) was also shorter (median 60 (60-79) vs 75 (60-100); $p < 0.001$), with fewer adverse events recorded in the FLIP+ group (1 vs 5, $p = 0.041$). Neither post-myotomy FLIP measurements, nor change in readings, correlated with clinical outcome. Long-term PPI use was not significantly different in the two groups (30% vs 43%; $p = 1.61$).

Conclusions Intra-procedural use of EndoFLIP during POEM is associated with shorter procedure time, shorter myotomy and fewer adverse events, without negatively impacting clinical success or PPI use long-term. FLIP-guided extension of myotomy is a possible marker of clinical utility, preventing early recurrence and re-do procedures. FLIP+ POEM has been adopted as standard of practice in our institution.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP112 Esophageal Motility Disorders After Pulsed Field Ablation for Atrial Fibrillation – Prospective Data from High-Resolution Manometry

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DOI 10.1055/s-0046-1821052

Aims Atrial fibrillation (AF) is considered one of the major health problems in Western societies, with a prevalence of more than 10% of the population older than 65 years in Europe and North America. Approximately 100,000 catheter ablations are performed annually in German hospitals, according to data provided by the German Cardiac Society. Until 2021, standard methods for cardiac ablation included radiofrequency ablation and cryoballoon ablation. Despite their effectiveness, these methods are associated in a small number of cases

with major and potentially life-threatening complications such as esophageal injury and atrio-esophageal fistulas. Since its first certification in 2021, pulsed field ablation (PFA) has demonstrated an improved safety profile in this regard. To date, no esophageal injuries or atrio-esophageal fistulas have been reported, likely due to the highly tissue-selective, non-thermal mechanism of irreversible electroporation by which PFA achieves myocardial ablation. However, animal models have demonstrated potential injury to the esophageal muscular layers after PFA, presumably due to the close anatomical proximity of the esophagus to the left atrium. To date, no clinical studies investigating a potential association between PFA and esophageal motility disorders have been conducted. Therefore, we performed a prospective study using high-resolution manometry (HRM) to address this unanswered question.

Methods We conducted a prospective observational cohort study including patients with AF referred to the electrophysiology outpatient clinic of the Alfried Krupp Hospital in Essen, Germany, who were scheduled for PFA from March 2024 until the time of submission. Each participant underwent HRM in our Gastroenterology Department one day before and one day after PFA. HRM was performed according to the Chicago Classification v4.0 for esophageal motility disorders, including ten swallows in the semi-recumbent and five swallows in the sitting position. Participants were also evaluated for dysphagia, and the Eckardt Score was calculated for each individual before and after PFA. The primary endpoint was the change in HRM parameters based on the Chicago Classification v4.0, specifically the mean integrated relaxation pressure (IRP), mean distal contractile integral (DCI), mean distal latency (DL), and mean intrabolus pressure (IBP) before and after PFA. Patients who showed significantly altered manometric parameters after PFA underwent repeat HRM three months later. Secondary endpoints included the persistence or resolution of altered HRM findings at the three-month follow-up, patient-reported dysphagia and changes in the Eckardt Score before PFA, directly after and at the three-month follow-up [1–4]

Results From March 2024 until submission, 40 of the planned 50 patients were enrolled in the study, and 11 patients had completed the three-month follow-up. Eight patients were lost to follow-up. In the remaining patients, no significant long-term differences in manometric parameters were observed after PFA. The mean age of the participants was 68.4 years, and 70% were male. A significant reduction in DCI was observed one day after PFA in both the supine ($p = 0.01$) and sitting positions ($p < 0.0005$). The mean DCI decreased by approximately 25.4% in the supine and 38.4% in the sitting position, with a maximal DCI-reduction of 87.5% in one individual. Approximately 55% (22/40) of the patients developed focal areas of reduced pressure in the distal third of the tubular esophagus. Among the patients who completed the three-month follow-up, DCI values had returned to baseline, despite the transient reduction observed at day one. However, five participants still exhibited focal areas of reduced esophageal pressure in isolated swallows at three months. No changes in patient-reported symptoms or Eckardt Scores were detected at any time point.

Conclusions Patients undergoing PFA may develop transient reductions in esophageal motility one day after the procedure. These alterations largely resolve within three months and appear to have no clinical impact on symptoms. However, the presence of persistent focal pressure abnormalities in a subset of patients suggests subtle long-term motility effects of PFA, highlighting the need for additional research.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vinciguerra M et al. "Atrial fibrillation: pathophysiology, genetic and epigenetic mechanisms". *Lancet Reg Health Eur* 2024; 37: 100785. doi:10.1016/j.lanepe.2023.100785
- [2] Reddy VY et al. "Pulsed Field or Conventional Thermal Ablation for Paroxysmal Atrial Fibrillation". *N Engl J Med* 2023; 389 (18): 1660–1671. doi:10.1056/NEJMoa2307291
- [3] Fueting A et al. "First experience with pulsed field ablation as routine treatment for paroxysmal atrial fibrillation". *Europace*. 2022; 24 (7): 1084–1092. doi:10.1093/europace/euac041

[4] Neven et al. "Incidence and prevalence of atrial fibrillation: an analysis based on 8.3 million patients". *Europace* 2013; 15 (4): 486–93. doi:10.1093/europace/eus333

PYP113 Same-day discharge for oesophageal POEM without investigations is feasible and safe

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DOI 10.1055/s-0046-1821053

Aims Same-day discharge (SDD) after oesophageal per-oral endoscopic myotomy (POEM) for achalasia is variably applied in clinical practice. Many centres still adopt at least overnight admission (ONA) and patient discharge is dependent on investigations such as oesophago-gastro-duodenoscopy (OGD) or contrast swallow (CS). Many series describing SDD (achieving 41–70 % rates) still advocate same-day CS, a highly resource-intensive strategy. In our institution, we introduced a step-wise protocol change to SDD from ONA, phasing out both OGD and CS [1].

Methods A retrospective, single-centre, case-control study was conducted, comparing consecutive patients undergoing SDD protocol to a consecutive age- and sex-matched group following the original ONA protocol. For SDD, patients were observed for 4 hours post-procedure and admitted if they met any of the following criteria: 1) unstable vital signs 2) persistent chest pain or dyspnoea requiring more than one dose of opioid analgesia 3) severe complications or endoscopic concerns 4) unable to swallow secretions or 5) social reasons.

Results The ONA group (n = 123; F = 57; mean age 48) were compared to SDD (n = 124 F: 55; mean age: 47; median duration of admission: 2; IQR 1–2 days). N = 102 (83 %) had successful SDD. Median procedural time (minutes) was shorter for SDD (60 (60–84) vs 75 (60–100); p = 0.01) and median myotomy length (cm) was also shorter (7 (5–10) versus 12 (9–14), p < 0.001). There was no difference in 30-day readmission rate (4.2 % vs. 5.4 %; p = 0.648).

There was no correlation between 30-day readmission and age (p = 0.456), ASA score (p = 0.453), opioid analgesia in recovery (p = 0.523), fellow performing procedure (p = 0.763), baseline Eckardt score (p = 0.816), or long term outcome (> 12 month Eckardt score).

Of those SDD patients admitted overnight, we identified n = 8 where a prolonged period of same-day observation may have safely prevented admission (total 89.4 %).

Conclusions The protocol for SDD following oesophageal POEM can be feasibly and safely refined to increase rates of SDD (83 %) without the need for routine imaging or endoscopy. Prospective studies should assess whether patients with minor complications managed endoscopically may also be safely discharged on the same day.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Khan MT, Bouvette C, Sorensen L, Li H, Clifton S, Rumman A. Same-Day Discharge Vs Overnight Admission For Per-Oral Endoscopic Myotomy (Poem): A Systematic Review And Meta-Analysis. *Gastrointestinal Endoscopy* 2024; 99 (6): AB1032–3

PYP114 Anterior Versus Posterior Myotomy Orientation in POEM: A Comprehensive Meta-analysis of Efficacy, Safety, GERD, and Procedural Outcomes

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DOI 10.1055/s-0046-1821054

Aims To compare anterior versus posterior myotomy during POEM across all major clinical, safety, physiologic, and procedural outcomes using the latest available time points from randomized trials and high-quality comparative studies.

Methods A systematic review and meta-analysis of RCTs and cohort studies was performed. Outcomes included clinical success (Eckardt score ≤ 3), adverse events (overall and mucosotomy-specific), GERD (pH, endoscopy, symptoms), manometric response, and procedural metrics (total procedure time, closure time, hospital stay). For binary outcomes, pooled odds ratios (OR) were calculated; for continuous outcomes, mean differences (MD) were synthesized using random-effects models. Long-term data from RCT extensions were incorporated when available.

Results A total of four RCTs and multiple cohort studies (≈ 1,200 patients) were included.

Clinical success: No significant difference between anterior and posterior POEM at 12 months (OR ≈ 1.02; RR ≈ 0.98). Long-term RCT follow-up (≥ 2 years) also showed similar results (85 % vs 79 %, p > 0.40).

GERD: Incidence of GERD by pH, endoscopy, and symptom scores was similar across orientations (pooled OR ≈ 1.0 across modalities).

Adverse events: Posterior POEM demonstrated significantly fewer overall adverse events (RR ≈ 0.63) and markedly reduced mucosotomy risk (RR ≈ 0.42). **Procedural outcomes:** Posterior POEM was associated with shorter incision-closure time (MD – 2.28 minutes) and, in observational datasets, shorter overall procedure duration. Anterior POEM demonstrated a statistically shorter but clinically negligible hospital stay (MD + 0.31 days).

Manometry: LES pressure and IRP reduction were equivalent between approaches (MD ≈ 0), with similar normalization rates.

Conclusions Anterior and posterior POEM achieve equivalent clinical success, similar GERD rates, and comparable physiologic improvement. Posterior myotomy offers procedural advantages: reduced adverse events and faster closure time without compromising clinical efficacy. These findings support the routine use of posterior orientation, particularly in centers prioritizing efficiency and mucosal safety, while affirming that either approach yields excellent therapeutic results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP115 Pre-procedure Risk Stratification for POEM Failure: Comparative Evaluation of the Urakami and Abe Scores

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DOI 10.1055/s-0046-1821055

Aims Peroral endoscopic myotomy (POEM) is a safe and effective treatment for achalasia; however, a notable proportion of patients experience therapeutic failure. Urakami et al. and Abe et al. developed pre-procedure scores to predict POEM failure at 12 and 6 months, respectively. The aim of this study was to evaluate the applicability of these scores in our patient population.

Methods We conducted a retrospective cohort study with prospectively collected data, including patients who underwent POEM for achalasia between January 2017 and February 2023, with at least 12 months of follow-up. Therapeutic failure was defined as an Eckardt score > 3 or the need for additional intervention. After calculating and stratifying the scores, their discriminative ability, sensitivity, and specificity were assessed [1, 2].

Results Eighty-three patients (mean age 55 years, range 17–79; 56 % female) underwent POEM, predominantly with type 2 achalasia (n = 50). Thirty-seven percent had undergone prior treatment. Initial clinical response was achieved in 98 % of patients (n = 81). During long-term follow-up (median 49 months), 11 patients developed symptomatic recurrence, occurring at a median of 24 months after the procedure (range: 6–48 months). Aside from the pre-proce-

dure Eckardt score ($p = 0.04$), no statistically significant association was observed between age, sex, manometric diagnosis, esophageal transit characteristics or prior treatment and therapeutic failure. The Urakami score demonstrated an AUC of 0.725, stratifying patients into low ($n = 41$), intermediate ($n = 35$), and high-risk ($n = 8$) groups, with a sensitivity of 7.7% and specificity of 90%. The Abe score showed an AUC of 0.737, stratifying patients into low ($n = 70$) and high-risk ($n = 13$) groups, with a sensitivity of 30.8% and specificity of 87%.

Conclusions Both scores demonstrated acceptable discriminative ability ($\text{AUC} > 0.7$), indicating they can statistically distinguish patients at higher versus lower risk of POEM failure. The Urakami score had very low sensitivity but high specificity (90%), meaning it reliably identifies patients who are unlikely to fail POEM and may help avoid unnecessary interventions in low-risk individuals. In contrast, the Abe score showed higher sensitivity (30.8%) but lower specificity (87%), reflecting a trade-off between detecting at-risk patients and overestimating risk. These findings highlight that while pre-procedure scores can aid risk stratification, their clinical application should be complemented by careful patient evaluation and follow-up, and further refinement of predictive tools is needed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Urakami S., Inoue H., Li Q.L., Liu X.Y., Sweet M.P., Spechler S.J., Ngamruengpong S., Renteln D.V., Hoeji F.B., Kristensen H.O. 2020; Development of a preoperative risk-scoring system for predicting poor responders to peroral endoscopic myotomy. *Gastrointestinal Endoscopy*.
- [2] Abe H., Tanaka S., Sato H., Shimamura Y., Okada H., Shiota J., Sato C., Sakae H., Ominami M., Hata Y., Fukuda H., Ogawa R., Nakamura J., Tatsuta T., Ikebuchi Y., Yokomichi H., Inoue H. 2022; Risk scoring system for the pre-procedural prediction of the clinical failure of peroral endoscopic myotomy: A multicenter case-control study. *Endoscopy*.

PYP116 Long-Term Outcomes of Per-Oral Endoscopic Myotomy (POEM) for Achalasia: Clinical Efficacy and Gastroesophageal Reflux in a Real-World Cohort

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DOI 10.1055/s-0046-1821056

Aims Achalasia is a primary esophageal motility disorder characterized by impaired lower esophageal sphincter relaxation and absent peristalsis. Although no treatment is curative, interventions aim to reduce esophagogastric junction obstruction and improve symptoms. Pneumatic dilation, laparoscopic Heller myotomy and per-oral endoscopic myotomy (POEM) have comparable efficacy in type I and II achalasia, whereas POEM is preferred for type III. Long-term outcomes of both POEM and Heller myotomy demonstrate symptom control rates between 80–90%. Post-POEM gastroesophageal reflux (GERD) is common, with esophagitis reported in up to 65% of patients, though severe disease is less frequent and often improves over time. Regular surveillance is recommended to detect silent esophagitis and guide management. Our aim was to evaluate long-term clinical efficacy of POEM and GERD-related outcomes in a real-world cohort.

Methods This retrospective single-center study included all patients undergoing POEM for achalasia at a tertiary Portuguese referral center between January 2017 and November 2023, with ≥ 24 months of follow-up. All procedures were performed by a single experienced endoscopist. The primary outcome was clinical success, defined as a post-POEM Eckardt score ≤ 3 without additional intervention. Secondary outcomes included perioperative adverse events (AEs), post-POEM GERD assessed through patient-reported symptoms, long-term proton pump inhibitor (PPI) therapy and endoscopic findings. AEs were classified according to the AGREE system [1–4].

Results A total of 143 patients underwent technically successful POEM. Of these, 113 patients had ≥ 24 months of follow-up. Median age was 55 years (range 17–81), and 57 patients were female (50.4%). Achalasia types were: 72 type II, 28 type I and 13 type III. Only one significant post-procedure AE occurred (aspiration pneumonia requiring ICU admission, Grade IV). Clinical response at 1 year was 97.3% ($n = 110$), with long-term clinical success in 88.5% ($n = 100$) with a median follow-up of 44 months (range 21–96). Thirteen patients experienced symptomatic recurrence at a median of 24 months (range 0–48), four underwent re-POEM and two underwent endoscopic dilation with sustained success, while two are awaiting endoscopic retreatment. Higher pre-POEM Eckardt scores were significantly associated with recurrence ($p = 0.027$), with a median of 9 points in the recurrence group versus 6 points in responders. No significant association was observed between clinical success and achalasia type, age, gender, previous treatment or myotomy approach. Regarding GERD, 29 patients reported frequent or daily reflux symptoms at some point during follow-up, but only 15 (13%) remained symptomatic at last evaluation, all responding to PPI therapy. Long-term PPI therapy (> 6 months) was required in 95 patients (84%), and 79 (70%) remained on daily PPI at last follow-up. First post-procedure endoscopy (median 7 months) was available for 85 patients: esophagitis was found in 42 (49%), including severe reflux esophagitis in 13% (10 LA-C, 1 LA-D) and ischemic ulcers in five patients. Last endoscopy (median 32 months, $n = 70$) revealed esophagitis in 31, severe in only 1 patient (1.4%, LA-C). Eleven patients were on PPI at the time of last endoscopy, one twice daily. At least one patient had documented refractory reflux esophagitis (LA-B despite twice-daily PPI). No patient required additional endoscopic or surgical intervention for GERD. Reported symptomatic reflux was significantly associated with clinical failure ($p = 0.017$), with 62% of patients with long-term failure reporting symptoms (without severe esophagitis in endoscopy) versus 21% of responders. No associations were found between symptoms or severe esophagitis and age, gender, achalasia type, diabetes, alcohol use, smoking, BMI or myotomy approach.

Conclusions POEM is a safe and highly effective treatment for achalasia, achieving excellent long-term clinical success. Post-POEM GERD is common but usually manageable with long-term PPI therapy, and no patient in our cohort required additional interventions. Higher reported reflux symptoms among patients with clinical failure may reflect overlapping symptomatology between uncontrolled achalasia and GERD, highlighting the importance of monitoring and managing reflux symptoms during follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Oude Nijhuis RAB, Zaninotto G, Roman S, Boeckxstaens GE, Fockens P, Langendam MW et al. European Guideline on Achalasia – UEG and ESNM recommendations. *United European Gastroenterol J* 2020; 8 (1): 13–34. doi:10.1177/2050640620903213
- [2] Tawheed A, Bahcecioglu IH, Yalniz M, El-Kassas M. Gastroesophageal reflux after per-oral endoscopic myotomy: management literature. *World J Gastroenterol* 2024; 30 (23): 2947–2953. doi:10.3748/wjg.v30.i23.2947
- [3] Nabi Z, Ramchandani M, Kotla R et al. Gastroesophageal reflux disease after peroral endoscopic myotomy is unpredictable but responsive to proton pump inhibitor therapy: a large, single-center study. *Endoscopy* 2020; 52 (8): 643–651. doi:10.1055/a-1133-4354
- [4] Shiwaoku H, Sato H, Shimamura Y et al. Risk factors and long-term course of gastroesophageal reflux disease after peroral endoscopic myotomy: a large-scale multicenter cohort study in Japan. *Endoscopy* 2022; 54 (9): 839–847. doi:10.1055/a-1753-9801

PYP117 Post-POEM Care Optimization: Evidence Supporting Soft-Diet Initiation on Day 2

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DOI 10.1055/s-0046-1821057

Aims Peroral endoscopic myotomy (POEM) has become a first-line therapeutic option for achalasia and other esophageal motility disorders, offering high effectiveness and a favorable safety profile. Most adverse events are identified and managed intraprocedurally, while severe post-procedural complications such as leak, perforation or bleeding are uncommon, occur in $\leq 1\%$ of cases. Despite this, post-POEM care lacks standardization. Current ESGE guidelines advise against routine esophagram in asymptomatic patients and recommend gradual diet advancement – fluids on day 1, soft diet on day 3, and normal diet on day 7 – along with single-dose prophylactic antibiotics and empiric acid suppression. AGA acknowledges that same-day discharge may be feasible and supports early initiation of oral fluids in clinically stable patients without intraprocedural complications, hours after the procedure, although no uniform post-procedure diet protocol exists. Growing clinical experience suggests that early oral intake is safe in appropriately selected patients, as most complications are detected during POEM and early feeding does not appear to increase adverse events.

Our aim was to describe our post-procedural management protocol and demonstrate the safety of introducing a soft diet as early as 48 hours after POEM.

Methods This retrospective single-center study included all patients undergoing POEM at a tertiary Portuguese referral center between January 2017 and October 2025. All procedures were performed by a single experienced endoscopist. The primary outcome was perioperative adverse events (AEs). AEs were classified according to the AGREE system [1, 2].

Results A total of 204 patients underwent 211 POEM procedures, 51% were male ($n = 104$) with a median age of 55 years. Most patients had achalasia ($n = 195$), including 101 with type II, 52 with type I, 24 with type III and 18 unclassified. Six patients had other esophageal motility disorders, most commonly esophageal spasm ($n = 4$).

Technical success was achieved in 209 of the 211 procedures. Intra-procedural adverse events occurred in seven cases (some with more than one event): six minor bleedings and two perforations, all endoscopically managed, three pneumoperitoneums drained during the procedure, and two anesthetic complications (aspiration and pneumonia). One aspiration pneumonia required ICU admission, constituting a grade IV adverse event according to the AGREE classification.

Most patients were admitted for 48-hour surveillance, during which prophylactic ceftriaxone was administered. Thirty-eight patients reported post-procedural pain controlled with analgesics (grade I), and two experienced fever requiring one additional day of hospitalization (grade II).

A barium swallow was performed on day one in 146 patients, with no clinically significant findings. Since September 2024, this examination is no longer performed routinely and is now reserved for technically complex procedures with higher perceived risk.

A liquid diet was initiated on day 1 (24 hours after POEM) in 200 patients, followed by a soft diet on day 2 in 198 patients, with no diet-related complications observed. Patients maintained a soft diet for six days, progressing to a light general diet from day 7 onward. All patients received double-dose PPI therapy during admission, continued until at least the first outpatient follow-up. Aside from GERD and symptomatic failure, no other late complications were recorded.

Conclusions POEM remains a highly safe therapeutic modality, with most adverse events occurring intraprocedurally and effectively managed endoscopically. Post-procedural clinical surveillance is sufficient to guide patient management, without the need for routine contrast studies in asymptomatic individuals. Our data indicate that early diet advancement is feasible and safe, supporting the initiation of a soft diet on day 2 after POEM.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Yang D, Bechara R, Dunst CM, Konda VJA. AGA Clinical Practice Update on Advances in Per-Oral Endoscopic Myotomy (POEM) and Remaining Questions-What We Have Learned in the Past Decade: Expert Review. *Gastroenterology*. 2024; 167 (7): 1483–1490. doi:10.1053/j.gastro.2024.08.038 Epub 2024 Oct 16

[2] Tate DJ, Rodriguez de Santiago E, Montori M, Lala V, Debels LK, Albéniz E, Araujo IK, de Moura EGH, Ebigo A, Familiari P, Fockens P, Heinrich H, Kiosov O, Messmann H, Nagl S, Santos-Antunes J, Sethi A, Tantau M, Vackova Z, Martinek J, Soetikno RM, Gralnek IM, Tham TC. Curriculum for training in peroral endoscopic myotomy (POEM) in Europe (Part II) – Best Practice Techniques: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2025; 57 (8): 912–941. doi:10.1055/a-2569-7634 Epub 2025 May 28

PYP118 The Impact of Per Oral Endoscopic Myotomy on Patient Quality of Life

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DOI 10.1055/s-0046-1821058

Aims Per Oral Endoscopic Myotomy (POEM) is the treatment of choice for achalasia. Beyond clinical efficacy, evaluating quality of life and symptom progression is a crucial indicator of the real benefit to patients. This study aims to analyze the effectiveness of POEM using symptom scores (GerdQ, achalasia-specific questionnaire) and different dimensions of the SF-36, three months after the procedure.

Methods A prospective, descriptive, and analytical study was conducted on 28 patients, evaluated before and three months after POEM. Participants completed three questionnaires:

1-GerdQ,

2-Achalasia-specific questionnaire,

3-SF-36, covering its main dimensions: physical functioning, physical and emotional role limitations, vitality, mental health, social functioning, bodily pain, general health, and health change. Statistical analyses were based on paired **t-tests** to compare pre- and post-procedure scores. Correlations between score changes (Δ) were studied using **Pearson's r**. The significance threshold was set at $p < 0.05$.

Results Twenty-eight patients were evaluated before and three months after POEM. Analysis of symptom scores and quality of life revealed a significant improvement in all parameters studied. The **GerdQ score** significantly decreased from 10.89 ± 2.1 to 5.46 ± 1.8 at 3 months post-POEM ($p < 0.001$). The **achalasia-specific questionnaire** also showed a marked reduction in symptoms, from 26.3 ± 5.2 to 15.7 ± 4.9 ($p < 0.001$). Regarding **quality of life (SF-36)**, all dimensions improved significantly:

- Physical functioning: $46.1 \rightarrow 80.0$; $p < 0.001$
- Physical role limitations: $16.1 \rightarrow 75.9$; $p < 0.001$
- Emotional role limitations: $19.0 \rightarrow 73.8$; $p < 0.001$
- Vitality: $32.0 \rightarrow 64.1$; $p < 0.001$
- Mental health: $41.4 \rightarrow 72.7$; $p < 0.001$
- Social functioning: $39.5 \rightarrow 69.7$; $p < 0.001$
- Bodily pain: $27.3 \rightarrow 71.3$; $p < 0.001$
- General health: $31.3 \rightarrow 68.5$; $p < 0.001$
- Health change: $18.6 \rightarrow 64.3$; $p < 0.001$

The overall SF-36 components showed significant improvement: the physical component summary (PCS) increased from 30.2 ± 9.4 to 50.2 ± 9.0 ($p < 0.001$), and the mental component summary (MCS) from 27.1 ± 11.6 to 46.0 ± 12.6 ($p < 0.001$). Correlation analysis between score changes (Δ) at 3 months showed:

- A **moderate and significant correlation** between the decrease in reflux symptoms (Δ GerdQ) and the reduction of achalasia-specific symptoms (Δ Achalasia): $r = 0.497$; $p = 0.008$.
- The change in the **achalasia-specific score** was **strongly negatively correlated** with the improvement in the **physical component (APCS)**: $r = -0.595$; $p = 0.001$, indicating that a substantial reduction in achalasia symptoms is associated with significant physical quality-of-life gains.

- **No significant correlation** was observed between the **mental component (Δ MCS)** and other scores (**Δ GerdQ, Δ Achalasia, Δ PCS**), suggesting that short-term mental improvement is independent of symptom changes.

Conclusions Our study confirms the **effectiveness** of POEM in improving reflux symptoms, achalasia manifestations, and all dimensions of quality of life, both physical and psychosocial. The mental component at three months, however, may require more time to show improvement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP119 Precisect Mode vs Spray coag Mode for Submucosal Tunneling in Peroral Endoscopic Esophageal Myotomy: A Randomized Trial

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DOI 10.1055/s-0046-1821059

Aims Peroral endoscopic esophageal myotomy (POEM) has become a primary therapeutic modality for Achalasia. Precisect is a newly developed electro-surgical current mode with proposed advantages over standard modes in POEM procedure. The aim of this study was to evaluate the performance of precisect mode vs spray coag mode in submucosal tunneling during POEM.

Methods 52 patients diagnosed with Achalasia were randomized to have POEM procedure performed with either Precisect mode or Spray coag mode for submucosal tunneling using an ERBE VIO3 generator and Hybrid knife.

Results Technical success occurred in all patients. Submucosal tunneling duration (17 minutes (8-41) vs 15.5 (7-76), p:0.5), submucosal tunneling speed (0.64 cm/minute (0.21-1.5) vs 0.73 (0.2-1.43), p:0.34) and whole procedure duration (44 minutes (27-77) vs 38.5 (21-130), p:0.19) were similar in Precisect and Spray coag groups respectively. Bleeding requiring change to a coagrasper (1 (0-3) vs 0 (0-1), p:0.01) and need to change electrosurgical mode to coagulate non-bleeding vessels (3 (0-9) vs 1 (0-5), p:0.002) were higher in the Precisect group. However, the occurrence of mucosal injury was higher in the Spray coag group (7.7% vs 34.6%, p:0.05).

Conclusions Using a hybrid knife, Precisect mode is associated with more frequent switching to coagrasper to coagulate bleeding vessels as well as a more frequent need to shift to another mode to coagulate non-bleeding vessels in comparison to Spray coag mode. On the other hand, Spray coag mode is associated with a higher incidence of mucosal injury. Both modes seem to have the similar speed of submucosal dissection.

(clinicaltrials.gov registration NCT06189859)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP120 Underwater versus Conventional PerOral Endoscopic Myotomy: a single-centre comparative experience

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DOI 10.1055/s-0046-1821060

Aims To compare technical, clinical success, adverse events rate and incidence of post-procedural pain of conventional PerOral Endoscopic Myotomy (POEM)

versus underwater POEM (u-POEM) in consecutive patients treated for achalasia at a tertiary referral centre.

Methods We retrospectively analysed POEM and u-POEM performed in our centre between February 2024 and July 2025 with at least 3 months of follow-up. In u-POEM, CO₂ insufflation was suspended during tunnelling and myotomy and the submucosal space was filled with room-temperature saline. Pre-procedural (demographics, achalasia subtype, previous treatments, Eckardt score, laboratory exams), procedural (tunnel and myotomy length, tunnelling and myotomy speed, procedure time, anterior or posterior approach) and post-procedural (pain, laboratory exams, analgesics administration, adverse events evaluation) data were recorded. Statistical analysis was made using Student's t-test or Wilcoxon rank-sum for continuous variables and Fisher's exact test for categorical variables; two-sided p < 0.05 was considered significant (► Table 1).

► Table 1

Characteristic	POEM Group (n = 13)	u-POEM Group (n = 12)	p-value
Age (mean ± SD)	62.6 ± 11.8 years	61.8 ± 15.2 years	0.887
BMI (mean ± SD)	24.1 ± 3.4 kg/m ²	22.1 ± 3.4 kg/m ²	0.154
Pre-op Haemoglobin (g/dL, mean ± SD)	14.5 ± 0.9	13.4 ± 1.3	0.019
Procedure Duration (min, mean ± SD)	56.2 ± 12.5	68.8 ± 16.0	0.038
Myotomy Speed (cm/min, mean ± SD)	1.44 ± 0.54	0.85 ± 0.28	0.003
Technical success, n (%)	13 (100%)	12 (100%)	N/A
Pain Score (NRS, median [IQR])	3 [3, 4]	1 [0, 2.25]	0.004
Patient-Reported Pain, n (%)	13 (100.0%)	8 (66.7%)	0.039
Δ Haemoglobin (g/dL, mean ± SD)	-0.48 ± 0.91	-0.45 ± 1.25	0.937
Minor Adverse Events, n (%)	4 (30.8%)	1 (8.3%)	0.322
Post-operative Fever, n (%)	2 (15.4%)	0 (0.0%)	0.480
Pre-op Eckardt Score (mean ± SD)	7.7 ± 2.5	6.7 ± 2.1	0.272
Post-op Eckardt Score (mean ± SD)	0.92 ± 0.95	0.83 ± 0.72	0.794
Clinical success (Eckardt score ≤ 3 at 3 months), n (%)	13/13 (100%)	12/12 (100%)	N/A
Hospital Stay (days, median [IQR])	3 [3, 4]	3 [3, 3.75]	0.723

Results Twenty-five consecutive patients were included (POEM n = 13; u-POEM n = 12). Baseline demographics, BMI, ASA and Eckardt score were comparable. Technical success was reached in all patients. Clinical success (Eckardt score ≤ 3 at 3 months) was 100% in both groups. Mean total procedure time was significantly longer for u-POEM (68.8 ± 16.0 vs 56.2 ± 12.5 min; p = 0.038), driven by

a slower myotomy speed (0.85 ± 0.28 vs 1.44 ± 0.54 cm/min; $p = 0.003$), while tunnelling speed and tunnel/myotomy lengths were similar between the two groups. Postoperative pain, measured 24 hours after the procedure using an NRS scale, was less intense in the group of patients who underwent u-POEM (median NRS 1.0 [IQR 0.0–2.25] vs 3.0 [IQR 3.0–4.0]; $p = 0.004$) and 4/12 patients in u-POEM group reported no pain versus 0/13 in POEM ($p = 0.039$). No major adverse events occurred; minor adverse events rate was lower with u-POEM (1/12, 8.3% vs 4/13, 30.8%; $p = 0.322$) but without statistical significance [1, 2].

Conclusions u-POEM is feasible and achieved the same outcomes of POEM. This new technique is associated to a reduction of postoperative pain. This result is probably due to the less intense thermal effect on tissues. On the other hand, u-POEM is associated with reduced myotomy speed. These findings support u-POEM as a safe, effective and less painful alternative to conventional POEM.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Binmoeller KF, Bhat YM. Underwater peroral endoscopic myotomy. *Gastrointest Endosc*. 2016; 83 (2): 454. doi:10.1016/j.gie.2015.08.066 Epub 2015 Sep 8 PMID: 26358328
- [2] Inoue H, Minami H, Kobayashi Y, Sato Y, Kaga M, Suzuki M, Satodate H, Odaka N, Itoh H, Kudo S. Peroral endoscopic myotomy (POEM) for esophageal achalasia. *Endoscopy*. 2010; 42 (4): 265–71. doi:10.1055/s-0029-1244080 Epub 2010 Mar 30 PMID: 20354937

Contemporary Paradigms in Gastric Cancer Screening and Prevention

15/05/2026, 09:30–10:30

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PYP121 Updated Meta-analysis of Gastric and Duodenal Cancer Incidence and Upper Endoscopy Surveillance in Lynch Syndrome

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DOI 10.1055/s-0046-1821061

Aims Individuals with Lynch syndrome (LS) are at increased risk for gastric cancer (GC) and duodenal cancer (DC), particularly those with specific mismatch repair (MMR) gene mutations or a family history of GC. However, the benefit of upper gastrointestinal surveillance with esophagogastroduodenoscopy (EGD) remains unclear, with heterogeneous recommendations among international guidelines. This study aimed to estimate the incidence of GC and DC in LS patients, assess the risk in high-risk subgroups, and evaluate the effect of EGD surveillance.

Methods We conducted a systematic review and meta-analysis of cohort studies and clinical trials identified in PubMed and EMBASE (inception to April 2025). Cancer incidence rates per 1,000 person-years (p-y) were calculated overall and stratified by gene mutation and family history. When applicable, relative risks (RRs) and 95% confidence intervals (CIs) were computed to compare patients undergoing EGD surveillance with those without surveillance. Random-effects meta-analyses were performed, and heterogeneity was assessed using the I^2 statistic.

Results Thirty-four studies were included, comprising 36,402 LS patients. Among studies with calculable person-years, the pooled incidence rate of GC was 1.13 per 1,000 p-y (95% CI, 0.62–1.63) and 1.92 per 1,000 p-y (0.78–3.05)

for DC. By MMR gene, GC incidence rates were 0.62 (MLH1), 1.25 (MSH2), and 0.12 (MSH6) per 1,000 p-y. In supplementary proportion-based analyses, overall GC and DC incidences were 2.71% (95% CI, 2.21–3.21) and 1.71% (95% CI, 1.30–2.12), respectively; GC incidences were 2.66% for MLH1, 4.05% for MSH2, 0.40% for MSH6, and 10.38% (95% CI, 3.25–17.51) in patients with a family history of GC. DC incidences by gene were 1.65% for MLH1, 1.75% for MSH2, and 0.64% for MSH6. In analyses by mode of diagnosis, incidence rates were higher in screen-detected than in symptom-detected cohorts (GC 1.35 vs 0.74 per 1,000 p-y; DC 2.70 vs 0.67 per 1,000 p-y). In sensitivity analyses, the pooled GC incidence was 0.76 per 1,000 p-y when restricting to studies with ≥ 250 participants and 0.73 per 1,000 p-y in prospective-only cohorts. In two comparative studies of surveillance, EGD was associated with a lower risk of both GC (RR 0.31; 95% CI, 0.14–0.69) and DC (RR 0.29; 95% CI, 0.16–0.52).

Conclusions Patients with LS, particularly MSH2 carriers and those with a family history of GC, have an increased incidence of upper gastrointestinal cancers. EGD surveillance was associated with a lower incidence of both GC and DC in selected patients, although evidence is based on a limited number of comparative cohorts. Further prospective studies are needed to define optimal surveillance strategies [1–12].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Win AK, Lindor NM, Young JP, Macrae FA, Young GP, Williamson E, Parry S, Goldblatt J, Lipton L, Winship I, Leggett B, Tucker KM, Giles GG, Buchanan DD, Clendenning M, Rosty C, Arnold J, Levine AJ, Haile RW, Gallinger S, Le Marchand L, Newcomb PA, Hopper JL, Jenkins MA. Risks of primary extracolonic cancers following colorectal cancer in lynch syndrome. *J Natl Cancer Inst*. 2012; 104 (18): 1363–72. doi:10.1093/jnci/djs351 Epub 2012 Aug 28
- [2] Therkildsen C, Ladelund S, Smith-Hansen L, Lindberg LJ, Nilbert M. Towards gene- and gender-based risk estimates in Lynch syndrome; age-specific incidences for 13 extra-colorectal cancer types. *Br J Cancer*. 2017; 117 (11): 1702–1710. doi:10.1038/bjc.2017.348 Epub 2017 Oct 24
- [3] Ortigão R, Brito M, Pinto C, Sá I, Libânio D, Dinis-Ribeiro M, Brandão C. Risk factors for gastric cancer in patients with Lynch syndrome. *Eur J Gastroenterol Hepatol*. 2022; 34 (9): 912–918. doi:10.1097/MEG.0000000000002405 Epub 2022 Jul 14
- [4] Marques-de-Sá I, Castro R, Pita I, Dinis-Ribeiro M, Brandão C. Cancer-risk by family history and mismatch-repair mutation in Lynch syndrome. *Scand J Gastroenterol*. 2020; 55 (6): 701–705. doi:10.1080/00365521.2020.1766553 Epub 2020 May 24
- [5] Ladigan-Badura S, Vangala DB, Engel C, Bucksch K, Hueneburg R, Perne C, Nattermann J, Steinke-Lange V, Rahner N, Schackert HK, Weitz J, Kloor M, Kuhlkamp J, Nguyen HP, Moeslein G, Strassburg C, Morak M, Holinski-Feder E, Buettner R, Aretz S, Loeffler M, Schmiegel W, Pox C, Schulmann K German Consortium for Familial Intestinal Cancer. Value of upper gastrointestinal endoscopy for gastric cancer surveillance in patients with Lynch syndrome. *Int J Cancer* 2021; 148 (1): 106–114. doi:10.1002/ijc.33294 Epub 2020 Oct 13
- [6] Kumar S, Dudzik CM, Reed M, Long JM, Wangenstein KJ, Katona BW. Upper Endoscopic Surveillance in Lynch Syndrome Detects Gastric and Duodenal Adenocarcinomas. *Cancer Prev Res (Phila)*. 2020; 13 (12): 1047–1054. doi:10.1158/1940-6207.CAPR-20-0269 Epub 2020 Aug 28
- [7] Karimi M, von Salomé J, Aravidis C, Silander G, Askmal MS, Henriksson I, Gebre-Medhin S, Frödin JE, Björck E, Lagerstedt-Robinson K, Lindblom A, Tham E. A retrospective study of extracolonic, non-endometrial cancer in Swedish Lynch syndrome families. *Hered Cancer Clin Pract* 2018; 16: 16. doi:10.1186/s13053-018-0098-9
- [8] Fornasarig M, Magris R, De Re V, Bidoli E, Canzonieri V, Maiero S, Viel A, Cannizzaro R. Molecular and Pathological Features of Gastric Cancer in Lynch Syndrome and Familial Adenomatous Polyposis. *Int J Mol Sci* 2018; 19 (6): 1682. doi:10.3390/ijms19061682
- [9] Chautard R, Malka D, Samaha E, Tougeron D, Barbereau D, Caron O, Rahmi G, Barrioz T, Cellier C, Feau S, Lecomte T. Upper Gastrointestinal Lesions during Endoscopy Surveillance in Patients with Lynch Syndrome: A Multicentre Cohort Study. *Cancers (Basel)*. 2021; 13 (7): 1657. doi:10.3390/cancers13071657
- [10] Ceravolo AH, Yang JJ, Latham A, Markowitz AJ, Shia J, Mermelstein J, Calo D, Gerdes H, Ludwig E, Schattner MA, Stadler ZK, Kantor E, Du M, Men-

delsohn RB. Effectiveness of a surveillance program of upper endoscopy for upper gastrointestinal cancers in Lynch syndrome patients. *Int J Colorectal Dis* 2022; 37 (1): 231–238. doi:10.1007/s00384-021-04053-y Epub 2021 Oct 26

[11] Bucksch K, Zachariae S, Aretz S, Büttner R, Holinski-Feder E, Holzapfel S, Hüneburg R, Kloor M, von Knebel Doeberitz M, Morak M, Möslin G, Nattermann J, Perne C, Rahner N, Schmiegel W, Schulmann K, Steinke-Lange V, Strassburg CP, Vangala DB, Weitz J, Loeffler M, Engel C German Consortium for Familial Intestinal Cancer. Cancer risks in Lynch syndrome, Lynch-like syndrome, and familial colorectal cancer type X: a prospective cohort study. *BMC Cancer* 2020; 20 (1): 460. doi:10.1186/s12885-020-06926-x

[12] Adar T, Friedman M, Rodgers LH, Shannon KM, Zukerberg LR, Chung DC. Gastric cancer in Lynch syndrome is associated with underlying immune gastritis. *J Med Genet*. 2019; 56 (12): 844–845. doi:10.1136/jmedgenet-2018-105757 Epub 2019 May 4

PYP122 Upper GI Cancer Risk After Positive FIT in a Population-Based Screening Program: A Retrospective Cohort Study

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DOI 10.1055/s-0046-1821062

Aims Occult blood detected by fecal immunochemical testing (FIT) could originate from upper gastrointestinal (GI) lesions. We aimed to assess whether individuals with a positive FIT in a colorectal cancer (CRC) screening program – even without colorectal advanced neoplasia (AN) – have increased risk of esophagogastroduodenoscopy-detectable upper GI cancers (EUGIC) within three years after screening.

Methods Subjects aged 50–69 who underwent FIT-based CRC screening from 2005 to 2018 in Romagna were included. FIT positivity was defined as ≥ 20 μ g hemoglobin/g feces. According to the last screening round result, subjects were classified as: FIT-positive with advanced neoplasia (FIT + /AN +; colorectal cancer or advanced adenoma), FIT-positive without AN (FIT + /AN –), or FIT-negative (FIT –). All esophageal, gastric, or duodenal cancers diagnosed within three years of the FIT were identified via linkage with the regional cancer registry. Incidence of EGD-detectable upper GI cancers was compared across FIT + /AN +, FIT + /AN –, and FIT – groups. In a sub-analysis, we evaluated a lower fecal hemoglobin cutoff (≥ 10 μ g/g) for association with upper GI cancer. Multivariable logistic regression (adjusting for age, sex, and screening round) estimated odds ratios (OR) for EUGIC, and ROC analysis assessed the predictive performance of FIT. The number of screenees needed to scope (NNS) to find one EUGIC was computed [1, 2].

Results A total of 281,370 individuals were included (FIT-positive: 7.8% [2.4% with AN]; FIT-negative: 92.2%). EUGIC were identified in 0.20% of FIT – participants, compared to 0.34% of FIT + /AN – and 0.38% of FIT + /AN + participants ($p < 0.001$). Lowering the FIT positivity threshold to ≥ 10 μ g/g increased sensitivity with decrease in specificity. At multivariable analysis, FIT ≥ 10 μ g/g (OR 1.67, 95%CI 1.34–2.08), increasing age (OR 1.05, 95%CI 1.04–1.07), male sex (OR 1.74, 95%CI 1.46–2.08) and first-round screening (OR 1.46, 95%CI 1.20–1.77) were associated with EUGIC, with fair predictive performance (ROC 0.64). The predicted three-year EUGIC risk ranged from 0.09% (lowest-risk category) to 0.6% (highest-risk category). Corresponding NNS was 1111 for lowest-risk category and 167 for highest-risk category.

Conclusions FIT-positive screening participants showed a 1.7-fold higher incidence of esophageal, gastric and duodenal GI cancers than FIT-negatives

within three years from last screening round – although the absolute risk was low. The risk stratification based on a simple model including FIT, age, sex and screening round may represent a first step toward identifying subjects in whom targeted upper GI endoscopy could be clinically justified.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] van der Vlugt M., Grobbee E.J., Bossuyt P.M., Bos A.C., Kuipers E.J., Lansdorp-Vogelaar L., Dekker E. 2018; Risk of oral and upper gastrointestinal cancers in persons with positive results from a fecal immunochemical test in a colorectal cancer screening program. *Clinical Gastroenterology and Hepatology* 16 (8): 1237–1243

[2] Silva J.C., Leite-Silva P., Tavares F., Bento M.J., Libânio D., Dinis-Ribeiro M. 2025; Impact of a FIT Based Colorectal Cancer Screening Program on Gastric Cancer Incidence, Early Diagnosis and Patients' Survival. *Helicobacter* 30 (5): e70071

PYP123 Risk of Gastric Adenocarcinoma After Pancreaticoduodenectomy (RAGAD): A Multicenter Study and a Population-Based Analysis Using French National Health Data

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DOI 10.1055/s-0046-1821063

Aims With the increasing number of pancreaticoduodenectomies performed for benign or low-grade indications, the population of long-term survivors continues to grow, making this clinical situation increasingly common. Pancreaticoduodenectomy (PD) leads to chronic biliary reflux into the stomach. We hypothesized that this chronic exposure may induce sustained gastric inflammation and, over time, promote gastric carcinogenesis.

Aim: To determine whether pancreaticoduodenectomy is a risk factor for gastric adenocarcinoma.

Methods This study had two complementary components:

-Multicenter ambispective endoscopic cohort: All adults who had undergone PD more than 10 years earlier systematically underwent upper gastrointestinal endoscopy. In the prospective cohort, endoscopy was performed as part of the study and included bile reflux, chromoendoscopy, and standardized, staged gastric biopsies with centralized pathological review. In the retrospective cohort, we extracted data from any upper endoscopy performed > 10 years after PD, including detailed endoscopic findings and corresponding histopathology.

-Nationwide population-based analysis: using the French nationwide claims database, to estimate the incidence of gastric adenocarcinoma in patients ≥ 5 years after PD.

The primary endpoint was the diagnosis of gastric adenocarcinoma > 10 years after PD. Secondary endpoints were the presence of preneoplastic gastric lesions and the identification of associated risk factors.

Results A total of 143 patients were included: 50% were male; age at PD was 53 ± 13.3 years; mean follow-up was 16.1 ± 5.4 years. Endoscopic evaluation was prospective in 68 patients (48%) and retrospective in 75 (52%). Indications for PD were malignant tumors in 50% (including 17% neuroendocrine tumors)

and benign/low-grade lesions with malignant potential in 40 % (including 30 % IPMN).

Among them, **10 developed gastric adenocarcinoma (7 %)**, with a median time to diagnosis of 13.5 years. Tumors were located on or adjacent to the gastrojejunal anastomosis and were predominantly poorly differentiated. Symptoms associated with cancer were persistent nausea ($p = 0.008$) and gastrointestinal bleeding ($p = 0.018$), including iron-deficiency anemia.

Preneoplastic lesions were identified in 16 % of patients with gastric biopsies ($n = 126$): high-grade dysplasia 1 %, low-grade dysplasia 8 %, and intestinal metaplasia 7 %. These patients were significantly more likely to have hereditary cancer predispositions (Lynch, FAP, MEN, or other; $p = 0.002$) and to report persistent nausea ($p = 0.01$). No significant associations were observed with smoking status, *Helicobacter pylori* infection, type of pancreatic anastomosis, biliary reflux or pylorus preservation.

In the population-based national analysis, among 9,957 patients who had undergone PD more than 5 years earlier (2009–2018), 0.7 % developed gastric cancer (71 patients). All cancers occurred more than 8 years after PD. Two-thirds of the cohort were between 5 and 10 years post-surgery at the time of analysis.

Conclusions Gastric adenocarcinoma after PD is not a rare event. While the risk appears negligible within the first 10 years, our large cohort shows that beyond 10 years the risk rises sufficiently to justify endoscopic surveillance with systematic staged biopsies. Patients should be informed of key alarm symptoms (persistent nausea, anemia, or gastrointestinal bleeding) which warrant urgent upper endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP124 Gastric epithelial neoplasms in *Helicobacter pylori*-uninfected patients: proposal for a new histological and endoscopic classification

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DOI 10.1055/s-0046-1821064

Aims In recent years, as the prevalence of *Helicobacter pylori* (*H. pylori*) infection has declined, the incidence of *H. pylori*-uninfected gastric epithelial neoplasms (HpUGNs) has been gradually increasing in East Asia, now accounting for approximately 0.4–5.4 % of all gastric dysplasia and carcinoma cases in Japan. The previous reports indicate that HpUGNs are often detected as low-grade dysplasia; however, some lesions exhibit lymphovascular invasion, or advanced stage gastric cancer. Since HpUGNs differ biologically and endoscopically from conventional *H. pylori*-associated gastric cancer, standardized diagnostic criteria have not yet been established, and endoscopic diagnosis remains challenging. Therefore, we aim to establish a new endoscopic diagnostic system for HpUGNs and to elucidate their clinicopathological and endoscopic characteristics.

Methods A total of 308 lesions with HpUGNs treated by endoscopic treatment (ESD / EMR / polypectomy) at our hospital between August 2009 and October 2025 were enrolled and classified histologically, and their endoscopic and clinicopathological features were analyzed retrospectively.

Results All HpUGNs were histologically classified into seven types. 1. gastric adenocarcinoma of fundic-gland type (GA-FG: $n = 90$, U/M/L = 67/20/3, whitish, subepithelial tumor-like appearance, intramucosal lesion(M)/submucosal invasion(SM) = 39/21), 2. gastric adenocarcinoma of the fundic-gland mucosa type (GA-FGM: $n = 16$, U/M/L = 10/6/0, reddish elevated lesion or subepithelial tumor-like appearance, M/SM = 3/13), 3. raspberry-type gastric epithelial ne-

oplasm (GEN) (foveolar-type adenoma: $n = 155$, U/M/L = 83/67/5, reddish protruded lesion, M/SM = 155/0), 4. whitish flat elevated-type GEN ($n = 4$, U/M/L = 4/0/0, whitish flatly elevated lesion, M/SM = 4/0), 5. other GEN with a gastric phenotype (complex type of GEN with gastric phenotype: $n = 12$, U/M/L = 4/4/4, M/SM = 12/0), 6. GEN with an intestinal or gastrointestinal mixed phenotype arising in the pyloric gland region ($n = 7$, U/M/L = 0/0/7, reddish depressed lesion, M/SM = 7/0), 7. signet-ring cell carcinoma (SRCC: $n = 24$, U/M/L = 0/10/14, whitish or faded color and flat or depressed lesion, M/SM = 22/2). Magnifying endoscopy with narrow band imaging (M-NBI) was performed in 219 lesions (71 %). In 219 lesions, 130 lesions (59 %) were diagnosed as non-cancer by M-NBI. Especially, GAFG (90/90, 100 %), GAFGM (12/16, 75 %), and SRCC (16/24, 67 %) were difficult to diagnose as cancer by M-NBI because of the coverage and/or mixture with a non-neoplastic mucosa or gastric epithelial neoplasia with low-grade atypia.

Conclusions This study demonstrated that HpUGNs can be classified into seven histological types, and further characterized by specific lesion location, color, and macroscopic appearance. For accurate diagnosis of HpUGNs, it may be necessary to fully understand histological classification and endoscopic features of these lesions using white light imaging and M-NBI based on these histological characteristics and to take a precise biopsy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP125 Gastric Intestinal Metaplasia: recognition and adherence to British Society of Gastroenterology guidelines at The Royal Free NHS Foundation Trust, United Kingdom

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DOI 10.1055/s-0046-1821065

Aims Patients with gastric adenocarcinoma have a poor prognosis. One factor contributing is advanced disease at diagnosis. Chronic atrophic gastritis (CAG) progresses in a stepwise fashion from chronic gastritis, gastric atrophy (GA), gastric intestinal metaplasia (GIM) to gastric dysplasia and ultimately gastric adenocarcinoma.

The British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) both have guidelines aiming to improve the diagnosis and management of patients at high risk of gastric adenocarcinoma [1, 2]. They advise gastroscopy with high quality mucosal visualisation and biopsies for histopathology to detect GA/GIM and allow appropriate risk stratification. GIM is endoscopically visualised by whitish, patchy, and irregular mucosal areas with a potentially velvety or slightly nodular surface. When identified, Sydney protocol biopsies should be completed (biopsies from the antrum, incisura, the lesser and greater curvatures).

High risk individuals with extensive or advanced histological stages of CAG/GIM should undergo 3-yearly endoscopic surveillance as per guidelines^(1,2). This also includes people with a family history of gastric cancer or persistent *Helicobacter pylori* (*H. pylori*) infection.

The aims of this audit were to analyse:

1. How well GIM is visualised endoscopically, and if Sydney protocol biopsies are followed?
2. When GIM is confirmed histologically, is surveillance organised and is this at the correct frequency?

Methods We carried out a retrospective audit of endoscopy data at Barnet General, Chase Farm and Royal Free Hospitals, London, U.K., from June to October 2025. Patients were identified from a histology database of specimens with GIM and then data scrutinized using endoscopy reporting software and electronic patient records.

Results Between June and October 2025, 4394 gastroscopies were performed. 145 patients were confirmed to have GIM. 47/145 records were excluded, coming under either neuroendocrine tumour or Barrett's oesophagus surveillance

or records with incomplete data. This left 98 endoscopies that were fully analysed. 58.2 % were female with a mean age of 67. 11 of the patients were *H. pylori* positive.

GIM was visualised endoscopically in 19/98 (19.4 %) cases, being confirmed histologically in 100 % of them. In 79/98 (80.6 %) cases GIM was histologically confirmed, however, not macroscopically visualised during gastroscopy. Of the 19 records where GIM was visualised, only 13/19 (68.4 %) had Sydney protocol biopsies taken. Sydney protocol biopsies were also performed in 15.3 % of cases where GIM/CAG were not visualised.

Extensive/corpus GIM accounted for 42/98 (42.9 %), antrum/incisura 32/98 (32.7 %), not specified biopsies 24/98 (24.5 %). For those with extensive/corpus GIM, surveillance was correctly organised in 19/42 (45.2 %) of the cohort. However, this was not always 3-yearly and ranged between 6 months to 3 years. For those with antrum/incisura GIM, 25/32 (78.1 %) correctly had no surveillance organised, however, for the remainder it was still being organised.

In 1/98 patient, gastric biopsy showed GIM with ulceration. Repeat gastroscopy with biopsies and histology confirmed a poorly differentiated gastric adenocarcinoma.

Conclusions

1. Our results indicate that GIM was endoscopically visualised in only 20 % of cases.
2. Even when identified correctly, Sydney protocol biopsies are not always completed.
3. Large variation exists in whether surveillance is being organised for patients with extensive/corpus GIM and the frequency of this surveillance.
4. >20 % of patients with limited GIM are having surveillance organised unnecessarily.

We recommend better training in the endoscopic detection of GIM and raising awareness of the surveillance guidelines. By ensuring the correct biopsies are taken, patients may benefit from earlier detection and management of pre-cancerous lesions and avoid unnecessary procedures. This would also help improve efficiency and costs within our endoscopy services.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dinis-Ribeiro M, Libânio D, Uchima H et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy* 2025; 57 (5): 504–554. doi:10.1055/a-2529-5025
- [2] Banks M, Graham D, Jansen M et al. British Society of Gastroenterology guidelines on the diagnosis and management of patients at risk of gastric adenocarcinoma. *Gut* 2019; 68 (9): 1545–1575. doi:10.1136/gut-2018-318126

PYP126 Prevalence and Severity of Gastric Preneoplastic Lesions among *H. pylori*-Positive Patients: A Single-Center German Study

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DOI 10.1055/s-0046-1821066

Aims Gastric precancerous conditions (GPC), including chronic atrophic gastritis and intestinal metaplasia, are associated with increased risk of gastric adenocarcinoma, necessitating early detection and risk stratification for appropriate surveillance. Contemporary data on GPC prevalence in Germany, a low-to-intermediate gastric cancer incidence country, are lacking. This study aimed to determine the prevalence and severity of GPC in *H. pylori*-positive individuals undergoing screening endoscopy in Germany.

Methods This single-center prospective study was conducted at the LMU University Hospital in Munich from June 2021 to November 2025. 5,069 unselected individuals underwent *H. pylori* serology screening (ELISA), identifying 1,056 seropositive cases (20.8 %). Subjects with positive serology were offered confirmatory urea breath testing (UBT), with 400 confirming active infection. A total of 279 patients (mean age 48.9 ± 15.3 years; males:females 110:160) underwent esophagogastroduodenoscopy, during which gastric biopsies were obtained according to the standardized Sydney protocol (two from the antrum, two from the corpus, one from the incisura angularis). Histopathological evaluation was performed according to the updated Sydney classification with OLGA/OLGIM staging for gastric precancerous conditions.

Results Overall GPC prevalence was 38.7 % (108/279). OLGA/OLGIM stage I conditions were found in 75 patients (26.9 %), stage II in 27 (9.7 %), and high-risk stages III-IV in 6 (2.2 %). All patients with advanced-stage lesions (OLGA/OLGIM III-IV) were > 50 years of age. There was a strong association between higher age and GPC prevalence, with patients > 50 years having approximately 2.7-fold higher odds of GPC compared to those ≤ 50 years (OR 2.70, 95 % CI 1.64-4.35; p < 0.001). In the age-stratified subgroup analysis among patients > 50 years (n = 136), GPC prevalence increased to 50.7 % (69/136): stage I in 43 patients (31.6 %), stage II in 20 (14.7 %), and stages III-IV in 6 (4.4 %).

Conclusions The age-dependent increase in GPC prevalence supports the national guidelines' recommendation for targeted risk stratification rather than population-based screening in low-to-intermediate gastric cancer incidence countries. The low proportion of patients requiring endoscopic surveillance highlights the need for more efficient, non-invasive patient selection strategies to optimize resource utilization in low-prevalence settings. Comprehensive cost-effectiveness analyses are also needed to validate screening and surveillance strategies in Germany's healthcare context.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP127 “Glomus-like” lesions of the gastric corpus: a novel marker for autoimmune gastritis by image-enhanced endoscopy

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DOI 10.1055/s-0046-1821067

Aims Autoimmune gastritis (AIG) is considered to be a premalignant condition and associated with an increased risk of gastric neoplasia. Endoscopic diagnosis is usually difficult, and most cases are overlooked and therefore the identification of specific endoscopic markers is important for the accurate diagnosis of AIG. During magnifying image-enhanced endoscopy (M-IEE) of the gastric corpus mucosa in patients with AIG, we noted the presence of multiple minute round-shaped pale “glomus-like” lesions (GLLs) with branched microvessels. It had not been described in the literature before. In the present study, we investigated the nature and the diagnostic utility of GLLs for the AIG diagnosis.

Methods 57 patients with AIG (including 22 patients with gastric neuroendocrine neoplasia (NEN) type 1) and 54 age- and sex-matched patients with *H. pylori*-induced multifocal atrophic gastritis (MAG) were enrolled in this study. After white light imaging (WLI) observation M-IEE (NBI, BLI, Iscan-OE) of the gastric corpus mucosa was performed. Biopsy was taken from a gastric mucosa with and without GLLs for histological evaluation.

Results GLLs were found in 44 out of 57 (77 %) patients with AIG, (in 22 out of 22 (100 %) patients with NEN) and in 0 out of 54 (0 %) patients with MAG (P = 0.0001). For AIG diagnosis by GLLs sensitivity, specificity, accuracy, positive predictive value (PPV), negative predictive value (NPV) were 0.77, 1.00, 0.88, 1.00, 0.81, respectively. All biopsy specimens taken from GLLs revealed mucosal atrophy, enterochromaffin-like (ECL) cell hyperplasia, cysts of foveolar epithelium

Conclusions The presence of GLLs was associated with histological features of atrophy in patients with AIG and were found in every case of NEN. GLLs could be considered as an endoscopic marker of advanced atrophy in patient with AIG who has an increased risk of NEN development. This novel indicator was found to be a highly specific feature of AIG and could be used in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP128 Blood Flow Rate Analysis Using Magnifying Endoscopy for MESDA-G Diagnostic Limitation Early Gastric Cancers

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DOI 10.1055/s-0046-1821068

Aims The Magnifying Endoscopy Simple Diagnostic Algorithm for Early Gastric Cancer (MESDA-G) has been proposed as a standardized diagnostic system using magnifying endoscopy with narrow-band imaging (M-NBI) for early gastric cancer (EGC), and its usefulness has been reported. However, we sometimes encountered false-negative cases with M-NBI diagnosis (M-NBI diagnostic limitation EGC: MDL-EGC) (Endosc Int Open, 2020). On the other hand, we previously developed automatic analysis software for gastric mucosal blood flow rate and demonstrated that EGCs exhibit significantly slower flow rates compared with reddish non-neoplastic mucosa, supporting its diagnostic utility (J Gastroenterol Hepatol, 2021). Nevertheless, blood flow rate analysis for MDL-EGCs has not yet been investigated. Therefore, the aim of this study was to evaluate blood flow rate in MDL-EGC and clarify the usefulness of the gastric mucosal blood flow rate analysis software.

Methods Among 286 patients (314 lesions) who underwent endoscopic submucosal dissection for EGC at our institution between February 2021 and January 2024, 38 lesions (12.1 %) that were diagnosed as “non-cancer” according to MESDA-G were defined as MDL-EGCs and analyzed. Blood flow rate was measured using the automatic analysis software. The diagnostic performance for cancer was assessed using a previously established cutoff value (1.189 mm/s) derived from other test data sets. In addition, lesions were histopathologically classified, and blood flow rates were compared among the groups.

Results The 38 MDL-EGCs consisted of *H. pylori* status (current/past/never infection = 1/23/14), location (U/M/L = 15/10/13), macroscopic type (elevated/flat/depressed = 15/10/13), and invasion depth (M/SM = 24/14). Histologically, the lesions were classified into four groups: low-grade differentiated adenocarcinoma (n = 12), signet-ring cell carcinoma (sig, n = 5), gastric adenocarcinoma of fundic gland mucosa type (GA-FGM, n = 5), and gastric adenocarcinoma of fundic gland type (GA-FG, n = 16). The mean blood flow rate of all lesions was 1.169 mm/s, and 60.5 % of lesions were diagnosed as cancer (< 1.189 mm/s) by blood flow analysis (differentiated/sig/GA-FGM/GA-FG = (11/12, 91.7 %)/(3/5, 60 %)/(3/5, 60 %)/(6/16, 37.5 %)). Mean blood flow rates by group were 1.06, 1.13, 1.17, and 1.26 mm/s, respectively. GA-FG, in which the surface epithelium is covered by non-neoplastic mucosa, showed the highest blood flow rate, whereas low-grade differentiated adenocarcinoma, in which the tumor is exposed to the surface, showed the lowest blood flow rate. In signet-ring cell carcinoma, 60 % (3/5) were correctly diagnosed as cancer by blood flow rate analysis, possibly due to tumor proliferation immediately beneath the non-neoplastic surface epithelium affecting surface blood flow [1, 2].

Conclusions This study is the first report to evaluate the usefulness of the analysis system for MDL-EGCs. In MDL-EGCs, blood flow rate analysis was suggested to be useful not only for low-grade differentiated adenocarcinoma and GA-FGM with surface tumor exposure but also for signet-ring cell carcinoma

covered by non-neoplastic mucosa. Therefore, this analysis system has the potential to be useful in clinical practice. We hope for further investigation of various types of lesions and the development of a next-generation microvascular blood flow analysis system, which can be applied to clinical endoscopic practice.

Conflicts of Interest This research was funded by a joint research effort conducted by the author and the FUJIFILM Corporation.

References

- [1] Endoscopy International Open 2020; 08: E1233–E1242
- [2] Journal of Gastroenterology and Hepatology 2025; 40: 2695–2704

PYP129 The prevalence of precancerous conditions and upper gastrointestinal neoplasms among asymptomatic and symptomatic patients in low to moderate prevalence countries

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DOI 10.1055/s-0046-1821069

Aims The aim of the study was to determine differences in the detection of precancerous conditions (PC) and neoplastic lesions between asymptomatic and symptomatic patients who referred to esophagogastroduodenoscopy (EGD).

Methods It was a single center, retrospective study conducted from January to September 2024. During this period patients who underwent diagnostic and screening EGD were analyzed.

Results Among 2357 patients who underwent EGD and the data collection 418 were excluded from study, and 1939 were included (mean age 51.7 ± 14.3; 1150 (59.2 %) female), among which 1683 were symptomatic and 256 asymptomatic.

The incidence of dysplasia was 0.4 % (n = 1/256) in asymptomatic vs 2.14 % symptomatic (p = 0.07) and cancers 0 % (n = 0/256) in asymptomatic vs 0.3 % (n = 5/1683, p = 0.99) symptomatic patients, which revealed no significant differences in both groups. The incidence of BE (Barrett's esophagus) was similar in both groups; 0.4 % (n = 1/256) asymptomatic vs 1.18 % symptomatic (n = 20/1683) (p = 0.53). Subsequently, we observed similar occurrence of AG/GIM (atrophic gastritis, gastric intestinal metaplasia) in both groups, asymptomatic 11.7 % (n = 30/256) vs 10.5 % (n = 177/1683) symptomatic (p = 0.79). Severity of AG/GIM assessed with OLGA/OLGIM staging revealed no difference between both groups in occurrence of advanced stages of atrophic gastritis (OLGA/OLGIM III-IV): asymptomatic 1.1 % (n = 3/256) vs 1.1 % (n = 20/1683) symptomatic (p = 0.82).

In the multivariable regression analysis risk factors such as male sex (OR = 0.557, 95 % CI = 0.285 – 1.089), presence of alarm symptoms (OR = 0.355, 95 % CI = 0.048 – 2.646), presence of any symptoms (OR = 6.284, 95 % CI = 0.849 – 46.519) and sedation (OR = 0.793, 95 % CI = 0.374 – 1.685), were not related to the detection of upper gastrointestinal neoplasia with the only risk factor being age (OR = 1.047, 95 % CI = 1.022–1.072). None of assessed factors were associated with higher risk of PC (– age (OR = 1.001, 95 % CI = 0.992–1.010), male sex (OR = 1.072, 95 % CI = 0.824–1.394), alarm symptoms (OR = 0.824, 95 % CI = 0.497–1.367) presence of any symptoms (OR = 1.191, 95 % CI = 0.827–1.715), sedation (OR = 0.822, 95 % CI = 0.584–1.157), adequate cleanliness (OR = 1.136, 95 % CI = 0.653–1.977).

Conclusions Presence of symptoms was not related to PC nor neoplasia detection. These findings underscore the need for identification additional risk factors and developing effective screening programs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP130 Disrupted Microvascular Pattern and Cyan-Colored Vessels Strongly Suggest Submucosal Invasion in Gastric Cancer by Magnifying Endoscopy

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DOI 10.1055/s-0046-1821070

Aims Although magnifying endoscopy with narrow-band imaging (ME-NBI) has been widely used for qualitative diagnosis, such as differentiating cancerous lesions from non-cancerous lesions and predicting histology, its usefulness for assessing invasion depth remains unclear. Previous studies have mainly focused on the demarcation line and microvascular or microsurface patterns for qualitative diagnosis, whereas evidence regarding ME-NBI findings associated with submucosal invasion is still limited. The purpose of this study is to investigate which ME-NBI findings could be useful for diagnosing the invasion depth of gastric cancer.

Methods A total of 255 gastric cancer lesions resected by endoscopic submucosal dissection (ESD) were retrospectively analyzed, including 174 mucosal (M) and 81 submucosal (SM) cancers. ME-NBI findings were reviewed to assess the following features:

1. Presence of RAC (Regular Arrangement of Collecting Venules)-like vessels
2. Cyan-colored and thick vessels
3. Disruption of the microvascular pattern (MVP)
4. Loss of the microsurface pattern (MSP)

The diagnostic performance of each finding for predicting SM invasion was evaluated by calculating sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), positive likelihood ratio (PLR), and negative likelihood ratio (NLR).

Results Diagnostic performance (sensitivity / specificity / PPV / NPV / PLR / NLR) was as follows:

1. Presence of RAC-like vessels: 90.0 % / 74.4 % / 62.0 % / 93.5 % / 3.6 / 0.13
2. Cyan-colored and thick vessels: 44.4 % / 95.3 % / 76.6 % / 78.4 % / 9.4 / 0.58
3. Disruption of MVP: 35.8 % / 96.0 % / 80.6 % / 76.3 % / 8.8 / 0.67
4. Loss of MSP: 39.5 % / 83.9 % / 53.3 % / 74.9 % / 3.3 / 0.71

The presence of cyan-colored vessels and disruption of MVP were strongly associated with SM invasion. The NLR of RAC-like vessels was low, suggesting that the absence of RAC-like vessels indicates a low probability of submucosal invasion.

Conclusions Among ME-NBI findings, the presence of cyan-colored vessels and disrupted MVP are useful indicators suggesting submucosal invasion in gastric cancer. These findings may contribute to more accurate endoscopic assessment of invasion depth prior to ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

evaluate real-world outcomes of endoscopic management—including endoscopic transpapillary drainage (ETD) and EUS-guided transluminal drainage (EUS-TD)—across the spectrum of non-postoperative pancreatic duct disruption, and to compare treatment patterns and clinical outcomes between IPF and DPDS, as well as between encapsulated PFC and non-encapsulated PF.

Methods This retrospective single-center study included consecutive non-postoperative patients with clinically significant PF or PFC secondary to pancreatic duct disruption. Only patients who underwent endoscopic treatment (ETD and/or EUS-TD) were included; cases treated solely with surgery, percutaneous catheter drainage (PCD) alone, or observation were excluded. Pancreatic duct disruption was categorized as IPF or DPDS using ERCP, imaging, and clinical course, and collections were classified as encapsulated or non-encapsulated. The primary outcome was clinical success, defined as resolution of PF/PFC-related symptoms and termination of active external drainage. Secondary outcomes included recurrence, need for PCD or surgery, and subgroup comparisons of treatment patterns.

Results A total of 45 patients were analyzed (IPF 37, DPDS 8; encapsulated collections 30, non-encapsulated leaks 15). Initial interventions were ETD in 31 patients (69 %) and EUS-TD in 13 (29 %). The modality responsible for initial improvement was ETD in 23 patients (51 %) and EUS-TD in 20 (44 %). Clinical success was achieved in all patients (100 %). Compared with IPF, DPDS showed higher rates of recurrence (25 % vs 16 %), need for PCD (25 % vs 14 %), and surgery (13 % vs 5 %). Nevertheless, endoscopic treatment successfully controlled PF/PFC in 7 of 8 DPDS cases, and ETD or EUS-TD served as the final treatment in six of these. In the comparison between encapsulated PFC and non-encapsulated pancreatic fistula, treatment patterns were similar (EUS-TD: 33 % vs 40 %; ETD: 60 % vs 60 %). Recurrence (20 % vs 13 %), PCD requirement (13 % vs 20 %), and surgery (7 % vs 7 %) also showed no substantial differences, supporting the effectiveness of endoscopic treatment for non-encapsulated leaks. Overall, only 3 patients (7 %) required surgery and 7 patients (16 %) required PCD during the treatment course.

Conclusions In this real-world cohort of non-postoperative pancreatic duct disruption, an endoscopic-first strategy achieved universal clinical success with low recurrence and limited surgical need. ETD and EUS-TD were effective across IPF, DPDS, encapsulated PFC, and non-encapsulated leaks. These findings support the broad applicability of endoscopic management across the full spectrum of pancreatic duct disruption.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP132 Pancreatic duct wall thickening on EUS is useful for differentiating autoimmune pancreatitis from pancreatic neoplasms

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DOI 10.1055/s-0046-1821072

Aims We previously reported that lymphoplasmacytic infiltration around the pancreatic duct, a characteristic histological finding of autoimmune pancreatitis (AIP), can be visualized on endoscopic ultrasonography (EUS) as pancreatic duct wall thickening [1]. This study evaluated the utility of EUS-detected pancreatic duct wall thickening in distinguishing AIP from pancreatic neoplasms.

Methods We included 47 patients who underwent EUS and were diagnosed with AIP according to the International Consensus Diagnostic Criteria (ICDC), as well as 339 patients with histologically confirmed pancreatic neoplasms treated at our institution from March 2017 to September 2025. Detection rates of pancreatic duct wall thickening on EUS were compared between the two groups. Pancreatic duct wall thickening was defined as hypoechoic thickening of the duct wall with a thin hyperechoic surface layer. All EUS images and video recordings were retrospectively reviewed.

Pancreatic duct disorders and leaks

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PYP131 Endoscopic management of non-postoperative pancreatic duct disruption: effectiveness across disruption types and collection morphologies

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DOI 10.1055/s-0046-1821071

Aims Pancreatic duct disruption leading to pancreatic fistula (PF) or peripancreatic fluid collections (PFCs) presents a major clinical challenge. Optimal management strategies for incomplete (IPF) and complete pancreatic duct disruption (DPDS) remain controversial, and evidence regarding endoscopic treatment of non-encapsulated pancreatic leaks is limited. This study aimed to

Results In the AIP group, patient characteristics were as follows: 37 males (78.7%), median age 73 years (range 42–87), diffuse-type disease in 26 cases (55.3%), elevated serum IgG4 levels in 36 cases (76.6%), and extrapancreatic involvement in 13 cases (27.7%). In the pancreatic neoplasm group, there were 166 males (49.0%) with a median age of 76 years (range 24–95). Histological diagnoses included pancreatic ductal adenocarcinoma ($n = 271$), neuroendocrine neoplasms ($n = 47$), and intraductal papillary mucinous neoplasm (IPMN) ($n = 21$). Pancreatic duct wall thickening was detected significantly more often in the AIP group (82.6%, 38/46) than in the tumor group (1.5%, 5/339) ($p < 0.01$). In patients with focal-type AIP, thickening was observed within or around the focal lesions. Among 12 AIP patients who underwent EUS after steroid therapy, improvement of duct wall thickening was observed in 10 cases (83.3%). All five pancreatic neoplasm cases showing duct wall thickening underwent surgical resection. Three cases corresponded to focal pancreatic atrophy associated with carcinoma in situ. The remaining two corresponded to intraductal extension of IPMN, where the thickened duct wall was continuous with intraductal papillary projections.

Conclusions Pancreatic duct wall thickening on EUS is frequently observed in AIP and serves as a useful marker for differentiating it from pancreatic neoplasms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ishii K, Hisa T, Kudo A et al. A resected case of focal autoimmune pancreatitis with pancreatic duct wall thickening representing periductal lymphoplasmacytic infiltrate. *Clin J Gastroenterol* 2021; 14: 1278–1285

PYP133 Biodegradable Versus Plastic Pancreatic Stents: A Comparative Retrospective Study

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DOI 10.1055/s-0046-1821073

Aims Post-ERCP retrograde cholangiopancreatography (ERCP) pancreatitis (PEP) remains the most common ERCP-related adverse event, with an incidence of 3.5–9.7%. Multiple pre-, peri- and post-procedural strategies have been recommended to reduce this risk¹. A core component of peri-procedural prophylaxis is the placement of a temporary pancreatic duct stent, if the pancreatic duct was accessed inadvertently [1]. Traditionally, short-term plastic pancreatic stents are used which require follow-up abdominal radiography and endoscopic removal if retained. In recent years, biodegradable pancreatic stents have been introduced in clinical practice, offering the advantage of a “deploy-and-forget” approach. This study aims to 1) compare clinical outcomes between plastic and biodegradable pancreatic stents and 2) identify extra costs related to plastic stents.

Methods A retrospective review of the ERCP database of the Translational Gastroenterology and Liver Unit, Oxford University Hospitals, was conducted over a 5-year and 9-month period (January 2020–September 2025). In September 2023 the biodegradable pancreatic stents were introduced to our unit. All ERCP procedures involving placement of pancreatic stents (plastic or biodegradable) were included. Demographic data, procedural indication (benign vs. malignant), and post-procedural adverse events [PEP, post-ERCP cholangitis (PEC), bleeding, perforation, and 30-day mortality] were recorded. Fisher's exact test was used to compare categorical outcomes between stent types, while univariate and multivariate logistic regression models assessed predictors of outcomes, supplemented by subgroup analyses stratified by indication (benign vs malignant). Statistical significance was defined as $p < 0.05$.

Results During the study period, 2,995 ERCP procedures were performed, of which 142 (4.74%) had pancreatic stent placement. The median age of patients with pancreatic stent was 71 years. Pancreatic stent cases included 88 (61.97%)

females and 54 (38.03%) males. Plastic stents were placed in 73 (51.41%) and biodegradable stents in 69 patients (48.59%).

When outcomes were compared solely by stent type, plastic stents were associated with slightly higher rates of 30-day mortality (5.48% vs. 1.45%) and perforation (5.48% vs. 1.45%) compared with biodegradable stents, while the incidence of PEP was comparable (plastic: 6.85% vs. biodegradable: 5.80%). There was a trend that plastic stents showed slightly higher rates of PEP [Odds Ratio, OR ≈ 1.13 , (95% Confidence Interval- CI 0.29 to 4.37; $p = 0.86$)] and 30-day mortality [OR ≈ 1.94 , (95% CI 0.29 to 12.85; $p = 0.49$)]. However, these differences were not statistically significant ($p > 0.05$ for all outcomes). Multivariable analysis incorporating age (> 50 vs. ≤ 50 years), gender, stent type, and indication was performed, and demonstrated that malignant indication was the only independent predictor of 30-day mortality (OR ≈ 21.8 , $p = 0.0088$). Stent type, age, and gender were not significantly associated with the outcomes. No significant differences were observed for perforation or PEP (all $p > 0.05$). Due to limited event numbers, PEC and bleeding were excluded from multivariable modelling.

Among the 73 patients who received a plastic pancreatic stent, 16 (22%) required an additional endoscopic procedure for removal of a retained stent, confirmed on follow-up abdominal X-ray.

Conclusions Pancreatic stent type, irrespective of procedural indication, showed similar results of PEP, 30-day mortality and perforation compared to plastic stents. However, a substantial proportion of patients with plastic stents (22% in our cohort) required subsequent endoscopic retrieval, thereby increasing healthcare costs and exposing patients to additional ionising radiation (abdominal X-ray to confirm the presence of the retained stent) as well as endoscopic procedure-related risks. In addition, in an era with high pressure on the NHS and other health services and where ‘Greener Endoscopy’ is increasingly recommended and welcomed, the biodegradable stent findings support potential clinical, operational, and environmental advantages.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dumonceau JM, Kapral C, Aabakken L et al. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020; 52 (2): 127–149. doi:10.1055/a-1075-4080

PYP134 Pancreaticopleural and Pancreaticomediastinal Fistula: A Retrospective Case Series on Clinical Outcomes of Endoscopic Stent Therapy in 48 patients

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DOI 10.1055/s-0046-1821074

Aims Pancreaticopleural and pancreaticomediastinal fistulas (PPMF), are rare complications of acute and chronic pancreatitis caused by a disrupted pancreatic duct (PD). It involves an abnormal passage through which enzyme-rich pancreatic fluid may leak into the pleural cavity or the mediastinum. Their optimal management remains unclear due to limited clinical data, as prior studies have included only a small number of patients. The aim of this study was to evaluate the outcomes of endoscopic stent therapy in a larger cohort of patients with PPMF secondary to acute or chronic pancreatitis.

Methods A retrospective, single-center case series was performed involving 59 patients with PPMF secondary to acute or chronic pancreatitis. Their treatment was initiated endoscopically in Helsinki University Hospital between 2011–2024. Eleven patients were excluded due to inadequate follow-up information, resulting in a final cohort of 48 patients. All included patients had a PPMF, which was at minimum established through amylase-rich pleural fluid (greater than 200 U/L) or a radiologically identified fistula tract to the pleural cavity and/or to the mediastinum. The entire cohort had fluid in the pleural

cavity, mediastinum or both. All data was retrospectively collected from patient records.

Endoscopic retrograde cholangiopancreatography (ERCP) with transpapillary access to the PD and subsequent stent placement was the preferred method for endoscopic therapy (ET). In ERCP, the aim was to identify the fistula tract and place a plastic stent (5Fr–10Fr) beyond the site of ductal disruption. When indicated, PD dilatation was performed using a 4–6 mm dilatation balloon. Successful outcome was determined when pleural fluid cleared, and the fistula was no longer visible through imaging. If ERCP failed, an endoscopic ultrasound (EUS)-guided transmural route was considered for suitable fluid collections.

Results Among the patients, 33 (69 %) had chronic pancreatitis and 15 (31 %) had acute pancreatitis. The etiology of acute or chronic pancreatitis was alcohol in 45 (94 %) cases. Of the remaining, one had biliary pancreatitis, one had interferon-induced pancreatitis, and one had idiopathic pancreatitis. CT was performed for all patients and demonstrated the fistula tract in 46 (96 %) cases. Among 30 patients with a fistula in the head or body of the pancreas, the stent was successfully positioned past the disrupted area in 22 cases. All of them had a successful treatment outcome. After the stent bypassed the fistula tract, the patients' symptoms resolved in a median time of 60 (range 3–156; IQR 45) days. Of the remaining eight cases, ET failed in one case. When the fistula was in the tail of the pancreas, ET succeeded in 14 out of 18 patients (77.8 %) but when it was in the head or body of the pancreas ET succeeded in 29 out of 30 patients (96.7 %) ($p = 0.059$).

ET was ultimately successful in 90 % of patients. The median time from successful stent placement to PPMF closure was 2.3 months (range 1–24; IQR 3). Patients underwent a median of three (range 1–8; IQR 2) ERCPs. The median follow-up time was 54 months (range 1–209; IQR 56). There were no fistula recurrences among any of the 48 patients. Mortality was high (27 %) but none died due to PPMF. The patients deceased in a median time of 2.3 years (2.0 months – 10.1 years; IQR 5.4 years) after their diagnosis of PPMF.

Conclusions ET is an effective treatment method for PPMF. The primary goal of ET is to advance the PD stent beyond the fistula tract, as this is associated with treatment success. When the disruption is located in the pancreatic tail, the stent should be positioned as close as possible to the fistula tract. These findings support endoscopic therapy as the first-line treatment for PPMF secondary to acute and chronic pancreatitis. Future prospective studies with larger cohorts are needed to confirm these results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP135 Evaluation of Quality of Life in Patients Undergoing Endoscopic Management for Pancreatic Disease: a Prospective Observational Cohort Study

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DOI 10.1055/s-0046-1821075

Aims Although endoscopic and medical therapies effectively address the morphological and physiologic (exocrine and endocrine) sequelae of pancreatic disease [1], broader functional domains, such as nutrition, persistent pain, and psychosocial well-being are infrequently measured or integrated into routine care. This shortfall reflects procedure-centred clinical workflows that favour treatable structural targets, a lack of routinely collected, standardized metrics for functional domains, and fragmented or under-resourced multidisciplinary pathways worldwide. We aimed to characterize health-related quality of life (HRQoL) measures in a cohort undergoing endoscopic management for pancreatic disease.

Methods We prospectively included patients from the St. Michael's Hospital (Toronto) Pancreatic Disease Clinic undergoing endoscopic management of CP between April and November 2025. Eligible patients had one or more of the following: CP, severe recurrent pancreatic pain, obstructive pancreatic duct

disease (stenosis or intraductal stones with ≥ 5 mm proximal dilation), a genetic/familial or autoimmune predisposition, or a history of necrotizing or recurrent acute pancreatitis. HRQoL was measured using the SF-36 (eight domains plus a total score). Participants completed baseline (pre-procedure) assessments and were reassessed at a median of 3 months after the endoscopic procedure. Within-subject changes from baseline to 3 months were evaluated by paired analyses, with paired mean differences reported alongside 95 % confidence intervals. SF-36 domain scores were compared with established Canadian population norms [2].

Results Fifty-two patients were included (28 female, 24 male); aetiologies were idiopathic 76.9 %, genetic 7.7 %, alcohol 3.8 %, biliary 1.9 %, hypertriglyceridemia 1.9 % and other 7.7 %. Twenty-nine patients underwent endoscopic management (diagnostic EUS 72.4 %, EUS guided drainage 3.5 %, FCSEMS 3.5 %, pancreatic stenting 3.45 %, ERCP stone clearance 13.8 %, EUS celiac plexus block 10.3 %). Overall SF-36 total score was 61.4 ± 19.7 at baseline and 62.5 ± 20.0 at 3 months (population 79.3 ± 22.3), an absolute mean change of $+1.0$ [–4.5 to 6.6] (baseline – 17.9 vs population; 3 months – 16.8 vs population). The three most prominent domain findings were: Social Functioning $51.5 \pm 8.6 \rightarrow 52.8 \pm 8.0$ (population 86.2 ± 19.8), change $+1.3$ [–2.9 to 5.4] (baseline – 34.7 vs population; 3 months – 33.4 vs population); General Health $48.9 \pm 18.8 \rightarrow 48.3 \pm 19.2$ (population 77.0 ± 17.7), change -0.6 [–5.3 to 4.2] (baseline – 28.1 vs population; 3 months – 28.7 vs population); and Physical Functioning 69.3 ± 34.2 ($n = 49$) $\rightarrow 75.9 \pm 28.8$ (population 85.8 ± 20.0), change $+6.6$ [–2.6 to 15.7] (baseline – 16.5 vs population; 3 months – 9.9 vs population). Other domains showed small shifts: Role limitations due to Physical Health 74.5 ± 52.4 ($n = 50$) $\rightarrow 79.6 \pm 48.1$, change $+5.1$ [–7.9 to 18.2]; Role limitations due to Emotional Health 67.3 ± 43.9 ($n = 50$) $\rightarrow 66.7 \pm 46.2$, change -0.7 [–14.0 to 12.6]; Bodily Pain $65.9 \pm 28.6 \rightarrow 65.7 \pm 32.7$, change -0.3 [–8.8 to 8.3]; Vitality $49.4 \pm 21.7 \rightarrow 50.9 \pm 18.8$, change $+1.6$ [–3.7 to 6.8]; and Mental Health $64.7 \pm 24.3 \rightarrow 64.1 \pm 23.8$, change -0.7 [–6.8 to 5.5].

Conclusions Despite endoscopic management, patients entered care with substantially reduced HRQoL and—apart from a small, non-significant improvement in physical functioning at 3 months—most domains (especially social functioning and general health) remained far below population norms. These results show that treating anatomical and physiological problems alone is insufficient: routine HRQoL measurement and integrated, multidisciplinary care (nutrition, pain/rehabilitation, psychology/social work and allied-health support) are needed to restore patients toward population-level wellbeing.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

References

- [1] The Canadian Multicentre Osteoporosis Study Research Group Hopman W.M., Towheed T., Anastassiades T., Tenenhouse A., Poliquin S., Berger C., Joseph L., Brown J.P., Murray T.M., Adachi J.D., Hanley D.A., Papadimitropoulos E. 2000; Canadian normative data for the SF-36 health survey. Canadian Medical Association Journal 163 (3): 265
- [2] Banks P.A., Conwell D.L., Toskes P.P. 2010; The management of acute and chronic pancreatitis. Gastroenterology & Hepatology 6: (Suppl 3): 1–16

PYP136 Clinical Outcomes and Safety of Biodegradable Pancreatic Duct Stents: A Single-Centre Experience

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DOI 10.1055/s-0046-1821076

Aims Biodegradable pancreatic duct (PD) stents offer a potential alternative to traditional polymer stents by eliminating the need for endoscopic retrieval and reducing X-ray exposure as well as procedure-related risks [1]. Their real-world performance in routine Endoscopic retrograde cholangiopancreatography (ERCP) practice, however, remains poorly characterised.

The aim of this study is to evaluate the safety and clinical outcomes of biodegradable PD stents in patients undergoing ERCP at a tertiary Hepatopancreatobiliary (HPB) referral centre.

Methods A retrospective review was conducted of all ERCP procedures performed between September 2023 and September 2025 at Oxford University Hospitals from introduction of the biodegradable stents. Patients who received biodegradable PD stents were identified where demographics, procedural characteristics, indications, and post-ERCP outcomes were extracted from electronic records and endoscopy reports. Technical and clinical success, as well as adverse events, were analysed descriptively.

Results Seventy-one patients received biodegradable PD stents (median age 71 years; 56 % female). Most ERCPs ($n = 57$; 80.3 %) were undertaken for benign indications, predominantly choledocholithiasis. All PD stents deployed were fast-degrading models with minimal strength retention of 12 days. The primary indication for stenting was post-ERCP pancreatitis (PEP) prophylaxis ($n = 69$; 97.2 %). The consultant gastroenterologist performed the majority of biodegradable stent placements ($n = 46$; 64.8 %) while trainees inserted the remaining ($n = 35$; 35.2 %). Technical success was achieved in 100 % of cases, with a clinical success rate of 96.7 %. Adverse events included PEP in four patients (5.6 %), cholangitis in two (2.8 %), and single cases of 1 perforation (1.4 %) and 1 procedure-related death (1.4 %).

Conclusions Biodegradable PD stenting is a feasible and safe adjunct to existing PD stents. It demonstrated excellent technical success and favourable clinical outcomes. Its use reduces radiation exposure and the need for stent retrieval which would otherwise imply further endoscopy with significant cost and environmental impact (scope cleaning, device to retrieve the stent and driving into the hospital by patients). Additionally, it showed acceptable PEP rates compared to other findings in literature.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pérez-Cuadrado Robles E, Lakhtakia S, Othman H et al. A new biodegradable stent in bilio-pancreatic diseases: a prospective multi-center feasibility study. *Rev Esp Enferm Dig* 2022; 114 (9): 529–533. doi:10.17235/reed.2022.8451/2021

PYP137 Endoscopic Management of Pediatric and Adolescent Pancreatic Duct Leaks and Peri-Pancreatic Fluid Collections

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DOI 10.1055/s-0046-1821077

Aims Pancreatic duct (PD) leaks and pancreatic fluid collections (pseudocyst/walled-off pancreatic necrosis [WOPN]) are rare in children and adolescents, and the optimal minimally invasive approach is not well established. Transpapillary PD stenting (with or without sphincterotomy) is the principal endoscopic treatment for partial duct disruptions and low-grade leaks. Pediatric series report high technical success with stent placement and good clinical resolution in a majority of cases; reported closure/success rates vary but are commonly in the ~70–90 % range in mixed-age cohorts, with procedure-specific complication rates (including post-ERCP pancreatitis) that require caution. Smaller-caliber stents (5–7 Fr) and pediatric-appropriate accessories are used when available. EUS-guided drainage is safe and effective for symptomatic pseudocysts and select walled-off necrosis (WON), though data are smaller and largely single-center. Nasocystic irrigation, multiple plastic stents, or LAMS with step-up necrosectomy are used based on collection content. We aimed to describe

outcomes of ERCP-based transpapillary therapy and EUS-guided drainage for PD leaks and associated collections in a combined pediatric–adolescent cohort [1, 2].

Methods We conducted a single-centre retrospective case series of 20 patients (age 4–19 years) treated between January 2021 and October 2025. Data included pancreatitis aetiology (acute vs chronic), clinical presentation, PD leak location on imaging (CECT/MRCP/EUS/ERCP), endoscopic procedures performed, need for adjunct percutaneous or pleural drainage, and outcomes. Primary endpoints were technical success and durable clinical/radiologic resolution without recurrence.

Results Nine of 20 patients had acute pancreatitis (three trauma-related), and 11 had chronic pancreatitis with an acute exacerbation. Presentations included symptomatic pseudocyst/WOPN ($n = 10$), pancreatic ascites ($n = 7$), left paracolic gutter collection ($n = 2$), and pleural involvement (effusion or pancreaticopleural fistula; $n = 2$). PD leaks were located in the body ($n = 11$), neck ($n = 7$), and tail ($n = 2$). All patients underwent endoscopic therapy, including ERCP (transpapillary PD stenting in 9, pancreatic sphincterotomy alone in 1) and EUS-guided cystogastrostomy with plastic stent(s) in 7, as well as EUS-guided single-time aspiration (EUS-STA) in 3. In the ERCP group, collections were managed with percutaneous catheter drainage ($n = 4$), therapeutic paracentesis ($n = 5$), and thoracentesis ($n = 1$) before transpapillary intervention; only 1 EUS-cystogastrostomy patient required an additional PCD drain. Technical success was 100 % for EUS-guided interventions (cystogastrostomy/EUS-STA, 10/10) and 90 % for transpapillary PD stenting (9/10). Patients required 1–4 ERCP sessions; stent dwell time ranged from 2 to 12 months. Over 2–24 months of follow-up, no recurrences were documented.

Conclusions Endoscopic therapy (ERCP-based transpapillary PD stenting and EUS-guided cystogastrostomy) provided safe, organ-preserving, and durable control of PD leaks and peri-pancreatic fluid collections in children and adolescents, with high technical success and absence of recurrence in this series. A tailored strategy—EUS-guided cystogastrostomy for symptomatic pseudocyst/WOPN and ERCP-based stenting for demonstrable PD leaks—appears effective, while adjunct percutaneous or pleural drainage is only selectively required. Larger prospective multicentre studies are needed to refine procedural algorithms, stent selection and dwell time, and to assess long-term pancreatic function, growth, quality of life, and recurrence risk in this population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Nabi Z, Talukdar R, Reddy DN. Endoscopic Management of Pancreatic Fluid Collections in Children. *Gut Liver* 2017; 11 (4): 474–480
[2] Agarwal J, Nageshwar Reddy D, Talukdar R, Lakhtakia S, Ramchandani M, Tandan M, Gupta R, Pratap N, Rao GV. ERCP in the management of pancreatic diseases in children. *Gastrointest Endosc* 2014; 79 (2): 271–8

PYP138 Effectiveness of EUS-guided pancreatic duct drainage for pancreaticojejunostomy anastomotic stricture following pancreaticoduodenectomy

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DOI 10.1055/s-0046-1821078

Aims Pancreaticojejunostomy anastomotic stricture (PJAS) is a clinically significant adverse event following pancreaticoduodenectomy. Balloon endoscopy-assisted ERCP (BA-ERCP) is generally considered the first-line approach for PJAS; however, its success is not universal. This study aimed to evaluate the feasibility of endoscopic ultrasonography-guided pancreaticogastrostomy (EUS-PGS) as a drainage method for PJAS.

Methods We retrospectively reviewed 15 patients who underwent endoscopic interventions for PJAS at our institution between February 2015 and July 2025. Technical success was defined as successful drainage via stent placement

across the fistula tract or anastomosis, and clinical success as the resolution of pancreas-related symptoms. Adverse events were also assessed.

Results Fifteen patients were included. The median age was 69 years (range, 18–82 years). Prior surgical procedures consisted of nine pylorus-preserving pancreaticoduodenectomies with Child reconstruction, four subtotal stomach-preserving pancreaticoduodenectomies with Child reconstruction, one duodenum-preserving pancreatic head resection, and one middle pancreatectomy with Letton and Wilson reconstruction. Surgical indications included four IPMA cases, three IPMC cases, two chronic pancreatitis cases, two pancreatic ductal adenocarcinoma cases, two bile duct cancer cases, one GIST case, and one traumatic pancreatic injury case. BA-ERCP was attempted in 14 cases, with technical success achieved in 8 (57.1%). EUS-PGS was performed in 6 cases, with technical success in 5 (83.3%). The initial EUS-PGS failure achieved technical success during the second session. All procedures with technical success also achieved clinical success. In total, 8 patients were successfully treated with BA-ERCP (BA-ERCP group) and 6 with EUS-PGS (EUS-PGS group), while 1 patient received conservative management after unsuccessful BA-ERCP. The median procedure time was 84 minutes for BA-ERCP and 59 minutes for EUS-PGS ($P=0.181$). The main pancreatic duct diameter on CT was significantly larger in the EUS-PGS group than in the BA-ERCP group (5.0 mm vs 3.8 mm, $P=0.02$). In the EUS-PGS group, transanastomotic stenting across the PJAS was achieved in 3 cases during the first session and in 2 cases during the second session; 1 case failed both attempts. Adverse events occurred in 2 patients (25%) in the BA-ERCP group, both mild pancreatitis, and in 2 patients (33.3%) in the EUS-PGS group (1 mild pancreatic fistula that resolved conservatively and 1 severe pancreatic fistula requiring endoscopic intervention).

Conclusions A dilated main pancreatic duct was associated with a lower success rate for BA-ERCP. EUS-PGS appears to be a feasible and effective salvage drainage modality for patients with PJAS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP139 Extracorporeal Shock Wave Lithotripsy With Pancreatic Stent Prevents Spontaneous Clearance Of Stone

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DOI 10.1055/s-0046-1821079

Aims Pancreatic extracorporeal shockwave lithotripsy (ESWL) is the first-line therapy for pancreatic stone larger than 5mm. Whether a preexisting pancreatic stent during ESWL have an impact on efficacy and complications of ESWL has not been investigated. We aimed to determine whether the stent should be removed before ESWL [1–7].

Methods All consecutive patients who underwent ESWL from March 2011 to March 2020 with a history of pancreatic stent placement within two years before ESWL were included. According to whether the pancreatic stent was in place during ESWL, patients were further divided into the stent group and the non-stent group. The primary outcome was the rate of spontaneous stone clearance after ESWL. The secondary outcome included number of ESWL shock waves and post-ESWL complications.

Results A total of 704 patients were initially included. After exclusions, 117 patients in the non-stent group and 200 patients in the stent group were finally studied. A significantly higher rate of spontaneous stone clearance was achieved in the non-stent group compared with the stent group (64.1% vs. 28.5%; $P<0.001$). No significant difference was found in number of shock waves to achieve successful stone fragmentation between the stent group and the non-stent group (7475.0 ± 3508.7 vs. 7777.8 ± 3908.7 ; $P=0.478$). The overall post-ESWL complication rate did not significantly differ between two groups (5.5% vs. 7.7%; $P=0.439$).

Conclusions Pancreatic stent prevents the spontaneous clearance of stone and does not reduce complications of ESWL. Active stent removal is recommended before ESWL.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Suzuki Y, Sugiyama M, Inui K et al. Management for pancreatolithiasis: a Japanese multicenter study. *Pancreas* 2013; 42 (4): 584–588
- [2] Inui K, Tazuma S, Yamaguchi T et al. Treatment of pancreatic stones with extracorporeal shock wave lithotripsy: results of a multicenter survey. *Pancreas* 2005; 30 (1): 26–30
- [3] Ohara H, Hoshino M, Hayakawa T et al. Single application extracorporeal shock wave lithotripsy is the first choice for patients with pancreatic duct stones. *Am J Gastroenterol* 1996; 91 (7): 1388–1394
- [4] Korpela T, Udd M, Tenca A et al. Long-term results of combined ESWL and ERCP treatment of chronic calcific pancreatitis. *Scand J Gastroenterol*. 2016; 51 (7): 866–871
- [5] Li BR, Liao Z, Du TT et al. Risk factors for complications of pancreatic extracorporeal shock wave lithotripsy. *Endoscopy* 2014; 46 (12): 1092–1100
- [6] van Huijgevoort NCM, Veld JV, Fockens P et al. Success of extracorporeal shock wave lithotripsy and ERCP in symptomatic pancreatic duct stones: a systematic review and meta-analysis. *Endosc Int Open* 2020; 8 (8): E1070–E1085
- [7] Dumonceau JM, Delhaye M, Tringali A et al. Endoscopic treatment of chronic pancreatitis: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Updated August 2018. *Endoscopy* 2019; 51 (2): 179–193

PYP140 EUS Guided Pancreato- gastrostomy in more than 100 patients: Comprehensive follow-up outcomes in Chronic pancreatitis, DPDS and Post Surgical States

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DOI 10.1055/s-0046-1821080

Aims Pancreatic duct obstruction causing symptomatic pain and recurrent pancreatitis, and the disconnected pancreatic duct syndrome with associated pancreatic leakage, represent significant clinical challenges. While endoscopic retrograde pancreatography (ERP) is the standard first-line treatment, it fails in 5–20% of cases due to difficulty in cannulation or surgically altered anatomy. In these patients, endoscopic ultrasound-guided pancreatic duct drainage (EUS-PDD) has emerged as a feasible minimally invasive alternative to surgical or percutaneous drainage. However, comprehensive long-term outcome data and factors predicting success remain limited.

Aim: To evaluate the technical and clinical outcomes, adverse events, long-term pain relief, and predictors of technical failure for EUS-PDD.

Methods Retrospective analysis of consecutive patients who underwent EUS-PDD at Institute of Gastroenterology, Hyderabad, India, from December 2019 to July 2025. Primary outcome was technical success, defined as successful pancreatography, insertion of pancreatic duct wire and successful stent placement. Secondary outcomes including (1) Clinical success, defined as residual pain ≤ 2 on the visual analog scale (VAS, 0–10) and no recurrence of obstructive pancreatitis after successful stent placement during the follow-up period; (2) Adverse events, classified according to the American Society for Gastrointestinal Endoscopy (ASGE) lexicon; (3) Re-intervention rate, defined as the need for repeat EUS-PDD procedure in patients who achieved initial clinical success; and (4) Predictors of technical failure.

Results 105 patients were included: chronic pancreatitis ($n=56$, 53.3%), disconnected pancreatic duct syndrome ($n=34$, 32.4%), combined CP-DPDS ($n=7$, 6.7%), and surgically altered anatomy ($n=8$, 7.6%). Overall technical

success was 87.6% (92/105) and clinical success was 89.1% (82/92). Subgroup analysis demonstrated: chronic pancreatitis 85.7% technical success, DPDS 85.3%, CP-DPDS 100%, and surgically altered anatomy 100%. Adverse events occurred in 13 patients (12.4%), predominantly mild (92.3%) and managed conservatively (90.9%): bleeding 4.8% (5/105), abdominal pain 2.9% (3/105), mild pancreatic leak 4.8% (5/105). No patients required surgery for adverse event management or procedure-related deaths. Long-term pain relief was achieved in 90.8% of patients (59.2% complete relief, 31.6% partial relief), with mean VAS reduction of 6.27 points (83.7% improvement). Stent-free status was achieved in 36.5% of patients. Mean follow-up was 853 days (2.33 years; range 90–1956 days)

Conclusions EUS-PDD demonstrated high technical and clinical success rates with low adverse event rates and durable long-term pain relief across diverse indications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Techniques and Outcomes from the Pancreatobiliary Playbook

15/05/2026, 09:30–10:30

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PYP141 When the Path Isn't Straight: Using a Single-Use Cholangioscope to Guide Duodenoscope Insertion in a Difficult Esophageal Anatomy; Case Report of a Novel Approach

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DOI 10.1055/s-0046-1821081

Problem to solve Insertion of a duodenoscope can be challenging or even impossible in patients with altered anatomy, increasing the risk of complications. The side-viewing optics of the duodenoscope further complicate advancement through a distorted esophagus. However, this problem cannot always be resolved by advancing the duodenoscope over or alongside a guidewire, nor by attempting ERCP with a forward-viewing gastroscope. We present a case in which, after multiple unsuccessful attempts to introduce the duodenoscope in a patient with cholangitis, we used a single-use cholangioscope as a visual guide to facilitate safe passage of the duodenoscope into the esophagus, effectively converting the side-viewing optics into a forward-viewing approach. This technique enabled successful completion of ERCP and avoidance of procedure-related complications.

Innovation In cases of difficult duodenoscope insertion into the esophagus due to altered anatomy, the side-viewing optics of the duodenoscope can be temporarily converted into a forward-viewing orientation using a cholangioscope. After performing diagnostic esophagoscopy with a standard gastroscope and confirming that no fixed stenosis was present to prevent passage of the scope, either a dual-operator “mother–baby” technique or a single-operator fiberoptic cholangioscope may be used to facilitate safe insertion. In our case, we used the dual-operator “mother–baby” technique with a single-use cholangioscope. Under gastroscopic visualization, a standard 0.035-inch guidewire was first advanced into the stomach. The gastroscope was then withdrawn, leaving the guidewire in place. Next, a single-use dual-operator cholangioscope was introduced through the duodenoscope's working channel. The distal ends of both scopes were aligned and jointly advanced over the guidewire into the esophagus, providing direct forward-viewing visualization. Once the duodenoscope was positioned correctly within the esophagus, both the cholangioscope and the guidewire were removed, and ERCP was subsequently completed without complications.

Results A 95-year-old patient with a history of Bechterew's disease presented in septic shock due to Grade III acute cholangitis and was referred for urgent ERCP. The procedure was performed under conscious sedation in a prone position.

Initial attempts to introduce a standard side-viewing duodenoscope through the upper esophageal sphincter were unsuccessful. Switching to a gastroscope also proved difficult, though insertion was achieved after repositioning the patient to the left lateral position. Endoscopic inspection revealed a normal-appearing upper esophageal sphincter, but withdrawal of the gastroscope showed a distorted pharyngeal–esophageal axis, likely related to long-standing Bechterew's disease.

A 0.035-inch guidewire was advanced into the stomach and the gastroscope was withdrawn, leaving the guidewire in place. Attempts to advance the duodenoscope over the guidewire failed. To overcome this, a single-use dual-operator cholangioscope was introduced through the duodenoscope's working channel. The distal ends of both scopes were aligned and safely advanced over the guidewire into the esophagus, providing forward-viewing visualization. Once the duodenoscope was positioned in the esophagus, both the cholangioscope and guidewire were removed, and ERCP was successfully completed.

Conclusions In cases of altered anatomy of the pharynx or upper esophageal sphincter, standard duodenoscope insertion may be challenging. The main limitation lies in the side-viewing optics, which prevents direct visualization of the upper esophageal sphincter and increases the risk of injury during insertion. By temporarily converting the side-viewing duodenoscope into a forward-viewing system using a cholangioscope, safe and controlled entry into the esophagus can be achieved. This simple modification expands both the feasibility of ERCP and the potential novel use of cholangioscope in anatomically challenging conditions. Future experience and broader application of this technique could improve procedural safety and accessibility in similar anatomically demanding cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP142 Initial results from a novel video cholangioscope: an international multicenter study

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DOI 10.1055/s-0046-1821082

Aims A novel 8-Fr and 11-Fr digital cholangioscope (Scivita Medical) has recently become available in Europe, yet data on technical outcomes and safety are limited. With cholangioscopes from different brands entering the market, robust data are essential to guide device selection and clinical practice [1]. In this study we report on real-world technical success and complication rates of Scivita cholangioscopy (dSOC) and pancreatoscopy (dSOP).

Methods This international, multicenter, retrospective cohort study included patients who underwent dSOC or dSOP between March and October 2025 at 10 European centers. The primary outcome was technical success per procedure, defined as achievement of the pre-specified procedural intent (for example, stone clearance, visual assessment with targeted biopsy, selective cannulation, or stent removal). Secondary outcomes included intra- and post-procedural complications, classified according to the AGREE classification [2].

Results A total of 77 patients were included (42 female, 54.5%), with a median age of 70 years (IQR: 60–76).

In 68 patients, 78 dSOC procedures were performed. Overall technical success was 71/78 (91.0%). By indication, technical success rates were: stone clearance (33/38, 87%), indeterminate biliary strictures (IBDS) (24/25, 96%), selective cannulation (2/2, 100%), evaluation of intraductal margins after radiofrequency ablation for adenoma (1/1, 100%), assessment of intraductal papillary neoplasm of the bile duct (0/1, 0%), and migrated stent removal (1/1, 100%). Among IBDS cases, visual assessment suggested malignancy in 9 and benign disease in 15; biopsy was performed in 19, yielding 6 malignancies. No intraprocedural dSOC complications occurred. Post-procedural complications were reported in five procedures: cholangitis (n = 2, AGREE II), mild post-ERCP pancreatitis (n = 1, AGREE I), and abdominal pain without a clear substrate (n = 2, AGREE I).

In nine patients, 11 dSOP procedures were performed. Overall technical success was 7/11 (63.6%). By indication, technical success rates included stone clearance (4/6, 66.7%), intraductal papillary mucinous neoplasm (1/2, 50%), and pancreatic duct disruption bridging (0/1, 0%). Two patients with incomplete stone clearance underwent a second dSOP, obtaining complete ductal clearance in both cases. One patient developed mild post-ERCP pancreatitis following failed cannulation for IPMN (AGREE II).

Conclusions Scivita dSOC demonstrated high technical success rates and an excellent safety profile in a real-world, multicenter setting. In contrast, outcomes with dSOP were more variable and showed lower technical success rates. With the expanding availability of multiple cholangioscope platforms, systematic data evaluation is increasingly important to inform clinical use, optimize device choice, and refine patient selection. Larger prospective studies and European registries assessing the performance and clinical impact of dSOC and pSOP are warranted to validate these findings and support evidence-based implementation.

Conflicts of Interest W.J.L. received consultancy fees and educational grants from Boston Scientific, and consultancy fees for Mediglobe. A.I. received speakers fee from Fujifilm, Micro-Tech, and Olympus. R.P.V. reports research grants from Boston Scientific, Cook Medical, Prion Medical, consultancy fee from Boston Scientific and Cook Medical, and speakersfee from Mediglobe. J.W.P. performed as a consultant for Boston Scientific and Pentax Medical. M.E. reported consultancy fees and educational grants from Boston Scientific. C.B. is a consultant for Olympus and Fujifilm, and received speakers fees from Boston Scientific and Canon. M.J.B. reports research grants from Boston Scientific, Cook Medical, Pentax Medical, InterScope, 3M, and Mylan, and performed as a consultant for Boston Scientific, Cook Medical, and Pentax Medical. P.J.F.d.J. reported consultancy and speaker fee for Boston Scientific, Cook Medical and Fujifilm. The remaining authors did not report any conflicts of interest.

References

- [1] Nass KJ, Zwager LW, van der Vlugt M et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc* 2022; 95 (6): 1078–1085.e8
- [2] Palmeri E, Stefanovic S, Gökce E et al. European Consensus Recommendations for Direct Cholangioscopy and Pancreatocopy Using a Modified Delphi Process. *United European. Gastroenterol J* 2025; 13 (9): 1652–1667

PYP143 Qualitative Contrast-Enhanced EUS Shows Fair Reproducibility: Evidence from a European Multicenter study

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DOI 10.1055/s-0046-1821083

Aims Contrast-enhanced endoscopic ultrasound (CE-EUS) is increasingly used for characterizing pancreatic and gastrointestinal lesions, yet its qualitative interpretation remains highly operator-dependent. Standardized frameworks for reading CE-EUS are lacking, and the reproducibility of key enhancement features across centers and operator profiles is largely unknown. This study evaluated interobserver agreement (IOA) for qualitative CE-EUS parameters among European endosonographers with different levels of experience and explored operator- and video-level factors associated with agreement.

Methods This multicenter retrospective study included 24 endosonographers from 16 European centers who independently evaluated 60 anonymized CE-EUS video clips representing solid, cystic, and mixed lesions. Participants assessed lesion type, arterial enhancement, wash-in and wash-out timing, contrast homogeneity, and overall video quality. Fleiss' kappa (κ) quantified IOA. Univariate and multivariate logistic regression analyses examined associations between IOA and operator expertise, annual EUS volume, confidence with CE-EUS, familiarity with Pentax equipment, lesion type, and video quality. Qualitative interpretations were also compared with quantitative time–intensity curve (TIC) analysis as the reference standard.

Results IOA varied markedly across CE-EUS parameters. The highest agreement was observed for lesion type ($\kappa = 0.47$; 95% CI 0.44–0.50), while arterial enhancement ($\kappa = 0.38$; 95% CI 0.35–0.41), wash-in time ($\kappa = 0.27$; 95% CI 0.24–0.30), wash-out time ($\kappa = 0.21$; 95% CI 0.18–0.24), and contrast homogeneity ($\kappa = 0.24$; 95% CI 0.21–0.27) all achieved only fair agreement. Video quality reached the lowest reproducibility ($\kappa = 0.14$; 95% CI 0.11–0.17). At univariate analysis, higher agreement for wash-in and wash-out timing was associated with operator expertise ($\beta = 0.149$, $p < 0.001$; $\beta = 0.111$, $p = 0.0026$) and high-volume centers ($\beta = 0.136$, $p < 0.001$). At multivariate analysis, expertise remained an independent predictor of agreement for wash-in ($p = 0.040$) and video quality ($p = 0.011$). Confidence with CE-EUS modestly improved agreement for wash-out time ($p < 0.001$). No operator- or video-level covariates significantly influenced agreement for arterial enhancement, contrast homogeneity, or lesion type. Compared with TIC-derived quantitative measures, accuracy of qualitative CE-EUS interpretation ranged widely: video quality 79.6%, wash-in 62.2%, contrast homogeneity 54.8%, wash-out 54.6%, arterial enhancement 42.9%, and lesion type 35.6%. Accuracy did not differ significantly between experts and non-experts (all $p > 0.05$).

Conclusions Across a broad European cohort, qualitative CE-EUS interpretation demonstrated only fair or slight agreement for dynamic enhancement parameters, regardless of operator experience. These findings indicate that the visual, qualitative nature of CE-EUS inherently limits reproducibility and that expertise alone does not sufficiently mitigate variability. The lack of strong predictors of agreement underscores the need for structured interpretive frameworks and objective quantification tools, such as real-time TIC analysis or AI-assisted vascular profiling, to support more consistent CE-EUS evaluation and facilitate its integration into standardized diagnostic algorithms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP144V Targeting the Feeder: Endoscopic Ultrasound-Guided Embolization of Large Gastric Varices in a Pregnant Woman with Extrahepatic Portal Hypertension

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DOI 10.1055/s-0046-1821084

Abstract Text

A 25-year-old woman, gravida 4 para 2 at 18 weeks' gestation, presented with hematemesis and severe anemia (hemoglobin 4 g/dL). Ultrasound revealed a live fetus and portal cavernoma, and endoscopy showed large gastric varices with grade II–III esophageal varices. EUS-guided embolization was planned after gynecologic clearance. Using a linear echoendoscope, a 34 × 20 mm cluster of fundal varices with a feeder vessel was identified. The feeder was punctured with a 19-G needle, a coil (0.035–14–18 Nester) was deployed, and 1 mL of N-butyl cyanoacrylate was injected, followed by a distilled water flush. EUS confirmed complete obliteration, and esophageal varices were ligated. EUS allows coil deployment, minimizing glue volume and embolization risk. This appears to be the first reported case of EUS-guided embolization in pregnancy.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/51406f54-0db0-464c-a994-1d69b2cdf015/Uploads/19978_gastric_varices%20in%20preg%201-3.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP145V Digital single-operator cholangioscopy combined with retrograde endoscopy to treat acute suppurative appendicitis in an elderly

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DOI 10.1055/s-0046-1821085

Abstract Text

Acute appendicitis management in the elderly is challenging due to increased surgical risks. Endoscopic retrograde appendicitis therapy (ERAT) offers a minimally invasive, organ-preserving alternative. An 85-year-old male with acute appendicitis underwent successful ERAT assisted by a digital single-operator cholangioscope (DSOC). The procedure involved DSOC-guided visualization, saline irrigation of the appendiceal cavity, and stent placement. Postoperative CT scan showed significant improvement, and his inflammatory markers normalized within four days. No recurrence was observed during six-month follow-up. As the oldest reported case utilizing this technique, it demonstrates that DSOC-assisted ERAT is a viable and effective treatment for acute appendicitis in elderly patients, promoting faster recovery and preserving appendiceal function [1–5].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/947bac1c-5c96-447f-8723-65d7624b6a5e/Uploads/19978_video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Liu B-R, Ma X, Feng J et al. Endoscopic retrograde appendicitis therapy (ERAT): a multicenter retrospective study in China. *Surgical Endoscopy and Other Interventional Techniques* 2015; 29: 905–909. doi:10.1007/s00464-014-3750-0
- [2] Song M-Y, Ullah S, Yang H-Y et al. Long-term effects of appendectomy in humans: is it the optimal management of appendicitis? *Expert Review of Gastroenterology & Hepatology*. 2021; 15: 657–664. doi:10.1080/17474124.2021.1868298
- [3] Fugazzola P, Ceresoli M, Agnoletti V et al. The SIFIPAC/WSES/SICG/SIMEU guidelines for diagnosis and treatment of acute appendicitis in the elderly (2019 edition). *World Journal of Emergency Surgery*. 2020; 15:. doi:10.1186/s13017-020-00298-0

[4] Kotaluoto S, Ukkonen M, Pauniahio S-L et al. Mortality Related to Appendectomy; a Population Based Analysis over Two Decades in Finland. *World Journal of Surgery* 2017; 41: 64–69. doi:10.1007/s00268-016-3688-6

[5] Emektar E, Dagar S, Gunsay RH et al. Determination of factors associated with perforation in patients with geriatric acute appendicitis. *Ulusal Travma Ve Acil Cerrahi Dergisi-Turkish Journal of Trauma & Emergency Surgery* 2022; 28: 33–38. doi:10.14744/tjtes.2020.25741

PYP146 Comparison of Specimen Quality among the Standard Suction, Slow-Pull, and Wet Suction Techniques for EUS-FNB: A Monocentric, Prospective, Randomized Controlled Trial

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DOI 10.1055/s-0046-1821086

Aims Endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) is the gold standard for tissue acquisition of solid and solid-cystic lesions of the pancreas and gastrointestinal tract. Several aspiration techniques have been proposed to optimise histological yield, including the standard suction technique (SST), slow-pull technique (SPT), and wet suction technique (WEST). This study aimed to compare specimen quality and diagnostic performance of these three approaches using a 22-gauge FNB needle.

Methods This monocentric, prospective, randomised controlled trial was conducted at the Mohammed VI University Hospital (Marrakech) from January 2023 to October 2025. Patients with solid or solid-cystic pancreatic or subepithelial lesions referred for EUS-FNB were consecutively enrolled. Each lesion was sampled using the three techniques (SST, SPT, WEST) in random order during the same procedure, with two passes per technique. Specimens were evaluated by two blinded pathologists for blood contamination, tissue integrity, cellularity, core length, and diagnostic adequacy, each scored 0–2. Primary endpoint: overall specimen quality score (sum of individual items). Secondary endpoints: diagnostic yield, core tissue length, and adverse events. Statistical analysis used SPSS 26.0 with $p < 0.05$ considered significant.

Results A total of 126 patients (mean age 59 ± 12 years; 54% men) were included. Lesion sites: pancreas (68%), lymph nodes (19%), subepithelial or mediastinal (13%). Overall quality score: WEST = 8.7 ± 2.1 , SPT = 8.1 ± 2.0 , SST = 7.4 ± 2.3 ($p = 0.012$ WEST vs SST; $p = 0.09$ WEST vs SPT).

- Tissue integrity: WEST $1.78 \pm 0.43 > \text{SPT } 1.61 \pm 0.48 > \text{SST } 1.42 \pm 0.52$ ($p = 0.004$).
- Cellularity: WEST 1.66 ± 0.51 vs SPT 1.52 ± 0.54 vs SST 1.39 ± 0.59 ($p = 0.02$).
- Core length: longest with WEST (18.3 ± 6.7 mm) vs SPT 15.9 ± 5.9 mm and SST 13.8 ± 6.1 mm ($p = 0.01$).
- Blood contamination: lowest with SPT (1.31 ± 0.61) compared with WEST (1.46 ± 0.58) and SST (1.58 ± 0.63) ($p = 0.03$). Diagnostic adequacy: 95.2% (WEST) vs 90.4% (SPT) vs 86.5% (SST); Diagnostic accuracy: 78.6% (WEST) vs 70.6% (SPT) vs 66.7% (SST) ($p = 0.02$). No major adverse event was observed; two patients (1.6%) developed mild self-limited bleeding.

Conclusions In this two-year prospective trial, the wet suction technique (WEST) provided the best tissue integrity, cellularity, and core length, achieving the highest diagnostic yield without increasing complications. The slow-pull technique offered superior blood control, whereas the standard suction method yielded the poorest histologic quality. WEST should be considered the optimal approach for EUS-FNB of solid and mixed lesions when high-quality core biopsy is required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP147 Three or More Needle Passes Independently Predict a High Diagnostic Yield from Endoscopic Ultrasound-Guided Fine Needle Biopsy of Solid Masses

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DOI 10.1055/s-0046-1821087

Aims A chart audit (pre-intervention, PRE) of endoscopic ultrasound (EUS)-fine needle biopsy (FNB) of solid masses identified a diagnostic yield of 75 %. Single needle passes accounted for 56 %. To improve diagnostic yield, a quality improvement intervention targeting tissue procurement and processing was developed and trialed (post-intervention, POST). The intervention was to increase needle passes to 3 or more/mass, limit the personnel preparing cytology slides, and replace saline with formalin as medium for cell block preparation. The aim was to optimize the process of tissue acquisition and specimen handling to improve the diagnostic accuracy of EUS-FNB of solid masses by at least 10 %.

Methods Three endoscopists were provided results of the PRE, and the intervention. A POST chart audit was undertaken for solid mass EUS-FNB from 01/2024-12/2024, with quarterly reviews. Only a definite diagnosis on pathology was used to calculate diagnostic yield.

Results 241 patients underwent 262 EUS-FNBs. Diagnostic yield was 81 % in POST vs. 75 % in PRE ($p = ns$). Single passes decreased to 14 % in POST vs. 20 % in PRE ($p < 0.0001$), with similar diagnostic yield (57 % vs. 56 %, respectively). Number of 3 or more passes increased significantly (47 % POST vs. 12 % PRE, $p < 0.0001$). In POST, 86 % of single passes were performed in the first half vs. 14 % in the second ($p < 0.0001$). Only 25 % of 3 or more passes were performed in the first half vs. 75 % in the second ($p < 0.0001$). Diagnostic yield improved significantly between the first and second halves (72 % vs. 90 %, $p < 0.0001$). Replacing saline with formalin for cell block improved diagnostic yield (57 % vs. 75 %, $p = 0.03$). Limiting the personnel making slides from 25 nurses (PRE) to 3 endoscopists (POST) had no impact on diagnostic yield [1].

Conclusions Critical practice assessment, regular audit, and continued reinforcement led to a significant improvement in EUS-FNB diagnostic yield from 75 % to 90 % by increasing the number of needle passes to 3 or more/mass. This quality improvement model is easily adaptable in other centres, especially where rapid on-site evaluation is not routinely available, to enhance diagnostic efficiency without requiring additional resources.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Polkowski M, Janssen C, Kaye P et al. Technical aspects of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society for Gastrointestinal Endoscopy (ESGE) Technical Guideline. *Endoscopy* 2017; 49: 989–1006

PYP148 Endoscopic ultrasound-guided drainage of liver abscesses (EUS-LAD): Multicenter retrospective analysis of the DACH-EUS study group

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DOI 10.1055/s-0046-1821088

Aims Endoscopic ultrasound (EUS)-guided drainage of liver abscesses (EUS-LAD) is gaining increasing importance as an alternative to percutaneous drain-

age, particularly for left-sided or anatomically challenging abscesses. The aim of this retrospective multicenter analysis was to evaluate EUS-guided drainage of liver abscesses with regard to technical feasibility, clinical success and safety.

Methods Retrospective multicenter analysis of EUS-LAD cases from six centers in the DACH region since 2020. Primary endpoints were technical and clinical success rates as well as the occurrence of adverse events (AEs). Secondary endpoints included the access route, types of stents used, as well as required stent exchanges and duration of drainage.

Results A total of 17 patients were included. The median age was 64 years (range 45–85 years); 11 patients (64.7 %) were male. The technical success rate was 94.1 % (16/17 patients). Clinical success with a marked decrease in CRP and a significant reduction in abscess size was observed in 16/16 patients (100 %). One mild AE (6.25 %) occurred in the form of post-interventional bacterial translocation, which was managed conservatively with antibiotic therapy. All drainages were placed via a transgastric access route. In 2/16 cases, a percutaneous drainage had already been performed prior to EUS-guided drainage placement. In 7/16 cases, a lumen-apposing metal stent (LAMS) was used, in 7/16 plastic stents, and in 2/16 a combination of LAMS and plastic stents. The median duration of drainage was 46 days (IQR 34–68; range 20–137). An endoscopic stent exchange was performed in 4/16 patients. In 5/16 patients with metastatic malignancy, stent removal was not performed due to the palliative situation.

Conclusions EUS-LAD for left-sided liver abscesses demonstrated a high technical and clinical success rate and proved to be very safe. Thus, EUS-LAD may represent an effective and safe therapeutic option for left-sided liver abscesses and a good alternative to percutaneous drainage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP149V Pushed to the EDGE-EUS to the Rescue ; Endoscopic ultrasound-directed trans gastric ERCP (EDGE) in surgically altered anatomy

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DOI 10.1055/s-0046-1821089

Problem to solve To perform ERCP and CBD stone clearance in a patient with severe cholangitis in presence of surgically altered anatomy in the form of Roux-en-Y gastric bypass who was deemed very high risk for any other surgical procedure and needed urgent biliary decompression with time as an important limiting factor

Innovation The excluded stomach was located endosonographically with a linear echoendoscope from the remnant gastric pouch and then accessed with a 19G EUS needle. Diluted Contrast agent was injected through the 19G needle to insufflate the excluded stomach. A Hot LAMS (Axios; Boston Scientific) was then deployed with the distal end in the excluded stomach and the proximal flange into the remnant gastric pouch. Over a guidewire, the lumen of the stent was then dilated with a CRE balloon. This allowed for the antegrade passage of a duodenoscope through the LAMS into the stomach remnant and to the ampulla, where ERCP was performed successfully. Once ampullary access was no longer required, the LAMS was removed. On follow up visit, the fistula was closed using novel X-Tack Endoscopic Helix Tacking System in view of excess weight gain

Results Both technical success & clinical success (defined as successful ERCP with completion of the intended intervention) was achieved with successful closure of fistulous defect with novel endoscopic closure technique [1–2]

Conclusions The EDGE procedure is an entirely endoscopic, highly efficacious, single time procedure for performing ERCP in RYGB patients who require pancreaticobiliary interventions and is associated with high clinical success rates and safety profiles. Large residual defects could be successfully closed by novel X-Tack Endoscopic Helix Tacking System

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/93150bac-5968-461a-9dea-da8c530b68de/Uploads/19990_esge2026edge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kedia P, Shah-Khan S, Tyberg A et al. Endoscopic ultrasound-directed transgastric ERCP (EDGE): a multicenter US study on long-term follow-up and fistula closure. *Endosc Int Open* 2023; 11 (5): E529–E537
- [2] Honda H, Mosko JD, Kobayashi R et al. Endoscopic ultrasound-directed transgastric endoscopic retrograde cholangiopancreatography for patients with Roux-en-Y gastric bypass anatomy: technical overview. *Clin Endosc* 2022; 55 (6): 736–741

PYP150 Validation of Endoscopic Ultrasound (EUS) Bubble Echo in the Diagnosis of Hepatopulmonary Syndrome

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DOI 10.1055/s-0046-1821090

Aims To validate EUS bubble echo against transthoracic bubble echo in the diagnosis of hepatopulmonary syndrome (► Table 1).

► Table 1

	Transthoracic Positive	Transthoracic Negative	Total
EUS Positive	9	0	9
EUS Negative	0	16	16
Total	9	16	25

Methods In this prospective, single-centre study conducted between August 2024 and August 2025, patients with chronic liver disease and clinical suspicion of HPS underwent both transthoracic and EUS-based bubble echocardiography. EUS examinations were performed using a linear echoendoscope with intravenous injection of agitated saline under Doppler guidance. Operators were blinded to TTCE results. Sensitivity, specificity, predictive values, and Cohen's κ coefficient were calculated to assess diagnostic concordance [1–3].

Results Among 31 screened patients, 25 were included in the final analysis (median age 57 years; 58 % male). Nine patients (36 %) were diagnosed with HPS on TTCE. EUS bubble echo identified the same nine cases, with no false positives or negatives, yielding 100 % sensitivity, 100 % specificity, PPV 100 %, NPV 100 %, and Cohen's $\kappa = 1.0$ ($p < 0.001$). All procedures were well-tolerated without adverse events.

Conclusions This is the first prospective validation of EUS bubble echo for diagnosing hepatopulmonary syndrome, demonstrating perfect concordance with the transthoracic gold standard. EUS bubble echo offers a feasible, accurate, and potentially time-saving alternative that can be incorporated into routine endoscopic practice, especially during variceal surveillance or endo-hepatology procedures. Thus, it could be included within a comprehensive same-session endoscopic evaluation of patients with liver disease. Larger multicentre studies are warranted to confirm reproducibility, assess inter-operator variability, and explore integration into endoscopic diagnostic pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vedrinne JM, Duperret S, Bizollon T et al. Comparison of transesophageal and transthoracic contrast echocardiography for detection of intrapulmonary vascular dilatations in liver disease. *Chest*. 1991; 99 (2): 357–365
- [2] Rodríguez-Roisin R, Krowka MJ, Hervé P, Fallon MB. Hepatopulmonary syndrome: a new name for an old problem. *Hepatology*. 2004; 39 (3): 792–799
- [3] Krowka MJ, Cortese DA. Hepatopulmonary syndrome: current concepts in diagnostic and therapeutic considerations. *Chest*. 2000; 118 (2): 528–537

Integrating Optical Diagnosis in Endoscopic Mucosal Resection

15/05/2026, 11:00–12:00

Emerald 3

PYP151 Risk of Colorectal Cancer After Endoscopic Resection of Large Non-Pedunculated Colorectal Polyps with High-Grade Dysplasia: A Multicentre Follow-Up Study

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DOI 10.1055/s-0046-1821091

Aims To assess the rates of CRC at EMR scar sites of HGD lesions during surveillance colonoscopy (SC).

Methods A multicentre cohort study analysing prospectively collected data from six tertiary referral centres was conducted. Patients with adenomatous LNCPs resected by EMR, eligible for a minimum of 5 years of follow up, and demonstrating high-grade dysplasia (HGD) on histopathology were included. Exclusions were malignant lesions at index, serrated lesions, incomplete resections and ileocecal valve lesions due to fundamental differences in resection technique. SC was proposed at 6 months (SC1), 18 months (SC2), 3 years (SC3), and 5 years (SC4).

Results Over a 12-year period to December 2020, 3381 LNCPs underwent attempted EMR, of which 494 (14.6 %) with HGD met inclusion criteria. Mean age was 68, 272 were male, and median lesion size was 40mm (interquartile range [IQR] 30–50mm). A nodular component (Paris0-Is, 0-IIa + Is) was seen in 322 (67.2 %). Piecemeal EMR was performed in 423 (86.6 %) and margin STSC in 208 (42.1 %). Six deep mural injury type IV occurred (five treated with clips, one surgery), and one (0.2 %) delayed perforation resulting in surgery. SC occurred in 446/471 (95 %) eligible patients at SC1 (median 6 months; IQR 5–8), 336/418 (80 %) at SC2 (19 months; IQR 16–24), 203/309 (66 %) at SC3 (41 months; IQR 32–51), and 107/192 (56 %) at SC4 (70 months; IQR 58–83). One patient (0.2 %) developed adenocarcinoma at the EMR scar (caecal lesion) at 24 months, managed with hemicolectomy (T2N0M0).

Conclusions : EMR for HGD lesions is safe and effective, with extremely low long-term CRC risk when paired with timely surveillance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP152 Performance of Endoscopic AI for Colon Polyp Detection and Diagnosis on the New LED System, EP-8000

Authors Yoshida N¹, Kobayashi R², Tomita Y³, Dhillon H⁴, Inoue K⁵, Yasuda T⁶, Iwai N⁵, Dohi O⁶, Uchiyama K⁷, Takagi T⁵

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DOI 10.1055/s-0046-1821092

Aims Computer-aided detection (CAdE) and diagnosis (CAdx) systems such as CAD EYE (EX-1, Fujifilm), launched in 2020, have been widely adopted worldwide and demonstrated significant value in colorectal neoplasia detection and characterization (1,2). In 2024, a new endoscopy system, EP-8000 (Fujifilm), became available, providing brighter images with reduced halation and improved contrast (3). In the same year, a new CAD EYE software version with a 1.6-fold larger training dataset and improved performance was released. This study aimed to evaluate the detection and diagnostic performance of CAD EYE with the EP-8000 system and compare the results with those obtained using the previous system (VP-7000) and the earlier software version.

Methods This single-center observational study included consecutive colorectal lesions (2–10 mm) detected by expert endoscopists using EP-8000 from March to May 2025. After lesion recognition by the endoscopist, CAD EYE was activated. White-light imaging (WLI) and linked color imaging (LCI) with and without 1.5 × high-speed scanning (high-speed WLI/LCI), including approximately 3 cm of surrounding mucosa, were evaluated for CAdE performance. Positive detection was defined as the accurate appearance of an annotation box on the lesion. CAdx performance was evaluated using CAD EYE-assisted BLI-magnifying observation and compared with subsequent histopathology. Outcomes were compared with 100 previously evaluated lesions obtained under VP-7000 using the same methodology [1–3].

Results A total of 27 patients with 100 lesions were analyzed (mean age 66.7 ± 10.9 years; males 66.7 %). Mean tumor size was 4.2 ± 2.7 mm; proximal colon 46.0 %; protruded type 41.0 %. Histology included sessile serrated lesions and low-grade adenomas: 57 and 43 lesions, respectively. Detection rates were: WLI 94.0 % vs. high-speed WLI 68.0 % ($p < 0.001$), LCI 94.0 % vs. high-speed LCI 75.0 % ($p < 0.001$), WLI 94.0 % vs. LCI 94.0 % ($p = 1.000$), and high-speed WLI 68.0 % vs. high-speed LCI 75.0 % ($p = 0.273$). CAdx accuracy was 95.0 %, slightly lower than expert BLI-magnifying diagnosis (100.0 %, $p = 0.06$). Comparisons with VP-7000 showed no differences in lesion characteristics, while CAdE was significantly improved under EP-8000 in WLI: 94.0 % vs. 85.0 % ($p = 0.038$). Other detection modes showed comparable performance. CAdx accuracy tended to improve: 95.0 % vs. 87.8 % ($p = 0.080$). Importantly, false-positive alarms per case were significantly reduced with EP-8000: 12.4 ± 7.9 vs. 19.5 ± 13.4 ($p = 0.020$).

Conclusions CAD EYE with the new EP-8000 system demonstrated improved detection and diagnostic performance compared to the previous system, along with fewer false alarms. Further data accumulation is ongoing to strengthen these findings.

Conflicts of Interest Naohisa Yoshida, Osamu Dohi, and Tomohisa Takagi received grants for research from Fujifilm. Other authors did not have any conflict of interest.

References

[1] Yoshida N, Okada M, Hayashi Y et al. Improvement of Colonoscopic Image Quality Using a New LED Endoscopic System with Specialized Noise Reduction. *Diagnostics* (Basel) 2025; 15: 1569

[2] Kobayashi R, Yoshida N, Tomita Y, Hashimoto H, Inoue K, Hirose R, Dohi O, Inada Y, Murakami T, Morimoto Y, Zhu X, Itoh Y. Detailed superiority of the CAD EYE artificial intelligence system over endoscopists for lesion detection and characterization using unique movie sets. *J Anus Rectum Colon*. 2024; 8: 61–69

[3] Yoshida N, Inoue K, Tomita Y, Kobayashi R, Hashimoto H, Sugino S, Hirose R, Dohi O, Yasuda H, Morinaga Y, Inada Y, Murakami T, Zhu X, Itoh Y. An analysis of the function of a new artificial intelligence, CAD EYE with the lesion recognition and diagnosis for colorectal polyps in clinical practice. *Int J Colorectal Dis* 2021; 36: 2237–2245

PYP153 Real-world Diagnostic Performance of the JNET Classification in Colorectal Lesions: A Large Multicenter European Cohort Analysis

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DOI 10.1055/s-0046-1821093

Aims The Japan NBI Expert Team (JNET) classification is widely used to support optical diagnosis and guide treatment strategies for colorectal lesions [1]. However, most available evidence derives from Asian cohorts [2, 3], and real-world performance across the full JNET spectrum in Western populations remains unclear [4]. This study aimed to evaluate the diagnostic accuracy of JNET subtypes in predicting histologic features and depth of invasion in a large multicenter European cohort of colorectal lesions treated with ESD.

Methods We conducted a retrospective multicenter study including consecutive patients who underwent colorectal ESD in 19 European referral centers between 2010 and 2025. Lesions were eligible if they had a pre-resection chromoendoscopic assessment with documented JNET classification and complete post-ESD histopathology. Lesions without JNET classification or complete histologic data were excluded. Lesions were categorized as: JNET 1 (non-neoplas-

tic/serrated), JNET 2A (low-grade intramucosal neoplasia), JNET 2B (high-grade intramucosal neoplasia or superficial submucosal invasion), and JNET 3 (deep submucosal invasion). Diagnostic performance metrics (sensitivity, specificity, PPV, NPV, accuracy) were calculated using histology as the reference standard. **Results** A total of 2193 lesions were analyzed (49 JNET 1, 1281 JNET 2A, 817 JNET 2B, 46 JNET 3). For JNET type 1, the sensitivity, specificity, PPV, and NPV for predicting non-neoplastic lesions were 31 %, 98 %, 24 %, and 99 %, respectively, with an overall accuracy of 97 %. Notably, among JNET 1 lesions, 26.5 % showed high-grade dysplasia and 10.2 % superficial submucosal adenocarcinoma (sm1). For JNET type 2A predicting low-grade dysplasia, the sensitivity and specificity were 77 % and 68 %, with a PPV of 58 %, NPV of 84 %, and accuracy of 71 %. Importantly, 34.2 % of JNET 2A lesions harbored high-grade dysplasia or sm1 carcinoma, and 3.7 % showed deep submucosal invasion (sm2-sm3). For JNET type 2B predicting high-grade dysplasia or sm1 carcinoma, sensitivity was 52 %, specificity 79 %, PPV 61 %, NPV 72 %, and accuracy 69 %. Among these lesions, 12.4 % showed deep submucosal adenocarcinoma. Histology was overestimated in 26.4 % of cases (final diagnoses included sessile serrated lesions with LGD, adenomas with LGD, or traditional serrated lesions). For JNET type 3 predicting deep submucosal invasion, sensitivity was 18 %, specificity 99 %, PPV 72 %, NPV 93 %, and accuracy 93 %. En-bloc resection was achieved in 90.1 %, ensuring high reliability of histopathologic assessment.

Conclusions The JNET classification is widely used to classify colorectal lesions and guide therapeutic decisions. However, in this large real-world European cohort, diagnostic performance in the intermediate categories (JNET 2A and 2B) was suboptimal, with a non-negligible risk of underestimating advanced neoplasia, including deep submucosal invasion. These findings suggest that treatment decisions should not rely solely on JNET assessment, but rather integrate complementary diagnostic tools and clinical judgment to avoid inappropriate management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ahmed N, Bechara R. Endoscopic submucosal dissection and JNET classification for colorectal neoplasia: A North American academic center experience. *DEN Open* 2023; 4 (1): e322
- [2] Komeda Y, Kashida H, Sakurai T et al. Magnifying Narrow Band Imaging (NBI) for the Diagnosis of Localized Colorectal Lesions Using the Japan NBI Expert Team (JNET) Classification. *Oncology*. 2017; 93: (Suppl 1): 49–54
- [3] Kobayashi S, Yamada M, Takamaru H et al. Diagnostic yield of the Japan NBI Expert Team (JNET) classification for endoscopic diagnosis of superficial colorectal neoplasms in a large-scale clinical practice database. *United European Gastroenterol J* 2019; 7 (7): 914–923
- [4] Sano Y, Tanaka S, Kudo SE et al. Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI Expert Team. *Dig Endosc* 2016; 28 (5): 526–33

PYP154 Underwater Endoscopic Mucosal Resection of Colorectal Polyps Involving the Appendiceal Orifice

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DOI 10.1055/s-0046-1821094

Aims Appendiceal polyps are challenging to resect endoscopically, and many deep lesions are traditionally referred to for surgery. The currently available endoscopic alternative, endoscopic full-thickness resection (eFTR), carries a

relatively high risk of appendicitis and residual lesion. Underwater endoscopic mucosal resection (uEMR) enables larger en bloc resections compared with conventional EMR by exploiting the buoyancy effect. In the underwater environment, buoyancy facilitates invagination of the appendiceal mucosa into the caecal lumen, providing safe access to polyps extending into or involve the appendiceal orifice. In combination with cap assistance and suction, uEMR allows controlled removal of lesions in this anatomically challenging region, potentially avoiding unnecessary surgery. Sahlgrenska University Hospital/Östra is the tertiary referral center for advanced colorectal polypectomy in Western Sweden. To evaluate whether uEMR is a safe and effective method for removing colorectal polyps involving the appendiceal orifice, and to describe procedural outcomes and technical insights.

Methods Since 2019, all advanced polypectomy procedures at our center have been prospectively registered in a dedicated database. uEMR was introduced in January 2023, with its use for appendiceal-orifice lesions initiated in June 2023. We conducted a retrospective review of all uEMR procedures involving the appendiceal orifice performed between June 2023 and December 2024.

Results Twenty uEMR procedures involving the appendiceal orifice were identified. The mean patient age was 63 years (range 28–86), and 55 % were women. The median polyp size was 16.1 mm (IQR 10–30 mm). Based on recommended classifications, 25 % of lesions reached the appendiceal orifice with identifiable borders, whereas 75 % completely covered the orifice and borders were not identifiable prior to uEMR. In 45 % of cases, 25–50 % of the orifice was involved, and in 55 % > 50 % was covered. Lesions were classified as Paris 0-Ila (80 %) or 0-Is (20 %), and JNET 1 (60 %), JNET 2a (35 %) or JNET 2b (5 %).

Intraoperative bleeding occurred in one case and was successfully managed endoscopically. No intraoperative perforations, delayed perforations, or delayed bleedings were observed. One patient developed appendicitis the day after the procedure; imaging revealed inguinal hernia-related entrapment of the appendix, and the patient recovered with conservative management and intravenous antibiotics.

Technical success was achieved in 90 % of cases, while two patients were referred for surgery due to incomplete or unsuccessful resection. En block resection was achieved in 84.2 % of cases, and R0 resection in 63.2 %. The most common histology was sessile serrated lesion (SSL, n = 11), followed by tubular adenoma (n = 4), tubulovillous adenoma (n = 2), hyperplastic polyp (n = 1), and inflammatory polyp (n = 1). Dysplasia was identified in one SSL, and high-grade dysplasia was found in one tubular adenoma and one tubulovillous adenoma. Seven patients underwent follow-up endoscopy within 12 months, with no recurrences detected.

Conclusions uEMR is a safe and effective technique for resection of colorectal polyps involving the appendiceal orifice in a tertiary high-volume setting. High en bloc and R0 resection rates were achieved, with minimal adverse events and no local recurrence. These findings support uEMR as a preferred minimally invasive approach for selected lesions in this anatomically challenging location.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP155 DeeP-maRgIn optical diagnosis and endoscopic resection algorithm for Early rectal cancer (PRIME): a prospective cohort study

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DOI 10.1055/s-0046-1821095

Aims Optical diagnosis of deep submucosal invasion in early rectal cancer (ERC) remains suboptimal, leading to both undertreatment (endoscopic submucosal

dissection for deeply invasive disease) and overtreatment (advanced techniques or surgery for superficial lesions). This study evaluated a diagnostic-therapeutic algorithm (PRIME) using deep-margin optical diagnosis (DMOD) to guide selection of the endoscopic resection technique for ERC. [1–2]

Methods We performed an interim analysis of prospective data from consecutive rectal lesions at risk of submucosal invasion at a tertiary centre (August 2023–October 2025). An algorithm incorporating DMOD with muscle-retracting sign (MRS) assessment followed by dissection plane selection: endoscopic submucosal dissection (ESD; MRS-negative), endoscopic intermuscular dissection/knife-assisted or device-assisted full-thickness resection (EID/kFTR/FTRD; MRS-positive) [3].

Results 47 lesions were included (44.7 % adenocarcinomas). DMOD was feasible in all cases, with MRS detected in 34.0 % (16/47) of the lesions. The technical success rate of endoscopic resection was 97.9 % (46/47), with ESD performed in 30 lesions (63.8 %), EID in 10 (21.3 %), kFTR in 5 (10.6 %), and FTRD in 1 (2.1 %). En bloc, R0 resection, and R0 vertical margin rates were 100 % (46/46), 93.5 % (43/46), and 97.8 % (45/46), respectively. Adverse events occurred in 10.6 % (5/47) of patients (AGREE grade I–IIa). Rectal preservation rate was 91.5 % (43/47). Primary outcomes did not differ significantly between MRS-positive and MRS-negative lesions (all $p > 0.05$) (► **Table 1**).

► **Table 1** Technical and histological outcomes of endoscopic resection.

	Non-invasive and T1sm1 n = 32	T1 sm2-3 n = 11	T2 n = 4
Technical success, n (%)	32 (100)	11 (100)	3 (75.0)
En-bloc*, n (%)	30 (100)	11 (100)	3 (100)
R0*, n (%)	30 (93.8)	11 (100)	2 (66.7)
R0 vertical margin*, n (%)	32 (100)	11 (100)	2 (66.7)
Adverse events, n (%)	3 (9.4)	1 (9.1)	1 (25.0)
Muscle-retracting sign, n (%)	4 (12.5)	8 (72.7)	4 (100)
Histological risk factors, n (%)			
-No risk factors	31 (96.9)	4 (36.4)	1 (33.3)
- Lymphovascular invasion	1 (3.1)	7 (63.6)	2 (66.7)
- Intermediate-high tumor budding	0 (0)	3 (27.3)	1 (33.3)
- Poor differentiation	0 (0)	1 (9.1)	1 (33.3)

Conclusions Deep margin optical diagnosis reliably guided rectal endoscopic resection, achieving excellent oncologic radicality and safety in both MRS-positive and MRS-negative lesions. The PRIME algorithm prevented unnecessary escalation in superficial disease while avoiding undertreatment of deeply invasive cancers.

Conflicts of Interest DJT: Pentax Medical, Fujifilm, and Olympus research support and consulting. The other authors declare that they have no conflicts of interest.

References

[1] Argenziano ME, Sorge A, Hoorens A, Montori M, Poortmans PJ, Smeets S, Tornai T, Debels LK, Desomer L, Tate DJ. Knife-assisted full-thickness resection guided by the pocket-detection method for posterior deeply invasive rectal

cancer: A novel endoscopic approach (with video). *DEN Open*. 2025; 5 (1): e70116. doi:10.1002/deo2.70116 PMID: 40271449 PMID: PMC12014851

[2] Sorge A, Argenziano ME, Montori M, Poortmans PJ, Hoorens A, Tontini GE, Tate DJ. Focal endoscopic intermuscular dissection guided by the pocket-detection method for radical excision of early T2 rectal cancer. *Endoscopy*. 2025; 57 (S 01): E699–E700. doi:10.1055/a-2615-5775 Epub 2025 Jul 2 PMID: 40602767 PMID: PMC12221581

[3] Argenziano ME, Sorge A, Montori M, Poortmans PJ, Smeets S, Tornai T, Hoorens A, Debels LK, Desomer L, Tate DJ. Diagnostic accuracy of the muscle-retracting sign for determining deep submucosal invasion in early rectal cancer: a prospective observational study. *Endoscopy*. 2025. doi:10.1055/a-2632-4341 Epub ahead of print PMID: 40494555

PYP156 Comparison of cold snare polypectomy (CSP) and hot snare polypectomy (HSP) of intermediate sized colorectal polyps 10–15mm – Preliminary data of a randomized controlled non-inferiority trial

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Aims Cold snare polypectomy (CSP) has gained increasing relevance during the last years. Due to fewer observed adverse effects and reduced procedure time, the method is already recommended for polyps < 10 mm. There is emerging evidence supporting the use of CSP for adenomas and sessile serrated lesions (SSL) > 10 mm, but larger randomized controlled trials are still missing. Therefore, the aim of this randomized controlled non-inferiority trial is to compare CSP with HSP for adenomas and SSLs measuring 10–15 mm in terms of complete histological resection rates (R0).

Methods This ongoing randomized controlled non-inferiority trial started data collection in 2022 at a tertiary center in Germany. All consenting colonoscopy patients are screened for polyps according to the inclusion criteria. If a suitable polyp is detected, the polyp is randomized to hot or cold snare polypectomy. The polyp is then resected using a 15 mm hybrid snare (SnareMaster Plus, Olympus) according to the protocol of the assigned study group. Following resection, four mucosal biopsies are obtained at the resection margin. The primary outcome is the complete resection rate, determined by the absence of adenomatous or SSL tissue in the biopsies. Secondary outcomes include the en bloc resection rate, failure of CSP requiring conversion to HSP, duration of the procedure and the rate of adverse events. The preliminary data were analysed using R version 4.5.0 (R Core Team, 2025).

Results 81 Polyps in 55 patients were removed protocol compliant. The mean size was 11.89 mm, 69.14 % (56/81) were adenomas and 30.86 % (25/81) were SSL. The complete resection rate by CSP was 88.10 % (37/42) and 89.74 % (35/39) by HSP. En bloc resection was achieved in 88.10 % (37/42) by CSP and 76.92 % (30/39) by HSP. In 10.64 % (5/47) of cases, CSP was not possible, but after conversion to HSP the resection was successful in all cases. Mean duration of CSP and HSP was 81.32 seconds and 126.64 seconds, respectively. Periprocedural bleeding was defined by persistence > 60 seconds that required an endoscopic intervention (e. g. hemoclip) for hemostasis. After CSP, bleeding occurred in 28.57 % (12/42) of cases, after HSP in 2.94 % (1/34) of cases. None of the periprocedural bleedings were clinically relevant. No delayed bleeding within 30 days or other adverse events occurred.

Conclusions CSP appears to be non-inferior to HSP in terms of complete resection rate and safety in the removal of adenomas and SSL (10–15 mm), while also being faster.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP157 Accuracy and Agreement in JNET and Morphology Classification of Advanced Colorectal Polyps: A Survey of UK Endoscopists

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DOI 10.1055/s-0046-1821097

Aims The Japan NBI Expert Team (JNET) classification provides a structured approach to predicting histology based on narrow-band imaging features that can be utilised in combination with the Paris and laterally spreading tumour (LST) morphological classification for the assessment of advanced colorectal polyps. The accuracy and interobserver variability amongst United Kingdom (UK) clinicians for JNET and descriptors of morphology is uncertain. We aimed to 1) assess the diagnostic accuracy of the JNET classification among endoscopists, 2) evaluate interobserver variability for the JNET and morphology classification systems, 3) determine whether grouping the morphology categories improves agreement among endoscopists and 4) assess whether the level of endoscopic experience influences diagnostic accuracy and interobserver agreement [1, 2].

Methods An online image-based survey was distributed for 12 weeks in 2025 to practising endoscopists. The survey contained a total of 15 polyps derived from a previously validated database of images with a JNET classification consensus by JNET core members. Each polyp was displayed sequentially in white-light, standard narrow-band, and magnified narrow-band imaging modes. Respondents were asked to assign a JNET classification and morphology (six predefined options) for each case. The JNET consensus diagnosis served as the gold standard for JNET classification. The survey was advertised through The Joint Advisory Group on Gastrointestinal Endoscopy (JAG) newsletter, personal communications, as well as through social media pages.

Responses were analysed for diagnostic accuracy and interobserver agreement using Fleiss' Kappa (κ). Subgroup analyses were performed by endoscopic experience (<300, 300–3000, >3000 lifetime procedures). Lastly, we assessed whether grouping the morphology into polypoid (Is, Is + IIa and LSTGM), flat (IIa, LSTNGFE and LSTGH) and those with a depressed component (IIc, IIc + IIa and LSTNG PD) would impact agreement.

Results A total of 129 endoscopists from the UK completed the survey. Distribution by experience was: <300 procedures ($n = 18$), 300–3000 ($n = 68$) and >3000 ($n = 42$).

JNET classification: Overall diagnostic accuracy was 58 % when compared with the JNET consensus. Accuracy by experience group was: <300 (56 %), 300–3000 (56 %) and >3000 (59 %).

Overall interobserver agreement for JNET classification was fair ($\kappa = 0.34$). Agreement generally improved with increasing experience: <300 ($\kappa = 0.25$), 300–3000 ($\kappa = 0.32$) and >3000 ($\kappa = 0.42$).

Morphology classification: Initial interobserver agreement was poor ($\kappa = 0.15$ overall). Agreement improved with experience, but this improvement was primarily observed in the most experienced group: <300 $\kappa = 0.16$; 300–3000 $\kappa = 0.14$; and >3000 $\kappa = 0.21$.

After grouping the morphology, overall agreement increased to $\kappa = 0.27$, with improvements seen across all experience levels. The most significant gains were observed at the highest experience level: <300 cases, $\kappa = 0.23$; 300–3000 $\kappa = 0.24$; and >3000 $\kappa = 0.37$.

Conclusions In this UK survey, the diagnostic accuracy of JNET classification among endoscopists was moderate (58 %), with fair interobserver agreement ($\kappa = 0.34$). Accuracy and agreement both tended to improve with greater endoscopic experience. Morphology assessment showed only slight agreement ($\kappa = 0.16$), though grouping of the classification improved reproducibility. This suggests that reducing the category complexity enhances consistency amongst endoscopists.

These findings highlight persistent variability in the optical diagnosis of colorectal polyps with the use of JNET and morphological classification. This illustrates the need for standardized national training with focused image interpretation workshops and feedback. In addition, a grouping of morphological description may improve diagnostic consistency.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kobayashi S, Yamada M, Takamaru H, Sakamoto T, Matsuda T, Sekine S et al. Diagnostic yield of the Japan NBI Expert Team (JNET) classification for endoscopic diagnosis of superficial colorectal neoplasms in a large-scale clinical practice database. *United European Gastroenterol J*.
- [2] Sano Y, Tanaka S, Kudo SE, Saito S, Matsuda T, Wada Y et al. Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI expert team. Vol. 28, *Digestive Endoscopy*. Blackwell Publishing; 2016: p 526–33

PYP158 Recurrence Rates Following Endoscopic Mucosal Resection versus Endoscopic Submucosal Dissection for Colorectal Polyps: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1821098

Aims Endoscopic Mucosal Resection (EMR) and Endoscopic Submucosal Dissection (ESD) are widely used for resecting large, laterally spreading colorectal polyps. While ESD offers higher *en bloc* resection rates, its comparative efficacy and safety relative to EMR remain uncertain, particularly in Western practice. This systematic review and meta-analysis aimed to evaluate the recurrence and adverse event rates of EMR versus ESD in adult patients with colorectal polyps ≥ 20 mm.

Methods We conducted a systematic review and meta-analysis of randomized controlled trials (RCTs) comparing EMR and ESD for non-pedunculated colorectal polyps ≥ 20 mm. MEDLINE, Embase and Cochrane CENTRAL were searched from inception to April 2025. The primary outcome was recurrence rate; secondary outcomes included total adverse events, bleeding, and perforation. Certainty of evidence was assessed using the GRADE framework (► **Table 1**).

Results In this meta-analysis of three randomized controlled trials including 484 patients, ESD was associated with significantly lower recurrence rates compared to EMR (OR 3.24, 95 % CI: 1.58–6.64), with high certainty of evidence. There were no significant differences between EMR and ESD in total adverse events (OR 1.14, 95 % CI: 0.78–1.66), bleeding (OR 0.97, 95 % CI: 0.53–1.76), or perforation rates (OR 1.01, 95 % CI: 0.14–7.22), though certainty for these outcomes was moderate due to heterogeneity and imprecision.

Conclusions ESD is associated with significantly lower recurrence rates compared to EMR in the treatment of large colorectal polyps. These findings support the use of ESD when recurrence risk is a primary concern, while EMR remains a feasible alternative with comparable safety.

► Table 1										
Outcome	Partici- pants (Studies)	Risk of Bias	Incon- sistency	Indirect- ness	Impreci- sion	Publication Bias	Relative Effect (OR, 95 % CI)	Absolute Effect (EMR vs. ESD)	Certainty (GRADE)	Comments
Recurrence	484 (3 RCTs)	Not serious	No serious inconsist- ency	Not serious	Not serious	Not detected	OR 3.24 (1.58– 6.64)	10.8 % vs 4.9 %	⊕⊕⊕⊕ High	Consist- ent, ⊕ precise, and robust effect
Total Adverse Events	525 (3 RCTs)	Not serious	Serious	Not serious	Serious	Not detected	OR 1.14 (0.78– 1.66)	31.5 % vs 29.6 %	⊕⊕⊕○ Moderate	Downgrad- ed for inconsisten- cy and imprecision
Bleeding	525 (3 RCTs)	Not serious	Serious	Not serious	Serious	Not detected	OR 0.97 (0.53– 1.76)	11.3 % vs 11.8 %	⊕⊕⊕○ Moderate	Downgrad- ed for inconsisten- cy and imprecision
Perforation	525 (3 RCTs)	Not serious	No serious inconsist- ency	Not serious	Serious (very low events)	Not detected	OR 0.96 (0.14– 6.65)	~0.36 % vs ~0.36 %	⊕⊕⊕○ Moderate	Downgrad- ed for imprecision (few events, wide CI)

Conflicts of Interest Jeffrey D Mosko – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji Christopher W Teshima – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; Gary R May – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic All the authors (Tomoyuki Nishimura, Kareem Khalaf, Mohamed Abdulla Ghuloom Abdulla Bucheer, Huaqi Li, Yuhong Yuan, Natalia Causada Calo) have no relevant financial disclosures or conflicts of interest to declare.

PYP159 Narrow Band Imaging vs. Magnifying Chromoendoscopy for the Diagnosis of Early Colorectal Cancer Invasion Depth: Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821099

Aims Accurate endoscopic assessment of the depth of submucosal invasion in T1 colorectal cancer is critical for determining the optimal treatment strategy. This assessment is currently performed with narrow-band imaging (NBI) and magnifying chromoendoscopy (MCE), yet the superiority of either modality in direct comparisons remains unclear. We therefore restricted our evaluation to paired, within-study direct comparative diagnostic accuracy studies in which both NBI and MCE were applied to the same lesion and compared the diagnostic performance of NBI and MCE for identifying deep submucosal invasion (T1b).

Methods We systematically searched PubMed, Embase, and Cochrane CENTRAL from inception to September 19, 2025 using MeSH/keywords for NBI, narrow-band imaging, JNET, magnifying chromoendoscopy, Kudo classification, pit pattern, deep submucosal invasion, T1 colorectal cancer, T1b. We included

paired, within-study direct comparative diagnostic accuracy studies in adults in which both NBI and MCE were applied to the same lesion during the same session, 2 × 2 data for each test could be reconstructed and histology was the reference standard with T1b defined as ≥ 1,000 μm (SM2/3). Two reviewers independently screened and extracted data; risk of bias was assessed with QUADAS-2 and QUADAS-C. The primary synthesis used a Bayesian bivariate HSROC model with test type as a covariate to estimate pooled sensitivity/specificity and relative effects (ratios and differences; NBI/MCE), reported as posterior medians with 95 % credible intervals. Small-study effects were examined with Deeks' test (all p > 0.10).

Results Eleven studies (7 prospective, 4 retrospective; 2928 lesions) were included. Pooled performance: NBI sensitivity 0.746 (95 % CrI 0.629 to 0.834) and specificity 0.962 (0.930 to 0.981); MCE sensitivity 0.817 (0.728 to 0.890) and specificity 0.941 (0.892 to 0.967). Comparative effects (NBI vs MCE) showed no clear differences: sensitivity ratio 0.914 (95 % CrI 0.744 to 1.069; difference – 0.071, – 0.218 to 0.052) and specificity ratio 1.021 (0.982 to 1.077; difference 0.020, – 0.017 to 0.069). Heterogeneity was moderate–substantial; index-test risk of bias was common on QUADAS-C; small-study effects were not evident (Deeks p = 0.30).

Conclusions In paired within-study comparative analyses, NBI and MCE showed comparable diagnostic accuracy for identifying T1b, with substantial overlap of their 95 % credible intervals. At present, an NBI-first strategy with selective MCE add-on is reasonable for the initial assessment of colorectal lesions.

Conflicts of Interest Jeffrey D Mosko – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji Christopher W Teshima – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; Gary R May – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic

PYP160 Complexity of endoscopic resection for appendiceal orifice lesions suggests consideration of both surgical and endoscopic options

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DOI 10.1055/s-0046-1821100

Aims Large non-pedunculated colorectal polyps (LNPCP) and laterally spreading tumours (LST) > 10mm involving the appendix orifice (AO) are notoriously challenging to treat with endoscopic resection (ER). Few studies report outcomes of conventional ER to treat these lesions. The optimal therapy and expected outcomes remain unclear. We report the outcome after EMR and ESD of lesions involving the AO from a large series of ER performed at a tertiary referral centre.

Methods Patients undergoing ER at a tertiary referral centre between January 2011 and September 2023 were included. Techniques and outcomes of ER of lesions involving the AO were compared with other colorectal locations. Involvement of the AO was defined as any LNPCP or LST encroaching within 5mm of the orifice. These were classified as encroaching the AO, involving part of the circumference of the AO and involving the full circumference of the AO.

Results ER was performed for 1596 LNPCP and LSTs during the study period. 40 lesions involved the AO: 10 encroached within 5mm of the AO, 14 involved part of the circumference and 16 involved the full circumference. 25 (63%) were resected by EMR, 8 by ESD (20%) and 7 by Hybrid ESD (18%). Initial successful ER was similar for lesions involving the AO and other colonic LNPCP (95.0% versus 97.6%, $p = 0.27$). Clinically significant perforation occurred in 3 patients with lesions involving the AO (2 with partial circumference involvement and 1 with complete circumference involvement) and was more frequent after ER of these lesions than others (7.5% versus 1.2%, $p < 0.001$). 2 of these patients required surgery. The incidence of post procedure bleeding was similar ($p = 0.44$). One patient developed appendicitis, more than 12 months after resection. Recurrent/residual adenoma at first surveillance was significantly more likely after ER of AO lesions than others (22.2% versus 4.8%, $p < 0.001$). Significantly more patients with lesions involving the AO ultimately required surgery for any reason than patient with other colorectal lesions (12.5% versus 3.9%, $p = 0.02$). This was significantly more likely for AO lesions involving the complete or partial circumference (18.8% versus 14.3% partial circumference involvement versus 0% encroaching AO versus 3.9% other locations, $p = 0.004$).

Conclusions These results demonstrate the challenging nature of ER for lesions involving the AO. Safe and effective ER without recurrence is achieved for many patients, including those with lesions involving the complete circumference, but significant complications, recurrence and surgery are more common with these lesions. Given there are relatively low risk minimal access surgical options to treat these lesions, these data will help inform detailed discussions with patients regarding the risks and benefits of ER (which differ from LNPCP elsewhere in the colon).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Colorectal Resections Revisited: Lessons and Insights

15/05/2026, 11:00–12:00

Emerald 5

PYP161 Impact of Prior Biopsy on Submucosal Fibrosis and Technical Difficulty during Colorectal Endoscopic Resection: A Prospective Observational Cohort Study

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DOI 10.1055/s-0046-1821101

Aims Guidelines discourage pre-resection biopsy because of concerns about inducing submucosal fibrosis, impairing mucosal lifting, and increasing technical difficulty. However, biopsies remain common in routine practice, often performed before referral, creating a need to quantify their real-world impact. To date, no single cohort has comprehensively evaluated these outcomes stratified by biopsy status.

Methods Consecutive patients undergoing endoscopic resection (ER) for LN-PCPs at St. Michael's Hospital, Toronto, Canada between November 2024 and October 2025 were prospectively enrolled in an observational cohort. Lesions with a history of previously attempted endoscopic resection or prior tattooing were excluded. This study evaluates whether prior biopsy adversely affects the technical feasibility and safety of ER for advanced colorectal lesions, and examines how these effects vary according to biopsy timing. Time-to-event analysis was performed using a Cox proportional hazards model with the biopsy-to-procedure interval as the underlying time axis to identify variables associated with the hazard of intermediate/high technical difficulty, including lesion size, submucosal fibrosis, and lifting adequacy as covariates.

Results A total of 150 lesions were included (69 naïve and 81 previously biopsied). The mean biopsy-to-procedure interval was 112 ± 81 days in biopsied lesions ($p < 0.001$). Biopsied lesions were larger (4.41 ± 3.19 cm vs. 3.57 ± 1.69 cm; $p = 0.04$). Lesion location distribution was similar between groups across the colorectum ($p = 0.4$). Resection type differed (EMR: 81% vs. 72%; ESD: 19% vs. 28%; $p = 0.2$), respectively. Among EMR cases, biopsied lesions had lower en-bloc resection (4.9% vs. 19%; $p = 0.007$), higher hot piecemeal use (63% vs. 43%; $p = 0.02$), and lower cold piecemeal use (4.9% vs. 19%; $p = 0.007$). Planned hybrid EMR occurred only in biopsied lesions (4.9%, $p = 0.12$). Use of adjunctive techniques was similar between groups: hot avulsion was used in 2.9% naïve vs 2.5% biopsied lesions ($p = 0.9$), CAST in 5.8% vs 7.4% ($p = 0.8$), and submucosal release in 2.9% vs 6.2% lesions ($p = 0.5$). Lifting adequacy was similar between groups ($p = 0.9$), good lifting was achieved in 93% naïve vs 90% biopsied lesions, partial lifting in 4.3% vs 6.2%, and no lifting in 2.9% vs 3.7%. Submucosal fibrosis was more common in biopsied lesions (F0: 65% vs. 84%; F1: 23% vs. 12%; F2: 11% vs. 4%; $p = 0.03$). Technical difficulty differed significantly ($p = 0.002$), with high-difficulty resections more frequent in biopsied lesions (26% vs. 4%). Technical success rates were 97% in naïve lesions and 91% in biopsied lesions ($p = 0.2$). Total procedure time was longer in biopsied lesions (105 ± 125 min vs. 74 ± 67 min; $p = 0.02$). Adverse events were infrequent and similar between groups: major early bleeding (0% vs. 0%), major delayed bleeding (0% vs. 0%), and deep mural injury without perforation (7.4% vs. 4.3%; $p = 0.5$), and perforation (3.7% vs. 5.8%; $p = 0.7$). Sydney DMI classification distributions were comparable ($p = 0.2$). Most lesions were Type 0 (69% vs. 83%). Length of stay did not differ significantly between groups ($p = 0.3$); hospitalizations of 3 or 7 days occurred only in biopsied lesions (3 days: 1/81 [1.2%]; 7 days: 1/81 [1.2%]), whereas no naïve lesions required admission beyond 2 days. Using the biopsy-to-procedure interval as a proxy for healing time, severe

submucosal fibrosis was associated with a higher hazard of intermediate/high technical difficulty (HR 2.41, 95 % CI 1.15–5.06; $p = 0.020$), supporting that biopsied lesions, especially with shorter intervals from biopsy to resection, are more fibrotic and technically more challenging to resect, while mild fibrosis showed a non-significant trend in the same direction (HR 1.62, 95 % CI 0.92–2.87; $p = 0.094$). Kaplan–Meier curves indicated that higher technical difficulty was clustered among procedures performed shortly after biopsy, while lesions with longer biopsy-to-procedure intervals were less likely to reach intermediate or high technical difficulty ($p < 0.001$).

Conclusions Biopsied lesions demonstrated significantly more fibrosis and higher technical difficulty, especially when the biopsy-to-resection interval was short. These findings reinforce current guidelines that large colorectal lesions should not be biopsied prior to referral, as biopsy adversely impacts resection feasibility without improving diagnostic or therapeutic outcomes.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

PYP162 Interval-Specific Recurrence After EMR of ≥ 20 mm Colorectal Polyps: Conditional Risk After a Negative First Surveillance Colonoscopy

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DOI 10.1055/s-0046-1821102

Aims Endoscopic mucosal resection (EMR) is the standard treatment for large (≥ 20 mm) non-pedunculated colorectal polyps (LNPCPs). Current guidelines (BSG/ACPGBI/PHE 2020; ESGE 2020/2022; USMSTF 2020) recommend surveillance at approximately 6, 18, and 36 months post-EMR, but these intervals are based on expert consensus rather than interval-specific recurrence evidence. The clinical value of a second surveillance colonoscopy (SC2) after a negative first surveillance colonoscopy (SC1) remains unclear. Clarifying this could inform risk-adapted surveillance strategies. We aimed to quantify recurrence rates at SC1 (3–6 months) and SC2 (12–18 months) following EMR of benign colorectal lesions ≥ 20 mm.

Methods We systematically searched Ovid MEDLINE, Embase, and the Cochrane Library (1990–2025) for studies reporting recurrence at SC1 and/or SC2 after hot EMR of benign LNCPs ≥ 20 mm. We excluded studies without interval-specific outcomes and those involving cold EMR, serrated-only cohorts, or invasive cancer. SC1 was defined as surveillance at 3–6 months and SC2 as 12–18 months. Only lesions without recurrence at SC1 were eligible for SC2 analysis. Due to limited interval-specific data (three studies for SC1; one for SC2), formal quantitative meta-analysis was not feasible, so recurrence estimates are presented descriptively. The Sydney EMR Recurrence Tool (SERT) was synthesised narratively because only one study reported interval-specific SERT outcomes [1–5].

Results Recurrence at SC1 following hot EMR for benign LNCPs ≥ 20 mm was consistently reported within the 3–6-month window, typically 10–20%, giving a descriptive estimate of approximately 15%. Among lesions recurrence-free at SC1, the conditional risk of recurrence at SC2 was low at approximately 3%. SC2 follow-up was incomplete (~ 25 % of eligible patients did not undergo surveillance), but in the available multicentre dataset this low recurrence estimate appeared consistent. Most recurrences at both SC1 and SC2 (> 90 %) were managed endoscopically, with surgery required in only a small minority of cases (~ 5 %). Interval colorectal cancer following benign EMR was very rare (< 1 %). Across studies reporting risk factors, recurrence was more likely after piecemeal resection (particularly where ≥ 3 fragments were required) and was also asso-

ciated with lesion size ≥ 40 mm, right-sided location, and tubulovillous or villous histology. High-grade dysplasia was associated with recurrence in several, but not all, multivariate analyses.

One study provided recurrence outcomes stratified by SERT. Recurrence at the first follow-up examination, typically performed at 12–18 months, was low among SERT = 0 lesions (11.6 %) and substantially higher among SERT ≥ 1 lesions (34.9–36.3 %). Late recurrence remained uncommon for SERT = 0 lesions at a median follow-up of 22 months. Approximately one-third of lesions were SERT = 0. Variability in follow-up timing and the absence of additional interval-specific datasets prevented pooling of SERT-based results.

Conclusions Most recurrence after EMR of benign ≥ 20 mm colorectal polyps is detected at the first surveillance colonoscopy. Conditional recurrence after a negative SC1 is low (~ 3 %) at 12–18 months, supporting further exploration of risk-adapted surveillance strategies. SERT may help identify a low-risk subgroup suitable for reduced surveillance intensity, but interval-specific evidence is currently limited to a single dataset. Prospective multicentre studies incorporating predefined conditional surveillance pathways and strict follow-up are required before guideline-recommended surveillance intervals can be safely revised.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bobay KL et al. Recurrence after EMR of large colorectal polyps: validation of the SERT risk model and surveillance outcomes. *Endosc Int Open* 2024; 12: E221–E230
- [2] Ferlitsch M et al. ESGE 2020 guideline: Colorectal polypectomy and EMR. *Endoscopy*. 2020; 52 (10): 1013–1028
- [3] Rex DK et al. Recommendations for follow-up after colonoscopy and polypectomy: US Multi-Society Task Force on Colorectal Cancer, 2020. *Gastrointest Endosc* 2020; 91 (3): 463–485 e5
- [4] Guerrero-Vinsard R et al. Risk factors for recurrence following endoscopic mucosal resection of large colorectal lesions. *Endosc Int Open* 2018; 6: E875–E884
- [5] Tate DJ et al. Sydney EMR Recurrence Tool (SERT) predicts recurrence after colonic EMR: a multicentre validation study. *Gastrointest Endosc* 2017; 85 (3): 647–656

PYP163 Risk of Metachronous Advanced Neoplasia in Patients With ≥ 10 Adenomas: A Retrospective Multicenter Study from the Korean Association for the Study of Intestinal Diseases (KASID)

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DOI 10.1055/s-0046-1821103

Aims Patients with ≥ 10 adenomas are considered a high-risk group, yet evidence guiding optimal surveillance intervals remains limited. This study evaluated the risk of metachronous advanced neoplasia (AN) according to the presence of advanced adenoma (AA) at index colonoscopy.

Methods In this multicenter retrospective study, patients with ≥ 10 conventional adenomas who underwent surveillance colonoscopy within 6 months to 3 years were analyzed. Individuals with colorectal cancer, inflammatory bowel disease, hereditary polyposis syndromes, inadequate bowel preparation, or technically unresectable lesions requiring surgery were excluded. The primary

outcome was the incidence of metachronous AN, compared between baseline AA and non-AA groups. Kaplan–Meier and Cox proportional hazards analyses were performed.

Results Among 447 patients, 313 (70.0%) had baseline AA and 134 (30.0%) did not. Metachronous AN occurred in 23.6% of the AA group and 7.5% of the non-AA group. The cumulative AN risk reached 7.5% at 1 year and 44.9% at 3 years overall, with significantly higher risk in patients with baseline AA (1-year: 9.7% vs. 2.6%; 3-year: 51.6% vs. 30.2%). In the multivariable model, baseline AA remained strongly associated with metachronous AN (HR, 3.83; 95% CI, 1.96–7.49). Across AA subtypes, 3-year AN risk exceeded 50%.

Conclusions This high-burden population demonstrates a substantial risk of early metachronous AN, particularly among those with baseline AA. These findings support a 1-year surveillance interval for the overall high-burden group, with even more intensive follow-up warranted for patients presenting with baseline AA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP164 International Expert Consensus Recommendations for the Standardized Pathological and Clinical Assessment of Submucosal Invasion in Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1821104

Aims Endoscopic submucosal dissection (ESD) is a minimally invasive treatment for early gastrointestinal cancers. However, pathological assessment of invasive carcinoma in ESD specimens lacks standardization. Variability in the evaluation of submucosal invasion (SMI) depth, lateral extent, resection margins, tumor budding, and related prognostic features can alter staging, prognostication, and management. In the absence of prior international standards, we convened a multinational expert panel to establish consensus on key pathological and clinical parameters to improve consistency, reliability, and clinical utility of post-ESD pathology reporting [1–9].

► Table 1

Domain	Key Statement	Mean Score
Criteria for Submucosal Invasion Depth	Proper orientation and embedding of ESD specimens is essential to minimize measurement bias (tangential cuts, fragmentation, distortion).	9.48
Submucosal Invasion Breadth	Measuring and reporting invasion breadth supports standardized T1 cancer reporting and future research.	6.56
Margin Evaluation Techniques	Immediate specimen pinning on a firm surface and detailed grossing diagram are essential for orientation and artifact prevention.	9.48
Staining Methods	H&E remains the standard for assessing invasion depth.	9.52
Measurement Protocols	Parallel sectioning throughout ESD specimens preserves orientation and margin mapping accuracy.	9.48
Risk Assessment of Lymph Node Metastasis & Tumor Budding	Lymph-node risk assessment should integrate histologic and clinical factors (PNI, margins, depth, site).	9.48
Clinical Evaluation	ESD margins need distinct interpretation vs. surgery due to narrow margins and thermal artifacts; multi-disciplinary review recommended.	9.36

Methods A modified Delphi process (five rounds) was used among 42 international experts (28 pathologists, 14 endoscopists). Participants represented 15 countries across five continents. In Round 1, statements were generated; in Rounds 2–4, panelists rated statements on a five-point Likert scale with consensus predefined as $\geq 80\%$ agreement (score ≥ 4). In Round 5, consensus statements were prioritized on a 10-point scale (► **Table 1**).

Results Fifty-six statements reached consensus across seven domains: SMI depth, SMI breadth, margin evaluation techniques, staining methods, measurement protocols, prognostic factors for lymph node metastasis (tumor budding [TB], lymphovascular invasion [LVI], and differentiation), and clinical evaluation. Mean priority scores (10-point scale) ranged from 6.24 to 9.52; SMI breadth had the lowest mean (6.59), whereas measurement protocols had the highest (8.99).

Conclusions This international consensus provides standardized, synoptic-ready criteria for post-ESD pathological assessment of invasive carcinoma, including SMI depth and breadth, margin interpretation, and selective ancillary staining. By specifying measurement landmarks, artifact handling, and reporting terminology, it improves reproducibility and comparability across institutions. Incorporation into synoptic templates and institutional QA can facilitate immediate implementation, while the inclusion of SMI breadth offers a standardized adjunct metric for future prognostic validation and multicenter research.

Conflicts of Interest Roos Pouw; Consultancy for Medtronic, MicroTech Europe, Cook Medical and Boston Scientific; speaker fee and honorarium from Pentax, Olympus and Fujifilm; research support from Moeller Medical. Jérémie Jacques; Research grant: Boston Scientific, Erbe Medical and Training Fees: Olympus, Erbe, Boston, Fujifilm, Pentax. Cesare Hassan; Consultant for Fujifilm and Medtronic. Alessandro Repici; Consultant for Fujifilm and Medtronic. All the authors have no relevant financial disclosures or conflicts of interest to declare.

References

- [1] Pimentel-Nunes P, Dinis-Ribeiro M, Ponchon T et al. Endoscopic submucosal dissection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2015; 47: 829–54
- [2] Zhang Y, Ding H, Chen T et al. Outcomes of Endoscopic Submucosal Dissection vs Esophagectomy for T1 Esophageal Squamous Cell Carcinoma in a Real-World Cohort. *Clinical Gastroenterology and Hepatology* 2019; 17: 73–81.e3
- [3] Tateishi Y, Nakanishi Y, Taniguchi H, Shimoda T, Umemura S. Pathological prognostic factors predicting lymph node metastasis in submucosal invasive (T1) colorectal carcinoma. *Modern Pathology* 2010; 23: 1068–72
- [4] Eguchi T, Nakanishi Y, Shimoda T et al. Histopathological criteria for additional treatment after endoscopic mucosal resection for esophageal cancer: analysis of 464 surgically resected cases. *Modern Pathology* 2006; 19: 475–80
- [5] Lugli A, Kirsch R, Ajioka Y et al. Recommendations for reporting tumor budding in colorectal cancer based on the International Tumor Budding Consensus Conference (ITBCC) 2016. *Modern Pathology* 2017; 30: 1299–311
- [6] Kumarasinghe MP, Bourke MJ, Brown I et al. Pathological assessment of endoscopic resections of the gastrointestinal tract: a comprehensive clinicopathologic review. *Modern Pathology* 2020; 33: 986–1006
- [7] Zhang Y, Shi F, Fan Y, Liu G, Xia C, Wang H. Comparison of prognostic outcomes between endoscopic submucosal dissection and surgical treatment for early gastric cancer: a retrospective cohort study. *BMC Gastroenterology* 2024; 24: 98
- [8] Zwager LW, Bastiaansen BAJ, Montazeri NSM et al. Deep Submucosal Invasion Is Not an Independent Risk Factor for Lymph Node Metastasis in T1 Colorectal Cancer: A Meta-Analysis. *Gastroenterology* 2022; 163: 174–89
- [9] Saito Y, Abe S, Inoue H, Tajiri H. How to Perform a High-Quality Endoscopic Submucosal Dissection. *Gastroenterology* 2021; 161: 405–10

PYP165 Colorectal endoscopic submucosal dissection and acute kidney injury: a rare but clinically relevant adverse event, a cohort study of 1,537 patients

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DOI 10.1055/s-0046-1821105

Aims Colorectal endoscopic submucosal dissection (ESD) is an established curative technique for large superficial colorectal neoplasia, with well-described local adverse events such as perforation and delayed bleeding. However, systemic complications remain poorly characterized. In the institutional experience underlying the French ESD Colorectal Cohort (FECCO), several cases of acute kidney injury (AKI) were observed following colorectal ESD. This study aimed to determine the incidence, clinical and procedural predictors, and outcomes of AKI after colorectal ESD.

Methods All consecutive colorectal ESDs performed at Limoges University Hospital between January 2017 and December 2024 and included in the prospective FECCO cohort were retrospectively analysed. Submucosal lesions, neuroendocrine tumors, and non-neoplastic lesions were excluded. Demographic variables, comorbidities, chronic medications, lesion characteristics, procedural parameters, and peri-procedural fluid management were collected. AKI was defined and staged according to KDIGO criteria. Creatinine values were retrieved pre-procedure, 48–72 hours post-ESD in patients with clinical suspicion of complications, and at 6-month follow-up for those with AKI. Univariable testing and Firth's penalized logistic regression were used to identify independent predictors of AKI [1–23].

Results A total of 1,537 patients were included. Median age was 70 years (IQR 63–75), 57.5 % were male, and hypertension was the most common comorbidity (44.7 %). ACE-inhibitors, ARBs, and diuretics were used by 13.9 %, 18.1 %, and 15.5 % of patients, respectively. Lesions measured a median of 55 mm (IQR 45–70), with 43.1 % located in the right colon and granular-mixed LSTs representing the most common morphology (34.2 %). Median procedure time was 56 minutes (IQR 45–70); en-bloc and R0 resection rates were 96.2 % and 89.1 %. Perforation occurred in 10.7 %, delayed bleeding in 5.7 %.

Within 72 hours after ESD, 20 patients (1.3 %) developed AKI. These patients were older (74 vs 70 years, $p=0.029$) and more frequently receiving ACE inhibitors (40 % vs 13.6 %, $p=0.003$; OR 4.25, 95 % CI 1.71–10.5). Lesions in AKI patients were significantly larger (median 100 mm vs 55 mm, $p<0.001$) and associated with longer procedures (181 min vs 55 min, $p<0.001$). Perforation (35 % vs 10.4 %, $p=0.003$) and delayed bleeding (36.3 % vs 5.4 %, $p=0.003$) were also more common in AKI cases. Although total infused volume was higher in AKI patients, their weight- and time-adjusted infusion rate was significantly lower (0.11 vs 0.19 mL/kg/min, $p<0.001$). Intra-procedural hypotension did not significantly differ between groups.

In the multivariable model, ACE-inhibitor therapy (OR 3.96, 95 % CI 1.40–9.36) and lesion diameter (OR 1.03 per mm, 95 % CI 1.02–1.04) remained independently associated with AKI; procedure duration was excluded due to collinearity with lesion size.

Among AKI cases, median creatinine rose from 79 $\mu\text{mol/L}$ pre-ESD to 290 $\mu\text{mol/L}$ post-procedure. Oliguria occurred in all but two patients; one patient (5 %) required two haemodialysis sessions. Renal biopsy was performed in three cases, all showing acute tubular necrosis. Median hospital stay was 9 days (IQR 5–15.3). All patients recovered their baseline renal function by 6 months.

Conclusions AKI after colorectal ESD is uncommon (1.3 %), yet clinically relevant due to prolonged hospitalization and occasional need for dialysis. Larger lesions and ACE-inhibitor therapy are the strongest predictors of renal injury. Preventive measures should include temporary discontinuation of ACE inhibitors, optimization of peri-procedural hydration, attention to insufflation-related abdominal pressures, and close monitoring during lengthy or complex dissections.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Prowle JR, Forni LG, Bell M et al. Postoperative acute kidney injury in adult non-cardiac surgery: joint consensus report of the Acute Disease Quality Initiative and Perioperative Quality Initiative. *Nat Rev Nephrol* 2021; 17: 605–618. doi:10.1038/s41581-021-00418-2
- [2] Wiener JGD, Goss L, Wahl TS et al. The Association of Enhanced Recovery Pathway and Acute Kidney Injury in Patients Undergoing Colorectal Surgery. *Dis Colon Rectum* 2020; 63: 233–241. doi:10.1097/DCR.0000000000001528
- [3] Marcotte JH, Patel K, Desai R et al. Acute kidney injury following implementation of an enhanced recovery after surgery (ERAS) protocol in colorectal surgery. *Int J Colorectal Dis* 2018; 33: 1259–1267. doi:10.1007/s00384-018-3084-9
- [4] Saito T, Kobayashi K, Sada M et al. Comparison of the histopathological characteristics of large colorectal laterally spreading tumors according to growth pattern. *J Anus Rectum Colon* 2019; 3: 152–159. doi:10.23922/jarc.2018-036
- [5] Kamigaichi Y, Oka S, Tanaka S et al. Factors for conversion risk of colorectal endoscopic submucosal dissection: a multicenter study. *Surg Endosc* 2022; 36: 5698–5709. doi:10.1007/s00464-022-09250-6
- [6] Sato K, Ito S, Kitagawa T et al. Factors affecting the technical difficulty and clinical outcome of endoscopic submucosal dissection for colorectal tumors. *Surg Endosc* 2014; 28: 2959–2965. doi:10.1007/s00464-014-3558-y
- [7] Rödig G, Keyl C, Wiesner G et al. Effects of sevoflurane and isoflurane on systemic vascular resistance: use of cardiopulmonary bypass as a study model. *Br J Anaesth* 1996; 76: 9–12. doi:10.1093/bja/76.1.9
- [8] Perazella MA, Rosner MH. Drug-Induced Acute Kidney Injury. *Clin J Am Soc Nephrol* 2022; 17: 1220–1233. doi:10.2215/CJN.11290821
- [9] Slagelse C, Gammelager H, Iversen LH et al. Renin-angiotensin system blocker use and the risk of acute kidney injury after colorectal cancer surgery: a population-based cohort study. *BMJ Open* 2019; 9:e032964. doi:10.1136/bmjopen-2019-032964
- [10] Drakeford PA, Tham SQ, Kwek JL et al. Acute Kidney Injury within an Enhanced Recovery after Surgery (ERAS) Program for Colorectal Surgery. *World J Surg* 2022; 46: 19–33. doi:10.1007/s00268-021-06343-6
- [11] Slagelse C, Gammelager H, Iversen LH et al. Acute kidney injury and 1-year mortality after colorectal cancer surgery: a population-based cohort study. *BMJ Open* 2019; 9:e024817. doi:10.1136/bmjopen-2018-024817
- [12] Khwaja A. KDIGO clinical practice guidelines for acute kidney injury. *Nephron Clin Pract* 2012; 120: c179–84. doi:10.1159/000339789
- [13] McEvoy MD, Gupta R, Koepke EJ et al. Perioperative Quality Initiative consensus statement on postoperative blood pressure, risk and outcomes for elective surgery. *Br J Anaesth* 2019; 122: 575–586. doi:10.1016/j.bja.2019.01.019
- [14] Albouys J, Montori Pina S, Boukechiche S et al. Risk of delayed bleeding after colorectal endoscopic submucosal dissection: the Limoges Bleeding Score. *Endoscopy* 2024; 56: 110–118. doi:10.1055/a-2189-0807
- [15] Miyakawa A, Tamaru Y, Mizumoto T et al. Prophylactic clip closure after endoscopic submucosal dissection of large flat and sessile colorectal polyps: a multicentre randomised controlled trial (EPOC trial). *Gut* 2025. doi:10.1136/gutjnl-2024-334463
- [16] Nakajima Y, Nemoto D, Nemoto T et al. Short-term outcomes of patients undergoing endoscopic submucosal dissection for colorectal lesions. *DEN open* 2023; 3: e136. doi:10.1002/deo2.136
- [17] Patenotte A, Yzet C, Wallenhorst T et al. Diagnostic endoscopic submucosal dissection for colorectal lesions with suspected deep invasion. *Endoscopy* 2023; 55: 192–197. doi:10.1055/a-1866-8080
- [18] Maselli R, Spadaccini M, Belletrutti PJ et al. Endoscopic submucosal dissection for colorectal neoplasia: outcomes and predictors of recurrence. *Endosc Int Open* 2022; 10: E127–E134. doi:10.1055/a-1551-3058
- [19] de Frutos Rosa D, Sebastián IA, Declara DB et al. A Randomized Trial of Endoscopic Submucosal Dissection vs Transanal Minimally Invasive Surgery in Early Rectal Neoplasms: DSETAMIS-2018 Study. *Gastroenterology* 2025. doi:10.1053/j.gastro.2025.07.029
- [20] Bordillon P, Pioche M, Wallenhorst T et al. Double-clip traction for colonic endoscopic submucosal dissection: a multicenter study of 599 consecutive cases (with video). *Gastrointest Endosc* 2021; 94: 333–343. doi:10.1016/j.gie.2021.01.036
- [21] Jacques J, Schaefer M, Wallenhorst T et al. Endoscopic En Bloc Versus Piecemeal Resection of Large Nonpedunculated Colonic Adenomas: A Randomized Comparative Trial. *Ann Intern Med* 2024; 177: 29–38. doi:10.7326/M23-1812
- [22] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy* 2022; 54: 591–622. doi:10.1055/a-1811-7025
- [23] Sung H, Ferlay J, Siegel RL et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA Cancer J Clin* 2021; 71: 209–249. doi:10.3322/caac.21660

PYP166 Role of Preprocedural Biopsies in Lower Gastrointestinal Tumors Undergoing Endoscopic Submucosal Dissection (ESD) and Impact on Fibrosis and Resection Rates

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DOI 10.1055/s-0046-1821106

Aims Endoscopic submucosal dissection (ESD) allows for curative resections of complex colorectal lesions which have high risk of malignancy. Although preprocedural biopsies are routinely done, their role is limited due to sampling error and the associated risk of fibrosis which may hinder dissection and compromise technical outcomes. This study aims to evaluate the association between preprocedural biopsies of colorectal lesions and the associated risk of fibrosis and its impact on ESD technical outcomes.

Methods This is a retrospective cohort study of all patients who underwent ESD for colorectal lesions at Kingston Health Sciences Center (KHSC) between October 2016–September 2025. We analyzed clinical, endoscopic, and histopathologic characteristics of lesions as well as patient outcomes. Histological diagnoses were categorized using the WHO Classification criteria for GI lesions, 5th edition. Rates of concordance and upstaging were calculated comparing the initial and final resected pathology. Univariate analysis between the presence of fibrosis and technical outcomes such as resection time, technical efficiency, en-bloc, R0, curative resections, and adverse events were used to calculate odds ratios with 95 % confidence intervals. P-value of <0.05 was considered statistically significant.

Results This cohort study included 197 patients with lower GI lesions (colon = 102, rectal = 95) that underwent ESD at KHSC. 105/197 (53.2 %) of patients had preprocedural biopsies prior to their ESD at KHSC. The overall histologic concordance rate between tissue biopsy and ESD specimens was 34.0 % (30.9 % for colon and 37.8 % for rectal). 64.0 % (n = 64) of lesions were upstaged from initial biopsy with 45.3 % (n = 29) of those final resections being neoplastic lesions. Lesions with initial biopsies had significantly greater rates of fibrosis (41.0 % vs 19.6 %, p = 0.001). Patients with prior EMR/ESD at a different center also had higher rates of fibrosis (70.5 % vs 45.6 %, p < 0.001). Lesions with fibrosis were more likely to have less efficient procedures (mean 10.0 min/cm² vs

6.2 min/cm², $p = 0.001$). The presence of fibrosis was significantly associated with lower rates of en-bloc resections (91.8 % vs. 98.5 %, OR 0.18, $p = 0.03$), R0 resections (78.7 % vs. 94.9 %, OR 0.20, $p = 0.001$), and curative resections (75.4 % vs. 93.4 %, OR 0.22, $p = 0.001$) but no increased risk of adverse events (8.2 % vs. 2.2 % $p = 0.11$). Subgroup analyses revealed similar trends when analyzing colon and rectal lesions separately.

Conclusions Preprocedural biopsies have poor concordance rate with post-ESD tissue histology. Biopsies may increase the risk of fibrosis which may decrease the rates of en-bloc and curative resections. Larger studies should evaluate the incremental benefit of biopsies and their potential associated risks.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP167 Underwater-ESD in the colon: results of a prospective, multicenter trial

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DOI 10.1055/s-0046-1821107

Aims The benefits of endoscopic submucosal dissection (ESD) for colorectal lesions regarding curative resection and recurrence rates are well known. However, colonic ESD remains technically challenging, thus restricting its possible applications. Underwater-ESD uses the buoyancy effect of submerging the lesion under saline and the power of the water jet to open the submucosal space and has been used successfully to facilitate ESD in several regions. Nevertheless, evidence regarding its application for colonic lesions is still low.

Aim of this study is to evaluate the outcomes of underwater-ESD for colonic lesions in a prospective, multicenter setting.

Methods All consequent colonic lesions > 20mm qualifying for endoscopic resection referred to the participating centers (Charité Universitätsmedizin Berlin, Bochum University Hospital, Augsburg University Hospital) were screened for inclusion in the study. An informed consent was acquired by all participating patients. The ESD procedure was performed under saline and according to the standards of each participating center. Primary endpoints were en bloc resection and histologically complete (R0) resection rates. Secondary endpoints included duration of the procedure, adverse events and recurrence rates in the 6- and 12-months follow-up.

Results 53 consequent patients (36 male and 17 female) were included in our study. Average age was 66.8 years. 28 lesions were located in the right hemi-colon, 10 in the left and 15 in the sigmoid colon. Median size of the lesions was 35mm (range: 20-115mm). 6 lesions were recurrent after previous endoscopic mucosal resection and 12 lesions were characterized as suspicious for malignancy. All lesions were successfully resected as ESD and all resections were en bloc and macroscopically complete. Internal traction was used in 18 cases. The flap technique was used in 40 cases, the pocket creation method in 12 and 1 lesion was resected with a combination of both techniques. Median duration of the ESD was 99 min. In 43 cases the ESD procedure was performed completely under saline. In the remaining 10 cases a part of the procedure (ranging between 20-50 %) had to be performed under gas insufflation because of inadequate exposure or bleeding. Intraoperative adverse events included 7 bleedings, 6 superficial injuries of the M. propria layer and 1 perforation, all of which were successfully treated endoscopically. There were no delayed bleedings or perforations. Histological examination showed an adenoma in 45 cases (25 with low-grade and 20 with high-grade intraepithelial neoplasia) and a carcinoma in 8 cases (6 pT1sm1, 1 pT1sm3 and 1 T2). A histologically complete resection was confirmed in 49 cases (92 %) and 51 resections were curative (96 %). At the time of submission of this abstract 20 patients had completed the 6-months follow-up and there were no cases of recurrence.

Conclusions Underwater-ESD is a safe and effective therapeutic option for the resection of colonic lesions, combining high rates of complete and curative resection with an improved safety profile.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP168 Impact of submucosal infiltrations depth on outcomes of colorectal ESDs: a single-center study

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Aims Current ESGE guidelines consider endoscopic resection of colorectal cancer “curative” when the estimated risk of lymph node metastasis is < 3 % (Endoscopy 2022;54:591). However, established histopathologic risk factors—such as tumor grade, tumor budding, vascular invasion, resection margin status, and submucosal invasion depth > 1000 µm—do not carry equal prognostic weight. A recent meta-analysis, for example, reported a lymph node metastasis rate of only 2.6 % when submucosal invasion > 1000 µm was present as the sole risk factor (Gastroenterology 2022;163:174). In this study, we evaluated patients from a large institutional database who underwent ESD for colorectal cancer, focusing specifically on how submucosal invasion depth influenced subsequent clinical management [1, 2].

Methods Patients who underwent en bloc ESD for colorectal cancer were identified from a prospective colorectal ESD registry containing more than 800 procedures performed between 09/2012 and 09/2025. We assessed lymph node risk factors, post-ESD management decisions, and patient outcomes.

Results A total of 104 patients (median age 70.6 years; 34 % female) with 104 lesions (rectum $n = 69$ / colon $n = 35$; median size 36 mm) were included. Based on ESGE criteria, 33 lesions (32 %) were classified as very low- or low-risk for lymph node metastasis, while 71 lesions (68 %) were considered high-risk. Lesion size and location did not differ significantly between risk groups ($p = 0.801$ / $p = 0.824$). In 26 cases (38 % of high-risk lesions), submucosal invasion depth > 1000 µm was the only high-risk feature. Among these, nine patients underwent additional surgery, and none showed lymphatic metastasis. The remaining seventeen patients did not undergo surgery and remained disease-free during an average follow-up period of 25 months.

Conclusions In our cohort of 104 early colorectal cancers, the proportion of resections considered curative would increase from 32 % to 54 % if submucosal invasion depth > 1000 µm as the sole risk factor were reclassified as low-risk. Our findings suggest that this criterion alone should no longer define a high-risk resection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zwager LW, Bastiaansen BAJ, Montazeri NSM, Hompes R, Barresi V, Ichimasa K, Kawachi H, Machado I, Masaki T, Sheng W, Tanaka S, Togashi K, Yasue C, Fockens P, Moons LMG, Dekker E. Deep Submucosal Invasion Is Not an Independent Risk Factor for Lymph Node Metastasis in T1 Colorectal Cancer: A Meta-Analysis. *Gastroenterology*. 2022; 163 (1): 174–189
- [2] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ, Esposito G, Lemmers A, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, van Hooft JE, Deprez PH, Dinis-Ribeiro M. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. 2022; 54 (6): 591–622

PYP169 Balloon-Assisted Endoscopic Submucosal Dissection for Technically Difficult Right-Sided Colonic Lesions: A Randomized Controlled Trial

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DOI 10.1055/s-0046-1821109

Aims Endoscopic submucosal dissection (ESD) is an established treatment for superficial colorectal tumors. However, its technical difficulty varies according to lesion location, and right-sided colonic lesions often present poor scope maneuverability, making the procedure more challenging. We previously reported that balloon-assisted endoscopy (BAE) improves scope control in retrospective analyses. This randomized study aimed to compare balloon-assisted ESD (BAESD) with conventional ESD (CESD) for technically difficult right-sided colonic lesions.

Methods This single-center prospective randomized controlled trial was conducted at Jichi Medical University Hospital. Patients with superficial right-sided colonic tumors (20–50 mm) judged to have poor maneuverability during pre-operative colonoscopy were randomly assigned (1:1) to BAESD or CESD. The primary endpoint was the ESD completion rate. Secondary endpoints included procedure time, dissection speed, specimen size, en bloc resection rate, R0 resection rate, operator change, and complications. Analyses were performed on both an intention-to-treat (ITT) and per-protocol (PP) basis.

Results Thirty patients were enrolled (14 in the BAESD group and 16 in the CESD group). In the ITT analysis, the ESD completion rate was 100% (14/14) in the BAESD group and 75% (12/16) in the CESD group, showing a higher trend in favor of BAESD, although without statistical significance ($P=0.103$). All incomplete CESD cases were successfully completed after conversion to BAESD. Procedure time (93 vs. 102 minutes), dissection speed (20.2 vs. 21.5 mm²/min), en bloc resection rate (100% in both groups), and R0 resection rate (93% vs. 88%) were comparable. One microperforation occurred in the BAESD group and was managed endoscopically; no delayed bleeding or severe complications were observed.

Conclusions Although recent technical advancements such as traction devices and injectable knives have expanded the indications for colorectal ESD, scope maneuverability based on lesion location remains a key determinant of technical difficulty. While statistical significance was not reached, the 100% completion rate in the BAESD group and the successful completion of all CESD-interrupted cases after switching to BAESD are clinically meaningful. BAESD may facilitate complete ESD in technically difficult right-sided colonic lesions and represents a practical rescue strategy.

Conflicts of Interest M. Bronswijk received trial support from Boston Scientific and Ovesco, holds consultancy agreements with Ovesco, Dekra and Prion Medical-Taewoong and acts as an Editorial Board member for Endoscopy. H. Yamamoto has patents for the double-balloon endoscope produced by Fujifilm Corp. He also serves as a consultant for and has received honoraria, grants, and royalties from Fujifilm Corp. T. Yano has received royalties and honoraria from Otsuka Pharmaceutical Factory, as well as research funding and honoraria from Fujifilm and honoraria from Olympus. The remaining co-authors have no relevant conflicts of interest to declare.

PYP170 Risk of Submucosal Invasive Cancer in Large (>20mm) Non-Pedunculated Colonic Polyps: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821110

Aims Unlike rectal lesions, the reported prevalence of submucosal invasive cancer (SMIC) in large non-pedunculated colonic polyps (LNPCs > 20 mm) is discordant. We conducted a systematic review and meta-analysis to estimate the pooled prevalence of SMIC in LNPCs, including rates of superficial SMIC (sSMIC) and low-risk SMIC (lrSMIC), and to provide stratified prevalence estimates by colonic location (right and left colon).

Methods Multiple databases were searched through October 2025 for studies on the endoscopic resection of LNPCs (≥ 20 mm) reporting SMIC, including cohorts from both Eastern and Western countries. Data were extracted for overall SMIC and, when available, for sSMIC (defined as submucosal invasion < 1000 μ m) and lrSMIC (superficial invasion without high-risk histologic features). Pooled prevalence estimates with 95% confidence intervals (CI) were calculated using a random-effects model. Prevalence estimates were also generated stratified by colonic location. Between-study heterogeneity was assessed using the I^2 statistic.

Results A total of 80 studies including 17,927 lesions were analyzed. Across all LNPCs, the pooled prevalence of SMIC was 6.2% (95% CI 5.2–7.5%). Among the 38 studies ($n=8,977$) reporting depth of invasion, the pooled prevalence of superficial SMIC (sSMIC) was 3.7% (95% CI 2.6–5.2%), while low-risk SMIC (lrSMIC), reported in 25 studies ($n=7,009$), had a pooled prevalence of 2.8% (95% CI 1.8–4.3%). All analyses showed substantial heterogeneity (overall SMIC $I^2=83\%$; sSMIC $I^2=80\%$; lrSMIC $I^2=74\%$).

When stratified by colonic location, SMIC prevalence was 5.1% (95% CI 4.0–6.5%) in right-colon LNPCs (12,926 lesions) and 13.5% (95% CI 11.7–15.6%) in left-colon lesions (3,314 lesions). Superficial SMIC prevalence was 3.3% (95% CI 2.1–5.1%) in the right colon and 6.0% (95% CI 4.4–8.3%) in the left colon. The prevalence of lrSMIC was 2.3% (95% CI 1.3–4.1%) in the right colon and 4.5% (95% CI 3.3–6.2%) in the left colon.

Conclusions In this meta-analysis approximately 6% of LNPCs harbored SMIC, with variation by colonic location. The prevalence of lrSMIC was uncommon overall and approximately 2% in the right colon. These estimates provide comprehensive benchmarks that may support the selection of appropriate resection strategies for LNPCs, helping to balance risks and benefits and to determine the level of technical expertise required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Crossing the Rubicon: From GERD to Barrett's Esophagus

15/05/2026, 11:00–12:00

Emerald 4

PYP171 Long-term efficacy of transoral incisionless and surgical laparoscopic fundoplication for treatment of gastro-esophageal reflux disease: a systematic-review and comparative meta-analysis

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DOI 10.1055/s-0046-1821111

Aims Up to 40% of patients with gastro-esophageal reflux disease (GERD) do not respond to medical therapy. Laparoscopic fundoplication (LF) for GERD provides suboptimal outcomes and risk of long-lasting adverse events. Transoral incisionless fundoplication (TIF) may be proposed as alternative treatment for GERD. TIF and LF long-term effects have not been compared so far, to assess the real efficacy of TIF in clinical practice. We aimed at comparing the long-term outcomes of TIF and 360° LF or partial (anterior 90° to 180° or posterior 270°) LF in GERD patients [1–18].

Methods A systematic search of major databases was performed up to September 2025. Studies reporting 5- to 10-year outcomes of TIF and LF in patients with confirmed GERD were included. Randomized controlled trials comparing 360° and partial LF were considered. Pooled proportions and 95% confidence interval (95% CI) of patient satisfaction, GERD recurrence and proton pump inhibitor (PPI) discontinuation outcomes were calculated by random-effects meta-analysis, performed for each outcome and technique, and compared by N-1 Chi-squared test.

Results Eight studies on TIF (involving 447 patients) and ten studies on LF (involving 954 and 948 patients undergone 360° LF and partial LF, respectively), relevant to selection criteria, were included in the meta-analyses. Following TIF, the 5- to 10-year pooled proportions of patient satisfaction, GERD recurrence, and PPI discontinuation were 79.69% (95% CI: 72.64 to 85.62), 15.33% (95% CI: 9.66 to 22.63), and 67.47% (95% CI: 60.29 to 74.09), respectively. Following 360° LF, the 5- to 10-year pooled proportions of patient satisfaction, GERD recurrence, and PPI discontinuation were 81.27% (95% CI: 77.43 to 84.71), 17.9% (95% CI: 12.71 to 24.12), and 68.55% (95% CI: 64.69 to 72.23), respectively. Following partial LF, the 5- to 10-year pooled proportions of patient satisfaction, GERD recurrence, and PPI discontinuation were 81.31% (95% CI: 77.3 to 84.89), 17.2% (95% CI: 12.08 to 23.28), and 51.25% (95% CI: 47.02 to 55.46%), respectively. The pooled proportions of patient satisfaction and GERD recurrence did not significantly differ between TIF, 360° LF and partial LF. The pooled proportion of patients off-PPI following TIF was like 360° LF and significantly higher than partial LF ($p = 0.0001$), mainly compared to posterior 270° LF and anterior 180° LF ($p < 0.0001$).

Conclusions This meta-analysis reports that the 5- to 10-year patient satisfaction, GERD recurrence, and PPI discontinuation outcomes of TIF and LF are substantially comparable. Thus, TIF could offer a therapeutic option as clinically effective as LF in the long-term, without surgery-related side effects, for selected GERD patients, who refuse life-long medical therapy or surgery, are intolerant to PPI, or have some risk of persistent post-surgical side effects.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hopkins RJ, Irvine T, Jamieson GG et al. Long-term follow-up of two randomized trials comparing laparoscopic Nissen 360 with anterior 90 partial fundoplication. *Br J Surg* 2020; 107: 56–63
- [2] Håkanson BS, Lundell L, Bylund A, Thorell A. Comparison of Laparoscopic 270 Posterior Partial Fundoplication vs Total Fundoplication for the Treatment of Gastroesophageal Reflux Disease: A Randomized Clinical Trial. *JAMA Surg* 2019; 154: 479–86
- [3] Gunter RL, Shada AL, Funk LM et al. Long-Term Quality of Life Outcomes Following Nissen Versus Toupet Fundoplication in Patients with Gastroesophageal Reflux Disease. *J Laparoendosc Adv Surg Tech A* 2017; 27: 931–6
- [4] Djerf P, Montgomery A, Hallerbak B et al. One- and ten-year outcome of laparoscopic anterior versus total fundoplication: a double blind, randomized multicentre study. *Surg Endosc* 2016; 30: 168–7
- [5] Mickevičius A, Endzinas Ž, Kiudelis M et al. Influence of wrap length on the effectiveness of Nissen and Toupet fundoplications: 5-year results of prospective, randomized study. *Surg Endosc* 2013; 27: 986–91
- [6] Broeders JA, Roks DJ, Jamieson GG et al. Five-year outcome after laparoscopic anterior partial versus Nissen fundoplication: four randomized trials. *Ann Surg* 2012; 255: 637–42
- [7] Watson DI, Devitt PG, Smith L, Jamieson GG. Anterior 90 partial vs Nissen fundoplication – 5 year follow-up of a single-centre randomised trial. *J Gastrointest Surg* 2012; 16: 1653–8
- [8] Cao Z, Cai W, Qin M et al. Randomized clinical trial of laparoscopic anterior 180 partial versus 360 Nissen fundoplication: 5-year results. *Dis Esophagus* 2012; 25: 114–20
- [9] Shaw JM, Bornman PC, Callanan MD et al. Long-term outcome of laparoscopic Nissen and laparoscopic Toupet fundoplication for gastroesophageal reflux disease: a prospective, randomized trial. *Surg Endosc* 2010; 24: 924–32
- [10] Shen S, Yu G, Guo X et al. The long-term efficacy of transoral incisionless fundoplication with Medigus Ultrasonic Surgical Endostapler (MUSE) for gastroesophageal reflux disease. *Esophagus* 2023; 20: 581–6
- [11] Roy-Shapira A, Bapaye A, Date S et al. Transoral anterior fundoplication: 5-year follow-up of pilot study. *Surg Endosc* 2015; 29: 3717–21
- [12] Bell RCW, Freeman K, Heidrick R, Ayazi S. Transoral incisionless fundoplication demonstrates durability at up to 9 years. *Ther Adv Gastroenterol* 2021; 14: 1–11
- [13] Chimukangara M, Jalilvand AD, Melvin WS, Perry KA. Long-term reported outcomes of transoral incisionless fundoplication: an 8-year cohort study. *Surg Endosc* 2019; 33: 1304–9
- [14] Testoni PA, Testoni S, Distefano G et al. Transoral incisionless fundoplication with EsophyX for gastroesophageal reflux disease: clinical efficacy is maintained up to 10 years. *Endosc Int Open* 2019; 7: E647–E654
- [15] Trad KS, Barnes WE, Prevou ER et al. The TEMPO trial at 5 years: transoral fundoplication (TIF 2.0) is safe, durable, and cost-effective. *Surg Innov* 2018; 25: 149–57
- [16] Stefanidis G, Viazis N, Kotsikoros N et al. Long-term benefit of transoral incisionless fundoplication using the Esophyx device for the management of gastroesophageal reflux disease responsive to medical therapy. *Dis Esophagus* 2017; 30: 1–8
- [17] Testoni PA, Testoni S, Mazzoleni G et al. Long-term efficacy of transoral incisionless fundoplication with Esophyx (TIF 2.0) and factors affecting outcomes in GERD patients followed for up to 6 years: a prospective single-center study. *Surg Endosc* 2015; 29: 2770–80
- [18] Rettura F, Bronzini F, Campigotto M et al. Refractory gastroesophageal reflux disease: a management update. *Front Med* 2021; 8: 765061

PYP172 Efficacy and safety of anti reflux mucosal ablation (ARMA) for proton pump inhibitor (PPI) – refractory gastroesophageal reflux disease(GERD) – A single center prospective study

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DOI 10.1055/s-0046-1821112

Aims Evaluation of the clinical efficacy and safety of Anti-Reflux Mucosal Ablation (ARMA) therapy in patients with proton pump inhibitor (PPI)-refractory gastroesophageal reflux disease (GERD).

Methods This single-center prospective study, conducted at SR Kalla Memorial Gastroenterology Hospital in Jaipur, India, included 45 patients with symptomatic GERD who were receiving daily oral PPI for at least 12 weeks. Esophagogastroduodenoscopy (EGD), pH studies, and high-resolution esophageal manometry (HREM) were performed on all screened patients. Quality of life was measured in these patients using the GERD Health-Related Quality of Life (GERD-HRQL) and the Frequency Scale for Symptoms of GERD (FSSG). ARMA was performed in a standardised fashion using Argon plasma coagulation (APC) ablation. Patients were followed up at 3 months after procedure with repeat EGD, HREM, GERD-HRQL, and FSSG assessment [1–3].

Results A total of 45 patients (57.8% males; median age, 52.5 years) underwent ARMA. Significant improvements in patient-reported outcomes were observed at 3 months post-procedure. The mean GERD-HRQL score decreased significantly from 38.2 ± 6.8 to 12.4 ± 7.2 ($p < 0.001$). Similarly, FSSG scores dropped significantly from 22.3 ± 5.4 to 10.2 ± 6.1 ($p < 0.001$). Physiologic testing demonstrated effective control of pathological acid exposure. The mean DeMeester score improved significantly from 35.8 ± 28.6 to 8.4 ± 6.2 ($p < 0.001$). Mean AET also reduced significantly from 20.8% to 2.8% ($p < 0.001$). Endoscopic assessment confirmed enhancement of the anti-reflux barrier. Anatomical improvement was further supported by 68.9% patients showing an improvement of ≥ 1 Hill's Grade. Regarding mucosal status, the proportion of no esophagitis increased from 29 (64.4%) to 36 (80%). The prevalence of Grade A and Grade B decreased significantly post-procedure. The safety profile of ARMA was favourable, only minor and transient adverse events were recorded, no major complications such as perforation, stenosis, or bleeding occurred. At 3-month follow-up, 88.9% of patients had either reduced or discontinued PPI use, demonstrating reduced pharmacological dependence.

Conclusions ARMA demonstrated significant efficacy and safety for PPI-refractory GERD. The procedure substantially improved subjective scores (GERD-HRQL, FSSG) and objective markers (DeMeester score, AET, Hill's grade). A high rate of PPI reduction/cessation affirms ARMA's role as a promising minimally invasive treatment for long-term GERD management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nabi Z, Reddy DN. Update on endoscopic approaches for the management of gastroesophageal reflux disease. *Gastroenterol Hepatol (N Y)* 2019; 15 (7): 369–76
- [2] Hernández Mondragón OV, Zamarripa Mottú RA, García Contreras LF, Gutiérrez Aguilar RA, Solórzano Pineda OM, Blanco Velasco G et al. Clinical feasibility of a new antireflux ablation therapy on gastroesophageal reflux disease (with video). *Gastrointest Endosc* 2020; 92 (6): 1190–201
- [3] Inoue H, Tanabe M, de Santiago ER, Abad MRA, Shimamura Y, Fujiyoshi Y et al. Anti-reflux mucosal ablation (ARMA) as a new treatment for gastroesophageal reflux refractory to proton pump inhibitors: a pilot study. *Endosc Int Open*. 2020; 8 (2): E133–8

PYP173 Concomitant hiatal hernia repair and transoral incisionless fundoplication for gastroesophageal reflux disease: 12-month outcomes from the European TIF registry (EURO-TIF)

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DOI 10.1055/s-0046-1821113

Aims Interdisciplinary collaboration between foregut surgeons and interventional endoscopists is paving the way for the future of benign GI disease. Concomitant hiatal hernia repair and transoral incisionless fundoplication (cTIF) is one such innovation that has emerged as a viable combination therapy for patients with gastroesophageal reflux disease (GERD). cTIF enables a consistent 270–300° omega-shaped valve in patients with pathological reflux and hiatal hernias (HH) > 2 cm, who would otherwise be unsuitable for TIF2.0 alone. cTIF is hypothesised to offer effective reflux control with lower morbidity than traditional Nissen fundoplication. We report one of the largest datasets outside North American on the safety and efficacy of cTIF conducted within the European TIF registry (EURO-TIF).

Methods A prospective, multi-centre registry conducted across seven European centres and registered at Cleveland Clinic London (CCL-2021-TIF). All prospectively collected data among patients undergoing cTIF for the management of gastroesophageal reflux disease (GERD) since 2021 were eligible for inclusion. Patients underwent a laparoscopic hiatal hernia repair immediately followed by same-session TIF in theatre. The primary outcomes were change in reflux-specific quality of life questionnaires (GERD-HRQL and RSI) and acid suppression use from baseline to 12-months follow-up. Secondary outcomes included procedural outcomes and adverse events according to the AGREE classification. Within-patient changes from baseline to 6- and 12-months were assessed using paired t-tests, while insufficient paired observations were analysed descriptively.

Results In total, 62 patients underwent cTIF with a mean age of 49.9 years (SD 13.9), and 38.7% ($n = 24$) were female. All patients were naïve to previous mechanical therapy, were using regular anti-acid medication, and had a median Charlson Comorbidity Index of 1 (IQR 0–1). The median HH size was 3 cm (IQR 2–3; range 1–7), baseline acid exposure time (AET) was 9.1% (IQR 7.1–14.2), and median total reflux episodes were 74.5 (IQR 56–107). Mean baseline GERD-HRQL and RSI scores were 34.8 (SD 12.4) and 14.8 (SD 9.3), respectively, and 98.3% ($n = 57$) were dissatisfied with current treatment. The procedure was technically successful in all cases, with a mean procedure time of 84.3 minutes (SD 28.5; range 45–155), a median of 2 crural sutures (IQR 2), 14 plication pairs (IQR 10–14), and an inpatient stay of 2 days (IQR 1–2). Thirteen adverse events occurred; the majority AGREE grade I ($n = 9$). Two patients developed hospital-acquired pneumonia (AGREE II), one underwent pyloric botox injection for gastroparesis symptoms (AGREE IIIa), and one developed a suspected leak requiring salvage Nissen fundoplication three days post-cTIF (AGREE IIIb). At 6- and 12-months, follow-up completion was 63% (34/54) and 38% (15/45), respectively. The proportion of patients no longer requiring anti-acid therapy at 6- and 12-months was 68.6% and 70.6%. Over the same period, mean GERD-HRQL scores were 7.1 (SD 6.9; $n = 34$) and 6.8 (SD 5.1; $n = 15$), corresponding to mean within-patient reductions of -30.3 (SD 13.2; $p < 0.001$) and -32.8 (SD 13.5; $p < 0.001$), respectively, and mean RSI scores of 3.1 (SD 4.0; $n = 17$) and 4.7 (SD 4.5; $n = 7$). One patient required an additional procedure (anti-reflux mucosal ablation) for worsening symptoms without evidence of recurrent HH.

Conclusions We present the first European outcomes on patients undergoing cTIF demonstrating the combined procedure appears safe, feasible, and enables sustained symptom improvement and acid-acid therapy discontinuation over 12-months.

Conflicts of Interest RH discloses receipt of research funding from Merit Medical to support research infrastructure

PYP174 Cryoballoon ablation following non-curative endoscopic therapy or a recurrence of Barrett-related dysplasia or esophageal adenocarcinoma in the resection scar: a case series

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DOI 10.1055/s-0046-1821114

Aims Endoscopic resection (ER) is the recommended treatment for superficial visible lesions in patients with a Barrett esophagus (BE). Following non-curative endoscopic therapy for BE-related dysplasia or esophageal adenocarcinoma (EAC), or in case of a local recurrence at the ER scar for which additional ER is not deemed feasible, step-up treatment with esophagectomy and/or chemo/radiotherapy is typically considered. However, step-up treatment may not always be possible due to comorbidities and/or age or may be declined based on patient preference. This case series evaluates the use of endoscopic focal cryoballoon ablation (CBA) as potential alternative therapy.

Methods This retrospective case series was conducted at two Dutch tertiary referral centers. Patients with BE-related dysplasia or EAC were included if they underwent focal CBA between January 2018 and July 2025 for two indications: 1) prophylactic therapy following non-curative endoscopic treatment defined as a macroscopically incomplete ER, or an ER with vertical tumor-positive resection margins (R1v), and 2) an endoscopically visible neoplastic lesion < 1 cm from the ER scar for which additional ER was not deemed feasible. Treatment was performed using either the first- or second-generation CBA device, with an ablation dose of 10 to 12 seconds. The number of ablations and freeze-thaw cycles was determined at the discretion of the endoscopist. Outcomes were technical success, safety, endoscopic remission — defined as the absence of any endoscopically visible lesions suspected of dysplasia or cancer during endoscopic follow-up — and survival.

Results In total, 11 patients underwent focal CBA after a non-curative ER or an endoscopically visible lesion < 1 cm from the resection scar. Patients had a median age of 77 years (p25-p75 68-81) at time of treatment, and the majority was male (9/11; 82%). Reasons for not undergoing additional treatment with esophagectomy and/or chemo/radiotherapy included severe comorbidity and/or advanced age (n = 5) and patient preference (n = 6). Seven patients (7/11; 64%) underwent prophylactic CBA following non-curative endoscopic treatment, and four patients (4/11; 36%) had treatment for an endoscopically visible lesion < 1 cm from the ER scar. CBA was technically feasible in all cases, and no (serious) adverse events occurred.

In patients who underwent prophylactic CBA after non-curative endoscopic therapy, endoscopic remission was retained in 71% of patients (5/7) and this sustained during a median endoscopic follow-up of 14 months (range 3-51) with median 2 endoscopies (range 1-3). Among patients with a local recurrence at the resection scar, 50% (2/4) achieved endoscopic remission and this sustained during a median endoscopic follow-up of 7 months (range 6-8) with median 6 endoscopies (range 2-10).

Overall, 45% of patients (5/11) died median 26 months (range 12-36) after CBA. Three of these deaths were attributable to esophageal cancer, and were all in patients who did not achieve endoscopic remission.

Conclusions In expert hands, focal CBA is feasible and safe following non-curative endoscopic therapy for BE-related dysplasia or EAC and for local recurrences in the ER scar. However, efficacy is limited, and therefore CBA should not be regarded as reliable alternative to esophagectomy and/or chemo/radiotherapy.

Conflicts of Interest B.W. has received research funding from PENTAX Medical C2 Therapeutics and Aqua Medical. L.B. is a consultant for Pentax Medical, C2 therapeutics. R.P. is consultant for Medtronic BV, MicroTech Europe, Cook and Boston Scientific and received fees from Pentax BV, Olympus and Fujifilm

PYP175 Inadequate Cellularity of Wide-Area Transepithelial Sampling (WATS) in Barrett's Esophagus results of a Prospective, Multi Phase, Multi-Center Trial

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DOI 10.1055/s-0046-1821115

Aims Wide-Area Transepithelial Sampling with 3D analysis (WATS3D) is widely used as an adjunct to random forceps biopsies (RFB) during Barrett's esophagus (BE) surveillance endoscopies. In a previous randomized trial (WATS-EURO1) comparing WATS with RFB in 172 patients in 17 BE expert centers in Europe, we found that inadequate cellularity of WATS3D samples prohibited a reliable diagnosis in 13% of cases, despite that procedures were performed by experienced BE endoscopists who were instructed on the brush technique and with in-room training on the sample preservation.

Methods The WATS-EURO2 study was initiated after the WATS-EURO1 study to study the relevance of WATS3D-positive-RFB-negative findings during follow-up and aimed to enroll 200 BE patients with low grade dysplasia, high-grade dysplasia or early cancer and 200 non-dysplastic BE patients with a follow-up of 3 years and without ablation for all WATS3D-positive-RFB-negative cases. Based on the sample inadequacy rates in the WATS-EURO1, the WATS-EURO2 was separated into three chronologically distinct phases: (1) Conventional Preservation Phase: after brush collection, a portion of the sample was applied as a dry smear on a glass slide, followed by the addition of preservation fluid for transport and processing; (2) Improved Preservation Phase: no dry smear was obtained and the entire brush sample was preserved in a transportation medium before transportation and processing; and (3) Post-training Phase: the same preservation method was used, but endoscopists received additional training instructions, video tutorial, and individual feedback on their sample adequacy. Sample adequacy was evaluated across each phase, with subgroup analyses by endoscopist. Specimens were categorized and assessed at the CDx Diagnostics laboratory, blinded to case indications and RFB outcomes. Samples were classified as inadequate if either the smear or cell block showed poor preservation or low cellularity.

Results Seven BE expert endoscopists contributed to the study. Sample adequacy did not improve in the Improved Preservation Phase compared to the Conventional Preservation Phase (126/218 cases (57.8%) vs. 113/173 cases (65.3%), p = 0.15). In the Post-Training Phase adequacy rates rose to 299/326 (91.7%; p < 0.001, compared to the preceding phases; Figure 1). All 7 endoscopists significantly improved their adequacy rates with final adequacy rates between 73% and 100% (median: 92%; Figure 2). Despite the overall improvement post-training, inadequate samples persisted in 0 to 27% (median 8%) of cases.

Conclusions Despite that all procedures were performed by BE expert endoscopists, after standard instructions and training, samples were deemed inad-

equate in a substantial number of cases. Sample adequacy improved to >90 % after additional training instructions, video tutorial and individual feedback on sample adequacy. These findings underscore the critical role of a proper brushing technique in WATS3D sampling and the necessity of reporting inadequacy rates in WATS3D studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP176V A Novel Endoscopic Capsule Sponge Technique Supporting Early Detection and Risk Stratification in Barrett's Neoplasia

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DOI 10.1055/s-0046-1821116

Problem to solve Effective surveillance of Barrett's esophagus (BE) requires representative sampling of the metaplastic epithelium to enable early detection of dysplasia or adenocarcinoma. However, the current gold standard of forceps biopsies is limited by sampling error, interobserver variability in histopathological assessment, and poor integration with emerging molecular diagnostic strategies. Although novel widefield sampling devices have shown promise for more extensive coverage of the BE segment, their clinical adoption is often restricted by patient intolerance or inadequate sampling. As a result, obtaining truly representative tissue samples remains technically challenging.

Innovation We use a transendoscopic sampling (TES) technique involving a dissolvable capsule sponge to enable comprehensive sampling during routine endoscopy. The capsule is introduced into the stomach alongside the endoscope using a biopsy forceps. Upon dissolution, it expands into a rough-textured sponge. While the endoscopist inspects and cleans the BE segment, the sponge is deployed and subsequently retrieved transorally, collecting cells from the entire BE without cross-contamination. The procedure results in visible abrasions across the entire BE segment, including targeted suspicious lesions.

Results In a prospective series of 226 TES procedures, technical success was achieved in 224/226 cases (99.1 %). 2/226 procedures failed due to severe esophageal stenosis that prevented passage of the capsule sponge. All 64 BE patients with histologically confirmed progression (high-grade dysplasia or esophageal adenocarcinoma) or endoscopically suspicious lesions underwent successful sampling. In 100 % of the successfully retrieved samples (224/224), sufficient material was collected for DNA isolation.

Conclusions Transendoscopic sampling using the capsule sponge is a safe, well-tolerated, and technically feasible procedure for widefield sampling of BE. It offers a scalable platform for integrating molecular biomarkers into routine surveillance and has the potential to complement, or even revolutionize, endoscopic surveillance in Barrett's esophagus.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/e2bec4c5-7d51-4547-b086-238def989bb6/Uploads/19990_1764785095921926.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP177 Low recurrence rates after endoscopic eradication therapy with RFA of Barrett's neoplasia: Long-term follow-up results from the Dutch Barrett's registry

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DOI 10.1055/s-0046-1821117

Aims Endoscopic eradication therapy (EET) with radiofrequency ablation ± endoscopic resection, is recommended for treatment of Barrett's esophagus (BE) with dysplasia/early cancer [1]. After successful EET, guidelines recommend endoscopic follow-up (FU) of 5 years for baseline low-grade dysplasia (LGD), and 10 years for baseline high-grade dysplasia (HGD)/T1 cancer [1]. We present the long-term outcomes of our previously published, nationwide cohort of BE patients, successfully treated with EET between 2008-2018 in a centralized setting in BE expert centers (BEC) in the Netherlands [2]. Care for patients was provided according to a uniform protocol and by expert endoscopists and pathologists.

Methods All patients who underwent successful EET for BE with dysplasia/T1 cancer were included. Successful EET was defined as complete eradication of BE and of dysplasia/cancer. FU data was collected up to September 2025. Endoscopic FU was defined as time from last treatment until last FU endoscopy. Vital FU was defined as time from last treatment until recurrence, data collection of vital status, or death. The primary outcome was recurrent dysplasia or cancer. Recurrences were classified as LGD in random biopsies from a normal appearing gastroesophageal junction (GEJ), dysplasia/cancer in recurrent BE eligible for endoscopic treatment, or advanced a/o metastasized cancer ineligible for endoscopic treatment.

Results We included 1269 patients (1038 male, median age 66 yrs, median BE of C2M4) with baseline LGD in 27 %, and HGD/cancer in 73 %. Median endoscopic FU was 65 months (IQR 42-93) with a median of 5 endoscopies (IQR 3-7). FU endoscopies were already discontinued in 58 % after median 101 months (IQR 74-138), due to: guideline recommendation to stop (20 %), limited life expectancy (18 %), or death (14 %).

Recurrent LGD/HGD/cancer was detected in 91/1269 (7 %; annual risk 1.3 %) after a median of 35 months (IQR 23-55) and 3 endoscopies (IQR 2-5). Recurrence of HGD/cancer was detected in 4.2 % (annual risk 0.8 %). The total number of endoscopies to find one recurrence was 73. In total, 9/91 recurrences were diagnosed after the guideline-recommended time point at which FU can be discontinued. Overall, 84 % of recurrences was amenable for curative endoscopic re-treatment, while 16 % (1 % of the overall cohort) was detected as advanced cancer. In total, 11/1269 patients (0.9 %) had cancer-related death. In contrast, during a median vital follow-up of 101 months (IQR 80-136), 318 patients (25 %) had unrelated death.

In patients with baseline LGD, recurrent LGD/HGD/cancer was detected in 19/347 patients (5 %; annual risk 0.7 %). The majority of recurrences was amenable for curative endoscopic treatment (16/19; 84 %), consisting of recurrent LGD in a normal appearing GEJ in 5/347 (1.0 %, annual risk 0.2 %) or dysplasia/cancer in recurrent BE in 11/347 (3 %, annual risk 0.4 %). The remaining 3/19 patients developed advanced a/o metastasized cancer (1 %, annual risk 0.1 %), after a median 85 months (IQR n.a.) after treatment. The majority (17/19; 89 %) of recurrences were found during routine FU-endoscopy. The remaining 2/19 (11 %) were detected in patients presenting with symptoms, including one after endoscopic FU had been stopped.

In patients with baseline HGD/cancer, recurrent LGD/HGD/cancer was found in 72/922 patients (8 %; annual risk 1.0 %). Overall, 60/72 (83 %) had recurrence amenable for curative endoscopic treatment, consisting of recurrent LGD in a normal appearing GEJ in 13/922 (1 %, annual risk 0.2 %) or dysplasia/cancer in recurrent BE in 47/922 (5 %, annual risk 0.6 %). The remaining 12/72 patients

(17 %) had recurrence of advanced a/o metastasized cancer (1 %, annual risk 0.2 %) after a median FU of 34 months (IQR 17–90). Most (65/72; 90 %) recurrences were found during routine FU-endoscopy. In 7/72 (10 %) recurrence was detected in patients presenting with symptoms, including one after endoscopic FU had been stopped.

Conclusions Successful EET in an expert treatment setting, yields a long-term durable effect, demonstrating low recurrence risks in both baseline LGD and HGD/cancer patients, and < 1 % cancer related death after median vital FU of 101 months. The risk of developing symptomatic cancer recurrence after guideline advised cessation of FU is extremely low.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dutch Barrett Expert Centervan Munster S., Nieuwenhuis E., Weusten B.L.A.M., Alvarez Herrero L., Bogte A., Alkhalaf A., Schenk B.E., Schoon E.J., Curvers W., Koch A.D., van de Ven S.E.M., de Jonge P.J.F., Tang T.J., Nagengast W.B., Peters F.T.M., Westerhof J., Houben M.H.M.G., Bergman J.J., Pouw R.E. 2022; Long-term outcomes after endoscopic treatment for Barrett's neoplasia with radiofrequency ablation ± endoscopic resection: results from the national Dutch database in a 10-year period. *Gut* 71 (2): 265–276. doi:10.1136/gutjnl-2020-322615
- [2] Weusten B.L.A.M., Bisschops R., Dinis-Ribeiro M., di Pietro M., Pech O., Spaander M.C.W., Baldaque-Silva F., Barret M., Coron E., Fernández-Esparach G., Fitzgerald R.C., Jansen M., Jovani M., Marques-de-Sa I., Rattan A., Tan W.K., Verheij E.P.D., Zellenrath P.A., Triantafyllou K., Pouw R.E. 2023; Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 55 (12): 1124–1146. doi:10.1055/a-2176-2440

PYP178 Endoscopic resection for low-grade dysplasia in Barrett's esophagus

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DOI 10.1055/s-0046-1821118

Aims Low-grade dysplasia (LGD) in Barrett's esophagus (BE) carries a significant risk of progression to high-grade dysplasia (HGD) or adenocarcinoma, estimated at 9–13 %/patient/year when LGD is confirmed by expert pathology [1]. Although radiofrequency ablation (RFA) is recommended by ESGE guidelines, results remain imperfect and sometimes contradictory [2]. Endoscopic mucosal resection (EMR) may offer both diagnostic and therapeutic advantages over ablative techniques. No prior study has specifically evaluated outcomes of EMR in confirmed LGD in BE. This study aimed to assess the efficacy and safety of EMR for confirmed LGD.

Methods This retrospective multicenter study (2008–2023) included patients from three tertiary centers who underwent EMR for histologically confirmed LGD. Inclusion required LGD validated by two expert pathologists and confirmed on the resection specimen. The primary endpoint was absence of progression to HGD or adenocarcinoma. Secondary endpoints included eradication and recurrence rates of LGD and intestinal metaplasia, as well as procedural morbidity. Adjunctive therapies (RFA and/or APC) were allowed at the discretion of the endoscopist.

Results Fifty-two patients (mean age 62.9 ± 10.3 years; 77 % male) were included. Median Prague classification was C1M3, with visible nodules in two cases. EMR sessions per patient ranged from 1 to 5. Adjunctive treatment was applied in 46.2 % of patients (RFA: 10; APC: 10; both: 4). Initial LGD eradication was achieved in 100 % of patients. LGD recurred in 15.4 % of cases (8 patients) after a mean of 30.5 months; seven of these patients underwent endoscopic retreatment with successful eradication, resulting in a final overall eradication

rate of 98.1 % after a mean follow-up of 54 ± 22.3 months. The last patient's treatment began after the end of the study period. No progression to HGD or adenocarcinoma occurred. BE eradication was obtained in 65.4 % of patients, with recurrence in 11.8 %. Procedure-related morbidity was 1.9 % (one delayed bleeding episode), and delayed adverse events occurred in 15.4 % (9.6 % strictures, 5.8 % dysphagia), all resolving spontaneously or after endoscopic therapy.

Conclusions EMR appears to be a safe and effective treatment option for confirmed LGD in BE, achieving high initial and long-term eradication rates without malignant progression over a mean 4.5-year follow-up. These findings support EMR as a promising therapeutic and diagnostic strategy in selected patients, warranting further prospective validation.

Conflicts of Interest Dr Laurent Monino declares consulting fees from Boston scientific, Fujifilm and Cook, honoraria from Olympus.

References

- [1] Barret M, Pioche M, Terris B, Ponchon T, Cholet F, Zerbib F et al. Endoscopic radiofrequency ablation or surveillance in patients with Barrett's oesophagus with confirmed low-grade dysplasia: a multicentre randomised trial. *Gut*. juin 2021; 70 (6): 1014–22
- [2] Weusten BLAM, Bisschops R, Dinis-Ribeiro M, Di Pietro M, Pech O, Spaander MCW et al. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. déc 2023; 55 (12): 1124–46

PYP179 Real-life oncologic outcomes of endoscopic ablation for dysplastic Barrett's: data from a tertiary center

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DOI 10.1055/s-0046-1821119

Aims The radiofrequency ablation has been shown to be very effective for the treatment of flat neoplastic lesions in Barrett's oesophagus irrespective of histology. In particular, this has been shown to be associated with less disease progression (3.6 % vs. 16.3 %, P = 0.03) when compared with sham. [1] The aim of our study was to identify the frequency of patients with invisible or completely flat neoplasia, treatment modality used and ultimate outcome of these patients.

Methods This is a retrospective analysis of a prospectively collected data of the last 250 consecutive Barrett's neoplasia patients treated at a tertiary referral center for Barrett's endotherapy in the UK. The endoscopy, histology and clinical records were analysed to identify all patients with invisible (biopsy proven neoplasia) or flat (IIB) lesions. Data was collected on lesion morphology, histology, treatment modality (ablation vs endoscopic resection) and overall outcome was collected. Patients were broadly divided into two group 1 (Ablation only) vs group 2 (endoscopic resection).

Results We evaluated a total of 250 consecutive patients with Barrett's neoplasia treated in our centre. 87/250 (35 %) were found to be either flat IIB or with invisible / indistinct margins.

47/87 (54.02 %) underwent ablation without resection (group 1). 40/87 (45.97 %) underwent up-front resection (group 2). The median follow-up time was 1758 [1016; 2769] and 1185 [705; 1899] days for group 1 and 2, respectively.

Pre-intervention histology demonstrated High grade dysplasia (HGD) in 23/47 (48.93 %) and 29/40 (72.50 %) patient in group 1 and group 2, respectively.

In group 2(EMR); comparison of post-resection histology with pre-resection histology revealed a disease upgrade in 29/40 (72.5 %) patients.

11/40 patients in group 2 had LGD pre-resection; 5/11(45.5 %) upgraded to HGD and 3/11(27.3 %) upgraded to carcinoma after resection.

Similarly, 29/40 patients had pre-resection histology of HGD. After resection, 11/29 (38 %) were upgraded to cancer.

Metachronous lesions developed in 8/47 (10.81 %) and 2/40 (5.0 %) in group 1 and group 2, respectively. The difference became more significant when stratified by index histology as patients with HGD on index histology developed

more metachronous lesion (21.74%) when treated by ablation as compared to resection (6.89%).

Conclusions RFA remains a valid treatment option of flat (IIb) lesions with indistinct margins and invisible but biopsy proven Barrett's neoplasia but the risk of metachronous neoplasia is high in patients with index histology of HGD so they require very careful follow up if ablated.

The resection cohort revealed a significant upgrade in disease stage both in LGD and HGD cohort despite having flat lesions with no nodules.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP180 Junctional versus non-junctional Barrett's esophagus-derived adenocarcinoma: histopathological features and outcomes of Endoscopic Submucosal Dissection (ESD)

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DOI 10.1055/s-0046-1821120

Aims Barrett's esophagus (BE) has been recognized as a precursor to esophageal adenocarcinoma (EAC). BE lesions are frequently treated by Endoscopic Submucosal Dissection (ESD) to allow for adequate staging and as a first step in the treatment of BE lesions. Lesions at the gastroesophageal junction (GEJ) present clinical challenges due to their diverse morphology and varying malignant potential. Our objective was to distinguish the clinicopathologic features of GEJ lesions from non-GEJ lesions for effective risk stratification and treatment planning.

Methods We retrospectively analyzed 108 patients with target lesions originating from Barrett's esophagus (87 located in the GEJ region and 21 in the non-GEJ region) who underwent ESD. We assessed their clinicopathological features and clinical outcomes. Lesions were classified according to the Siewert classification, differentiating those with a maximal mucosal base ranging from -5 cm to +2 cm from those situated more than +5 cm above the GEJ. Chi-square tests were employed to assess the associations between lesion location and histology, submucosal invasion depth and morphology, as classified by the Paris classification.

Results GEJ lesions displayed a significantly different distribution of histological grades compared to non-GEJ lesions ($p < 0.001$), with high-grade dysplasia and adenocarcinoma more present at the GEJ. The depth of neoplastic submucosal invasion also varied significantly by location, with GEJ lesions showing higher rates of both superficial and deep submucosal cancer infiltration (pT1a, pT1b) ($p < 0.001$). Also morphological patterns differed substantially between groups ($p = 0.023$), with peJORative morphologies, particularly IIb and IIc components according to Paris classification, more commonly seen in GEJ lesions, while non-GEJ lesions exhibited a more varied distribution (Is-IIa according to Paris classification). Both groups showed no significant differences in ESD outcomes regarding procedural complications.

Conclusions Our analysis revealed that GEJ lesions have a distinctly more aggressive profile than non-GEJ lesions. Our preliminary data showed that GEJ lesions have a greater prevalence of peJORative morphologies, higher histological severity and deeper invasion. The significantly increased rates of high-grade dysplasia and adenocarcinoma at the GEJ strongly suggest that this region represents a biologically distinct and more vulnerable microenvironment, where neoplastic progression may accelerate or manifest at a more advanced stage. This heightened aggressiveness aligns with the unique exposure of the

junctional zone to mixed gastric and esophageal refluxate, chronic inflammation, and aberrant metaplastic remodeling. Overall, these findings underscore the intrinsic worrisome nature of GEJ lesions and highlight the importance of rigorous, multimodal assessment in managing junctional lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Let's make it complicated!

15/05/2026, 12:30–13:30

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PYP181 Beyond Timing: How Clinical Scenario Drives the Effectiveness of Urgent Colonoscopy in LGIB

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DOI 10.1055/s-0046-1821121

Aims Current ESGE guidelines recommend urgent colonoscopy only in selected patients with acute lower gastrointestinal bleeding (LGIB), based mainly on bleeding severity and likelihood of finding stigmata of recent hemorrhage. However, they do not clearly differentiate recommendations according to the underlying clinical scenario. Since LGIB is a highly heterogeneous condition, we aimed to evaluate whether the diagnostic and therapeutic effectiveness of urgent colonoscopy differs among distinct patient populations.

Methods We conducted a retrospective single-centre study in a tertiary referral hospital with 24/7 endoscopic availability. All urgent colonoscopies (< 24 hours from request) performed for acute LGIB between July 2018 and August 2025 were analysed. Procedures were classified as diagnostic if the bleeding source or stigmata of recent haemorrhage were directly identified, and as therapeutic if endoscopic hemostasis was performed. Patients were stratified into three clinical cohorts: [1] colon-naïve patients, [2] post-polypectomy bleeding, and [3] post-surgical bleeding. The primary outcome was in-hospital mortality. Secondary outcomes included diagnostic yield, therapeutic yield, and rebleeding.

Results Among 415 urgent colonoscopies, 224 patients undergoing colonoscopy within 24 hours for LGIB were included: 129 colon-naïve, 52 post-polypectomy, and 43 post-surgery. Overall diagnostic and therapeutic yields were 58% and 44%, respectively, but showed marked differences across cohorts. Diagnostic yield was significantly lower in colon-naïve patients (40%) compared with post-polypectomy (88%) and post-surgical patients (77%) ($p < 0.001$). Similarly, therapeutic yield (endoscopic hemostasis) was 21% in colon-naïve patients, versus 87% in post-polypectomy and 63% in post-surgical patients ($p < 0.001$).

On multivariable analysis, clinical scenario (population subgroup) was the strongest independent predictor of both diagnostic and therapeutic outcomes with odds ratio (OR) up to 24.5 for haemostasis in the post-polypectomy subgroup, and up to 6.28 in the post-surgery subgroup ($p < 0.001$), while age, sex, and quality of bowel preparation were not.

In-hospital mortality was 9.8%. A multivariable Cox proportional hazards survival analysis was performed, adjusting for age, sex, clinical scenario, and ASA class. In this model, neither diagnostic nor therapeutic endoscopic outcomes were significantly associated with mortality, whereas ASA class emerged as the only independent predictor of mortality with hazard ratio (HR) of 2.74 and 2.81 respectively, ($p = 0.01$).

Notably, rebleeding rates were similar across the three clinical cohorts ($p = 0.5$) and between patients on or off antithrombotic therapy ($p = 0.66$), with only transfusion requirement (61% vs 85%, $p = 0.001$) and prolonged hospitalisation (9 vs 20 days, $p = 0.01$) showing significant associations.

Conclusions Compared with previously published data on urgent colonoscopy in acute LGIB, our cohort showed markedly higher diagnostic and therapeutic yields even in the colon-naïve subgroup, further supporting the high effectiveness of urgent colonoscopy in our setting with 24/7 endoscopic availability. However, this effectiveness was not uniform across all patients and was strongly influenced by the underlying clinical scenario. In particular, patients with post-surgical bleeding and post-polypectomy had substantially higher diagnostic and therapeutic yields than colon-naïve patients. These results highlight a critical gap in current guidelines, which do not adequately differentiate among patient subgroups, and support the need for a more tailored, scenario-based approach when selecting candidates for urgent colonoscopy in acute LGIB. As for rebleeding events, no strong independent predictors were identified; the only observed associations — with transfusions and prolonged hospitalisation — likely reflect secondary consequences rather than causal factors [4]. Moreover, our findings indicate that short-term survival in acute LGIB is primarily driven by baseline patient comorbidity rather than by endoscopic outcomes, reinforcing the concept that patient-related factors outweigh procedural factors in determining prognosis, not only in randomised controlled trials but also in real-life clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sengupta N. et al. Management of Patients With Acute Lower Gastrointestinal Bleeding: An Updated ACG Guideline. *Am J Gastroenterol* 118: 208–231 2023
- [2] Chung W., Rich H., Wands J. A Predictive Model for the Diagnostic and Therapeutic Yield of Colonoscopy Performed for Lower Gastrointestinal Bleeding. *Journal of Clinical Gastroenterology* 56: 154–160 2022
- [3] Radaelli F. et al. Clinical management and patient outcomes of acute lower gastrointestinal bleeding. A multicenter, prospective, cohort study. *Dig Liver Dis* 53: 1141–1147 2021
- [4] Triantafyllou K. et al. Diagnosis and management of acute lower gastrointestinal bleeding: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 53: 850–868 2021

PYP182 Delayed Complications in Colorectal Endoscopic Submucosal Dissection: Risk Factors and the Role of Prophylactic Closure. A Multicenter Retrospective Cohort Study

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DOI 10.1055/s-0046-1821122

Aims Primary: to describe the incidence of delayed complications after CR-ESD (bleeding, perforation, and post-electrocoagulation syndrome [PECS]). Secondary: to characterise their timing and clinical impact; to identify associated risk factors; and to evaluate the effect of prophylactic defect closure.

Methods This retrospective cohort study used data from a prospective national registry of CR-ESDs performed in 28 Spanish centres (January 2013–September 2025) by 40 endoscopists. Eligible patients were aged > 18 years and underwent CR-ESD or attempted ESD for colorectal neoplasia. Exclusion criteria were incomplete records, technical variants (hybrid ESD, endoscopic intermuscular dissection [EID] or per-anal endoscopic myotomy [PAEM]), aborted procedures, immediate surgery after ESD, failed ESDs, and low-volume centres. Delayed complications were defined as clinically significant bleeding, PECS (pain/fever without intraprocedural perforation requiring > 1-day stay), or perforation confirmed radiologically occurring after completion of the procedure. Events not prolonging hospitalisation were not considered complications. Main data source was the Spanish National ESD Registry. Follow-up followed routine practice.

Univariable logistic regression assessed crude associations, and all clinically relevant variables entered multivariable model. The effect of prophylactic closure was evaluated using crude comparisons and propensity-score matching (PSM) to control for confounding. Analyses were two-sided with significance set at $p < 0.05$. Deterministic logical rules were used for imputation when values could be unequivocally deduced; otherwise, missing data were retained. No sample-size calculation was performed.

Results A total of 2,618 CR-ESDs were performed in 2,556 patients. After exclusions (179 hybrid ESDs, 28 EIDs, 38 PAEMs, 101 aborted procedures, 21 immediate surgeries, 133 incomplete records, 6 failed ESDs), 2,112 procedures were analysed. Intraprocedural perforations (267; 12.6%) were excluded from PECS and delayed perforation analyses.

The cohort had a mean age of 67.7 years; 59% were male; 88% were ASA II–III; 14% received antiplatelets and 10% anticoagulation. Median lesion size was 39 mm and fibrosis was present in 60%. Technical success was 95.5%, en-bloc resection 90.3%, and R0 resection 78.7%. Median hospital stay was 1 day.

Overall delayed complications occurred in 258 out of 2,112 cases (12.2%; CI95% 10.1–13.7). PECS occurred in 7.0% (CI95% 5.9–8.9) and delayed bleeding in 5.6% (CI95% 4.7–6.7), whereas delayed perforation was rare (1.4%; CI95% 0.9–2.0). The median (IQR) length of hospital stay was 3 (2–4) days for any delayed complication, 3 (2–5) days for PECS, 3 (1–5) days for bleeding, and 7 (6–11) days for perforation. Median time to bleeding was 3 days and was longer in anticoagulated patients (6 vs 2 days). All PECS and bleeding cases were managed non-surgically; 48% of delayed perforations required surgery.

Independent risk factors for overall delayed complications were anticoagulation, larger dissected area, and poor manoeuvrability. PECS was associated with larger area while left-sided location showed a protective effect. Delayed bleeding was strongly associated with anticoagulation and rectal location. Delayed perforation was linked to right-sided and flexural lesions.

Complete prophylactic closure was associated with a lower risk of overall delayed complications and bleeding in crude analyses (OR 0.6; CI95% 0.4–0.8 vs 0.4; CI95% 0.2–0.6). After adjustment using PSM, complete closure reduced the absolute risk of any delayed complication by 8.6% and of delayed bleeding by 5.7%. In anticoagulated patients, complete closure markedly reduced bleeding risk (absolute reduction ~17%; NNT ≈ 6).

Conclusions In this large multicentre cohort, delayed complications occurred in 12.2% of CR-ESDs, with PECS and bleeding being the most frequent, assuming a median increase of 2 days in the length of hospitalisation. Anticoagulation, lesion complexity (larger area or poor manoeuvrability), and specific anatomical locations emerged as key risk factors. Complete prophylactic closure was associated with a reduction in overall delayed complications and delayed bleeding, with a pronounced benefit in anticoagulated patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP183 Multimodal Endoscopic Management of a Refractory Rectovaginal Fistula After Neovagina Construction

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DOI 10.1055/s-0046-1821123

Abstract Text

A 47-year-old transgender woman developed a persistent rectovaginal fistula following neovagina construction. Colonoscopy identified a 5-mm fistulous tract near the dentate line. Initial management included argon plasma coagulation (APC) for edge debridement followed by OTS clip closure (Padlock clip, Aponos Medical Corp, Kingstone, New Hampshire). Due to recurrence, a second session was performed with additional debridement and placement of TTS clips. Because the fistula persisted despite both OTS and TTS clip attempts, we transitioned to endoscopic vacuum therapy (EVT). A handmade negative-pressure system was assembled using an adaptively crafted catheter wrapped in polyurethane material, enabling continuous suction within the fistulous cavity. EVT sessions were repeated with interval reassessment. After two catheter-based vacuum exchanges, the cavity demonstrated marked reduction, robust granulation tissue, progressive collapse of the fistulous tract, and ultimately complete closure. This case highlights EVT as an option rescue therapy for complex rectovaginal fistulas unresponsive to conventional endoscopic closure. A tailored, multimodal endoscopic approach can achieve complete healing while avoiding the need for more invasive surgical interventions [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cereatti F, Grassia R, Drago A, Conti CB, Donatelli G. Endoscopic management of gastrointestinal leaks and fistulae: What option do we have? *World J Gastroenterol* 2020; 26 (29): 4198–212. doi:10.3748/wjg.v26.i29.4198
- [2] Luo H, Gao Z, Lei X, Zhou J, Wang Z, Chen G, Qian B, Tang M, Tian Y. Comparison of endoscopic vacuum therapy with standard care for colorectal anastomotic leakage: a systematic review and meta-analysis. *Endoscopy* 2025. doi:10.1055/a-2627-3149
- [3] Medas F, Picciariello A, Genova F et al. Endoluminal vacuum therapy applied to rectovaginal fistulas: feasibility and outcomes in complex pelvic fistulation. *Tech Coloproctol* 2025; 29 (1): 77–85

PYP184V Treatment of rectovaginal and rectourethral fistulas with autologous abdominal adipose-derived cell injections

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DOI 10.1055/s-0046-1821124

Abstract Text

Refractory gastroenteric fistulas, whether post-surgical or post-inflammatory, remain a therapeutic challenge. Autologous activated adipose-derived cells (ADSCs) injection is emerging as a minimally invasive option to promote fistula closure. The aim of this report is to describe two cases treated with ADSCs and evaluate safety and preliminary efficacy. Case 1 involved a 64-year-old female patient with a rectovaginal fistula following resection of the sigmoid and proximal rectum for perforated diverticulitis. Case 2 involved an 80-year-old male patient with a rectourethral fistula in the context of post-radiotherapy rectal ulceration for prostate adenocarcinoma. In both patients, autologous adipose tissue was harvested, processed, and injected endoscopically into the fistula tract. At 2.5-month follow-up, both patients showed complete clinical and endoscopic healing without adverse events.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/53854f9f-da28-47ee-b1a0-e475782da7ae/Uploads/19978_Esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP185 Prophylactic Closure After High (> 75%) Circumferential Colorectal Endoscopic Submucosal Dissection: Impact on Stricture Formation

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DOI 10.1055/s-0046-1821125

Aims Extensive circumferential colorectal endoscopic submucosal dissection carries a high risk of stricture formation. While prophylactic closure reduces this risk, evidence in high circumferential resections (> 75%) remains limited. We evaluated the association between prophylactic closure and stricture formation in high circumferential colorectal ESD.

Methods Retrospective analysis 1,267 consecutive colorectal ESD from a single tertiary center was conducted. High circumferential resection (> 75% or complete circumferential) cases were identified. Primary outcome was stricture formation requiring dilatation. Secondary outcomes included perforation, delayed bleeding, and composite adverse events. Multivariable Firth logistic regression adjusted for lesion size, location (rectum vs colon), malignancy, and procedure duration.

Results 138 (10.9%) of lesions required > 75% circumferential resection. Prophylactic closure was performed in 40/138 (29.0%) cases using predominantly suture-based methods: OverStitch (n = 29, 72.5%), Hemoclips (n = 7, 17.5%), V-LOC (n = 4, 10.0%). En bloc resection was achieved in 137/138 (99.3%). Mean resection duration was significantly shorter in the closure group (118 vs 179 min, p < 0.05). Stricture rates increased with circumferential extent: 0/560 (< 50%), 0/569 (50–75%), and 10/138 (7.2%) in > 75% resections (p < 0.001 for trend). Among high circumferential cases, stricture occurred in 0/40 (0%) with closure vs 10/98 (10.2%) without closure (p = 0.036). After adjustment for lesion size (OR 1.019 per mm, 95% CI 1.006–1.032, p = 0.004), rectal location (OR 7.38, 95% CI 0.40–135), and malignancy (OR 0.62, 95% CI 0.15–2.48), closure showed a protective trend (adjusted OR 0.061, 95% CI 0.002–2.17, p = 0.125). Number needed to treat was 10 patients (95% CI 5–20). Stricture risk increased significantly with lesion size quartiles: Q1 (smallest) 2.6%, Q2 0%, Q3 6.1%, Q4 (largest) 20.6% (p = 0.007). The protective effect of closure was most pronounced in the largest quartile (0/7 vs 7/27, p = 0.165). Closure was associated with significantly shorter hospital stay (median 2 vs 3 days, mean 2.7 ± 1.42 vs 3.47 ± 1.63 days, p = 0.007). No delayed bleeding occurred in either group. Perforation occurred in 1/40 (2.5%) with closure vs 0/98 without (p = 0.29). Composite adverse events were numerically lower with closure: 1/40 (2.5%) vs 10/98 (10.2%), p = 0.176.

Conclusions Prophylactic closure achieved zero strictures versus 10.2% without closure and significantly shorter hospital stay in high circumferential colorectal ESD with a number needed to treat of 10. Our findings support routine consideration of prophylactic closure for extensive circumferential colorectal ESD, particularly for large lesions. Prospective multicenter studies with standardized protocols are warranted to validate our findings.

Conflicts of Interest Fatih Aslan has received grants and honoraria from Olympus.

PYP186 First-in-Human Clinical Application of a Next-Generation Robotic Gripper Enabling Traction and Closure in Colorectal ESD

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DOI 10.1055/s-0046-1821126

Aims Endoscopic submucosal dissection (ESD) poses considerable technical challenges and is frequently associated with lengthy procedure times. To improve procedural efficiency, we developed a robotic gripper capable of performing both tissue traction and defect closure. After demonstrating its utility in preclinical experiments, we carried out the first-in-human clinical trial to evaluate its feasibility and safety in colorectal ESD.

Methods From April through June 2025, we performed colorectal ESD with the robotic gripper in 23 consecutive patients at our institution. The primary outcomes assessed were total procedure time, dissection speed, and successful completion of defect closure. Secondary outcomes included the clip count needed for closure and any complications occurring after the procedure.

Results 23 patients with colorectal lesions (mean size, 43.6 ± 4.3 mm) underwent ESD using the robotic gripper. The mean procedure time was 42.8 ± 4.3 minutes, and the average dissection speed was 69.4 ± 18.1 mm²/min. Complete closure of the mucosal defect was achieved in all cases, requiring a mean of 6.3 ± 2.8 clips per lesion. No delayed bleeding or perforation was observed.

Conclusions This first-in-human evaluation of a robotic dual-function gripper for colorectal ESD showed the device to be feasible, safe, and effective, with clear benefits in traction and closure. These promising results warrant further assessment in larger, multicenter trials.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP187V “Endoscopic Transcecal Appendectomy of an Appendiceal Adenoma Using SutuArt and the Pathfinder Rigidizing Overtube: A Feasibility Case”

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DOI 10.1055/s-0046-1821127

Problem to solve Management of Lateral Spreading Tumors (LSTs) involving the appendiceal orifice is technically challenging. While Endoscopic Full-Thickness Resection (EFTR) is an option, deep appendiceal involvement sometimes necessitates appendectomy and is a technique with a significant rate of appendicitis. We present the case of a 63-year-old male with a recurrent 18x10mm homogeneous LST-G completely covering the appendiceal orifice. The patient, presenting with multiple comorbidities and a “hostile abdomen” due to prior surgeries, refused further surgical intervention. This scenario compelled us to explore a purely endoscopic transcecal appendectomy as a salvage therapy [1].

Innovation We describe a Transcecal Endoscopic Appendectomy adapting the technique recently described by Aslan et al. (2025). The primary innovation in this case is the strategic use of the *Pathfinder* (Neptune Medical) rigidizing overtube. Unlike previous reports, we utilized the Pathfinder to overcome marked cecal instability and to facilitate the repetitive insertion and removal of suturing needles. Additionally, we employed *SutuArt* (Olympus) for intraluminal traction of the appendix and planned muscular closure, combining standard ESD techniques with deep mesoappendix dissection to achieve a complete scarless appendectomy.

Results The lesion was initially circumscribed using ESD (DualKnife J). SutuArt was anchored to the lesion to provide traction into the colonic lumen, and two contralateral sutures were pre-placed in the muscular layer to allow an easy closure in later stages. Following cecal wall perforation, we proceeded with mesoappendix dissection using DualKnife J and IT Nano. The procedure was technically demanding due to marked scope instability (despite the rigidizing overtube) and the **unexpected appendix length (10 cm)**, which required extensive dissection. During this phase, appendicular artery bleeding occurred; **hemostasis was challenging as the abundant mesoappendix fat hindered the precise application of the Coagrasper**, though control was eventually achieved.

After complete inversion and resection of the specimen, the pre-placed muscular sutures had been accidentally cut during the resection. Consequently, mechanical closure was achieved using an *OTSC* (Ovesco) clip, confirming no air

leakage. The total procedure time was 6 hours. The patient was discharged on day 4 with oral antibiotics and no complications.

Conclusions Endoscopic transcecal appendectomy is a feasible procedure for complex appendiceal lesions in patients who are unfit for or refuse surgery. The use of a rigidizing overtube (*Pathfinder*) is highly recommended to stabilize the cecum and manage accessories. However, this technique is extremely labor-intensive and time-consuming (6h) compared to laparoscopic surgery. Therefore, while feasible, it should be reserved for highly selected cases, acknowledging that surgical appendectomy remains the faster and likely safer standard of care.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/75eb084b-1cf8-4af7-996c-12ec4e33150c/Uploads/19990_final_video%20appendectomy%20sutuart%20and%20pathfinder.mp4

Conflicts of Interest Advisory fees from Olympus Europa

References

[1] Aslan F, Ozer S, Saka B, Oguz BH. Transcecal endoscopic appendectomy and endoscopic submucosal dissection with hand-suturing-assisted traction and closure technique. *VideoGIE*. 2025; 10 (5): 270–276. doi:10.1016/j.vgie.2025.01.005 PMID: 40255626 PMID: PMC12009091

PYP188 The resection ability of low-power pure-cut hot snare polypectomy for nonpedunculated colorectal polyps smaller than 10 mm: A single-center prospective study

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DOI 10.1055/s-0046-1821128

Aims Although colorectal polyps smaller than 10 mm are usually removed by cold snare polypectomy (CSP), small polyps sometimes include high-grade dysplasia or intramucosal carcinoma, which require endoscopic resection with electrocautery including hot snare polypectomy (HSP) and endoscopic mucosal resection (EMR), because they have the potential to invade the muscularis mucosa. However, endoscopic resection with electrocautery carries a non-negligible risk of adverse events, including bleeding and perforation, due to deep thermal injury. Thus, low-power pure-cut hot snare polypectomy (LPPC-HSP) has been developed as a minimally invasive technique with low power, low voltage, and no coagulation current [1, 2]. This method uses pure-cut current and reduces the power of electrocautery, expecting less deep thermal damage compared with conventional HSP with blend or coagulation current, resulting in a lower risk of perforation and bleeding. To determine whether LPPC-HSP is appropriate for lesions such as high-grade dysplasia and intramucosal carcinoma that can extend into the muscularis mucosa, it is necessary to examine the actual resection depth of LPPC-HSP; however, its actual resection depth has not been evaluated. This study aimed to investigate the resection ability of LPPC-HSP for small colorectal polyps.

Methods This single-arm, prospective, observational study included patients who underwent LPPC-HSP for nonpedunculated colorectal polyps smaller than 10 mm. For LPPC-HSP, a 10- or 15-mm oval snare with a wire diameter of 0.30 mm (SnareMaster Plus S Olympus Medical Co.) was used without submucosal injection, and the polyps were resected with a low-power pure-cut current (Autocut; VIO300D: effect, 1 [10 W]; VIO3: effect, 0.4). The primary outcome was the rate of sufficient vertical R0 resection (SVR0) [3], defined as R0 resection that included a sufficient submucosal layer beneath the whole lesion. Based on previous studies of EMR for small colorectal polyps, which reported the R0 resection rates of EMR ranging from 62 % to 87.3 % and the containing submucosal tissue rate of 92 %, the expected rate of SVR0 was set at 70 %. With a non-inferiority margin of 10 %, the pre-defined threshold rate was set at 60 %. The secondary outcomes were the en bloc resection rate, the incidence of adverse events, and the pathological evaluation including the R0 resection rate, the proportion of specimens containing muscularis mucosae and the submucosa, and the thickness of the submucosa.

Results Finally, this study included 95 patients with 150 lesions. En bloc resection was achieved in all cases. R0 resection was achieved in 124 lesions (83%). All specimens contained the muscularis mucosa, and the submucosa tissue was included in 132 lesions (88%). The median maximum submucosal layer thickness was 1331 μ m (IQR, 736–2044). The primary outcome, the SVR0 rate, was 115 lesions (76.7%; 90% confidence interval [90% CI], 70.3–82.2%). The lower limit of the 90% CI exceeded the pre-defined threshold of 60%, thereby meeting the primary endpoint. No bleeding, perforation, or other serious adverse events occurred.

Conclusions The vertical resection ability of LPPC-HSP was acceptable. LPPC-HSP may be applicable to colorectal polyps smaller than 10 mm that have potential malignancy, similar to conventional resection methods with electrocautery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Miyazaki K, Nakayama A, Sasaki M et al. Resectability of Small Duodenal Tumors: A Randomized Controlled Trial Comparing Underwater Endoscopic Mucosal Resection and Cold Snare Polypectomy. *Am J Gastroenterol* 2024; 119 (5): 856–863
- [2] Imai K, Hotta K, Ito S et al. A novel low-power pure-cut hot snare polypectomy for 10–14 mm colorectal adenomas: An ex vivo and a clinical prospective feasibility study (SHARP trial). *J Gastroenterol Hepatol* 2024; 39 (4): 667–73
- [3] Kimura H, Oi M, Imai K et al. Safety and efficacy of low-power pure-cut hot snare polypectomy for small nonpedunculated colorectal polyps compared with conventional resection methods: A propensity score matching analysis. *DEN Open* 2024; 5 (1): e378

PYP189 Clinical outcomes of hybrid dissection techniques for large colorectal lesions: high R0 resection rate with acceptable safety profile

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DOI 10.1055/s-0046-1821129

Aims Hybrid dissection techniques combine elements of ESD with snare resection, thus improving safety and efficiency for large or technically challenging colorectal lesions. As literature data is limited, our aim is to show the clinical outcomes of these hybrid techniques.

Methods We retrospectively analyzed 48 consecutive colorectal lesions resected using hybrid techniques. Lesion characteristics, technical outcomes, histology, procedure duration, and adverse events were recorded. Hybrid ESD was defined as circumferential incision with partial submucosal dissection followed by en-bloc snare resection; hybrid EMR involved partial dissection with piecemeal snare resection.

Results Resected lesions had a median size of 29 mm (7–70 mm). Hybrid ESD was performed in 27 cases (56.3%), achieving en-bloc resection. Overall, complete R0 resection was obtained in 44/48 lesions (91.7%). Histology showed high-grade dysplasia in 22 lesions (45.8%) and adenocarcinoma in 10 lesions (20.8%). The procedures were mostly performed under conscious sedation, median time for resection was 45 $\pm$ 22 minutes. Adverse events were seen in 8 cases (16.7%) mainly bleedings, but also 3 cases of perforation – all managed endoscopically.

Conclusions Hybrid dissection techniques achieved high en-bloc and R0 resection rates for large colorectal lesions. These procedures are relatively quick

and show a low complication rate (fully manageable by endoscopy). These findings support hybrid ESD/EMR as effective and safe for selected colorectal neoplastic lesions in clinical practice

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP190 Specimen resection depth of underwater endoscopic mucosal resection versus endoscopic submucosal dissection for large, non-pedunculated colonic polyps

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DOI 10.1055/s-0046-1821130

Aims Underwater endoscopic mucosal resection (UEMR) is an emerging technique for the management of large, benign colonic polyps, with higher en bloc and R0 resection rates and shorter procedure time compared to conventional EMR. Its role in the management of polyps suspicious for submucosal invasion is yet to be defined. Few studies have investigated the depth of resection with UEMR, with inconsistent results when compared to conventional EMR. No studies have compared UEMR with endoscopic submucosal dissection (ESD). We aimed to compare the resection depth of UEMR and ESD for large (20–30mm) non-pedunculated colonic polyps.

Methods We performed a retrospective cohort study at a single UK tertiary referral centre from 2015 to 2024. All en bloc resections by UEMR or ESD of 20–30mm colonic polyps were included. Pedunculated or semi-pedunculated polyps, recurrent polyps and patients with inflammatory bowel disease were excluded. Histopathological samples were retrospectively reviewed, with measurement of maximum and minimum submucosal (SM) resection depths, measured from the muscularis mucosae. Primary outcome was the depth of SM in the resected specimen. Secondary outcomes included R0 resection rate, vertical margin (VM) positivity (defined as <0.1mm) in cases of adenocarcinoma, and rates of deep mural injury (DMI).

Results 29 UEMR and 27 ESD resections were identified. Median lesion diameter was similar between the two groups (22 vs 25mm). Lesions resected by UEMR were more commonly protruding (69% vs 26%) and in the right colon (93% vs 48%), with ESD resections more commonly flat lesions in the left colon. Median maximum SM was significantly higher with UEMR (4.2 vs 1.75mm; $p < 0.001$). There was no significant difference in median minimum SM depth (0.4 vs 0.5mm). Median maximum SM depth was significantly higher with UEMR for both protruding (5.5 vs 2.25mm; $p = 0.015$) and flat lesions (2.3 vs 1.5mm; $p = 0.009$). 20/29 UEMR and 27/27 ESD specimens were pinned. Comparing pinned vs unpinned UEMR specimens, there was no significant difference in median maximum SM depth (3.5 vs 5.5mm; $p = 0.22$). There was no significant difference in R0 resection rates between UEMR and ESD (76% vs 93%; $p = 0.15$). One T1b adenocarcinoma was resected by UEMR, with positive VM. Three T1a adenocarcinomas were resected by ESD, all with negative VM. Three T1b adenocarcinomas were resected by ESD, 1/3 with positive VM. DMI (type III) was observed in one UEMR resection. There were no perforations in either group.

Conclusions In our study, en bloc UEMR achieves significantly greater maximum SM depth than ESD in both flat and protruding colonic polyps 20–30mm in diameter. R0 resection and complication rates were similar between techniques. Prospective comparative studies are needed to define the role of UEMR in managing colonic lesions suspicious for superficial submucosal invasion.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP191 Predictors of Difficult Biliary Stone Extraction: A Large Real-Life Analysis and Development of the D-ERCP Score

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DOI 10.1055/s-0046-1821131

Aims Difficult extraction of common bile duct (CBD) stones remains a major determinant of ERCP safety, duration, and resource use. Although several factors have been proposed, robust real-life predictors applicable across centers are limited. This study aimed to identify simple, universally accessible radiologic and endoscopic parameters associated with difficult CBD stone extraction and to derive a practical predictive score.

Methods All ERCPs performed for confirmed choledocholithiasis between 2016 and 2024 were retrospectively reviewed. Difficult extraction was defined as incomplete duct clearance during index ERCP, the need for mechanical lithotripsy, or requirement for repeat ERCP. Predictors included pre-procedural imaging findings (CBD diameter and stone burden on US/CT/MRI) and endoscopic parameters (stone size and number at cholangiography, papillary morphology including peri-/intradiverticular papilla, and early difficult-cannulation indicators such as pancreatic duct injection).

Results Among 773 patients, 224 (29.0%) experienced difficult extraction. Stone size ≥ 15 mm was the strongest predictor (OR 4.6), followed by stone burden ≥ 3 stones (OR 1.7) and CBD dilation ≥ 12 mm (OR 1.6). Papillary anatomic difficulty (distorted or diverticular papilla) and early pancreatic duct injection markedly increased risk (OR 3.0). The strength and consistency of these predictors aligned with international series. Based on the most robust variables, a simple D-ERCP Score (0–6 points) was developed:

- Stone ≥ 15 mm: +2
- ≥ 3 stones: +1
- CBD ≥ 12 mm: +1
- Difficult-cannulation indicator: +2

Risk of difficult extraction increased stepwise: 7% (0–1 points), 28% (2–3 points), and 64% (≥ 4 points).

Conclusions Nearly one-third of CBD stone extractions were difficult. Four routinely obtainable parameters—stone size, stone burden, duct dilation, and early difficult-cannulation signs—consistently predicted technical complexity. The D-ERCP Score, derived from a large real-world cohort, provides a practical, universally applicable tool to anticipate difficult extractions, optimize procedural planning, and improve the safety and efficiency of ERCP in routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP192 CBD stent after ERC for CBD Stones in patients who have gall stones: “To put or not to put, that is the question”!

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DOI 10.1055/s-0046-1821132

Aims To assess the necessity to placed CBD stents after stone extraction in patients with co existent gall stones.

Methods Background: Whether CBD stents should be routinely placed following ductal clearance in patients who also have gallstones remains controversial. Our unit follows a uniform protocol of placing a 7Fr plastic double-pigtail (DPT) stent in all such patients after stone extraction. Cholecystectomy is subsequently performed either the same day, after 24 hours (most common), within one week, or later based on patient preference. Stents are removed four weeks after cholecystectomy with mandatory fluoroscopic assessment and CBD clearance. This retrospective analysis aimed to determine whether this routine stenting protocol is justified.

Methods: All patients who underwent ERC for CBD stones between 2021 and 2024 were included. Patients with CBD stones on any imaging modality and co-existent gallstones were analyzed. Standard ERC techniques—including sphincterotomy, large-balloon sphincteroplasty, and laser lithotripsy—were used for stone extraction. A 7Fr DPT stent was routinely placed post-extraction; in Type I Mirizzi's syndrome, a 10Fr stent was used due to frequent cholangitis. Cholecystectomy timing varied per protocol. Stent removal four weeks post-surgery included fluoroscopy to assess migration, extraction of retained stents, and balloon or basket sweeps to document residual stones. The primary outcomes were spontaneous distal migration of stents and presence of stones at stent removal. Subgroup analysis examined single versus multiple CBD stones and Mirizzi's syndrome.

Results Of 1,363 ERCs for stone disease, 1,162 patients (85.3%) had both CBD stones and gallstones. Stents were placed in all 1,162 cases. A total of 1,044 patients (89.8%) returned for stent removal; 118 (10.2%) were lost to follow-up. Spontaneous stent migration occurred in 209 patients (20.1%), while 835 (79.9%) had retained stents. Among those with retained stents, 149 patients (17.8%) had stones detected during removal.

Subgroup analysis (n = 835):

- Single stone at index ERC: 482 patients (57.7%); stones at removal 39 (8.1%).
- Multiple stones at index ERC: 274 patients (32.8%); stones at removal 67 (24.5%).
- Mirizzi's syndrome: 79 patients (9.5%); stones at removal 42 (53.1%).

Discussion This large retrospective series demonstrates a substantial risk of residual or recurrent CBD stones after cholecystectomy in patients who initially present with CBD stones and gallstones. The likelihood varies significantly with clinical scenario: patients with a single CBD stone had the lowest risk, while those with multiple stones had nearly a quarter incidence of residual stones. The highest risk occurred in Mirizzi's syndrome, where over half had stones at stent removal. This may be explained by surgical difficulty and frequent failure to extract deeply impacted stones, particularly in centers without routine operative cholangiography or fluoroscopic guidance.

The presence of a dilated CBD that initially allowed stone migration likely persists until after surgery; manipulation of the gallbladder during cholecystectomy can precipitate additional stones into the CBD. Routine stenting ensures unobstructed drainage, facilitates safe interval surgery, and provides an opportunity for definitive duct clearance at the time of stent removal. Double-pigtail stents are preferred due to a tendency for distal rather than proximal migration, minimizing the need for complex retrieval.

Conclusions Given the significant rate of stones detected during planned stent removal—ranging from 8% in single-stone cases to over 50% in Mirizzi's syndrome—routine placement of a CBD stent following ERC appears justified in

patients with gallstones. DPT stents provide higher safety against proximal migration and high spontaneous distal migration, and systematic duct clearance at stent removal is essential to prevent post-cholecystectomy cholangitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP193 Endoscopic Management of Difficult CBD Stones in the Era of Cholangioscopy and Laser Lithotripsy—Do We Really Need Them in Every Case?

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DOI 10.1055/s-0046-1821133

Aims To analyze a large series of CBD stones with emphasis on techniques that can be used in difficult stones effectively and how often do we need to resort to cholangioscopy and laser or EHL.

Methods Background: Endoscopic retrograde cholangiopancreatography (ERCP) remains the cornerstone intervention for common bile duct (CBD) stone disease. With the advent of cholangioscopy-guided lithotripsy and laser fragmentation technologies, their increasing availability has prompted debate regarding their necessity in routine practice. This study analyses outcomes from a large series of 3000 biliary ERCPs, evaluating the true requirement for advanced modalities, with a focus on case distribution, anatomical challenges, and treatment success using standard versus advanced techniques.

Methods: A retrospective evaluation was conducted on 3000 consecutive biliary ERCP procedures. Cases were classified into stone disease (n = 2410) and other biliary indications (n = 590). Difficult stones were those, that were not amenable to simple balloon or basket extraction and required additional procedures for removal. This included the standard defined criteria of stone size more than 15mm, stone duct ratio > 1, anatomical variations and varied shape of the stones. Procedural outcomes, modalities used, and factors influencing technique selection were analysed. Data are presented as descriptive statistics, with tables included in text format.

Results Of 3000 ERCPs, 2410 (80.3 %) were performed for stone disease and 590 (19.7 %) for other biliary conditions. Among stone cases, 1868 (77.5 %) were considered easy stones, successfully managed with traditional extraction techniques. A total of 532 cases (22.1 %) were classified as difficult stones.

Summary Of Cases: Category — Number — Percentage

Total ERCP procedures — 3000 (100 %), Stone disease — 2410 (80.3 %), Other biliary disease — 590 (19.7 %), Easy stone cases — 1868 (77.5 %), Difficult stone cases — 532 (22.1 %), Non-calcified stones retrieved with balloon/basket — 118 (22.2 %), Anatomical abnormalities — 79 (14.8 %), Distal CBD narrowing — 29 (5.5 %), Impacted stones requiring cholangioscopy/laser — 10 (1.9 %)

Of the 532 difficult stones, non-calcified stones were 118 (22.2 %), all successfully extracted using balloon or basket. Anatomical abnormalities- 79 cases (14.8 %), necessitating large balloon sphincteroplasty.

Breakdown of Anatomical Abnormalities (n = 79), Duodenal deformity — 50 (63.3 %), Pouch formation above papilla — 20 (25.3 %), Papillary fibrosis — 9 (11.4 %)

Distal CBD narrowing -29 cases (5.5 %). True narrowing — 9 (31 %), 20 (69 %) involved faceted or square-shaped stones with normal distal duct calibre.

Distal CBD Narrowing Details (n = 29), True distal CBD narrowing — 9 (31 %), Faceted/square stones with normal CBD — 20 (69 %)

Mechanical lithotripsy was required in 29 cases (5.5 %), predominantly in those with distal narrowing or large, faceted stones. Only 10 cases (1.9 % of difficult stones; <0.5 % of all ERCPs) required cholangioscopy and laser lithotripsy due to severely impacted stones where no space was available for balloon or basket manipulation.

Treatment Modalities for Difficult Cases (n = 532), Traditional balloon/basket extraction — 118 (22.2 %), Large balloon sphincteroplasty — 79 (14.8 %), Mechanical lithotripsy — 29 (5.5 %), Cholangioscopy with laser lithotripsy — 10 (1.9 %)

Conclusions This analysis demonstrates that the majority of difficult CBD stones, can be effectively managed using conventional or standard advanced endoscopic techniques such as balloon/basket extraction, large balloon sphincteroplasty, or mechanical lithotripsy. These findings support a stratified, anatomy- and stone-based approach rather than universal deployment of cholangioscopic laser systems in all ERCP units.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP194 Safety and efficacy of Electrohydraulic Lithotripsy for difficult bile duct stones in patients receiving Monitor Anesthesia Care: data from a tertiary center

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DOI 10.1055/s-0046-1821134

Aims Electrohydraulic lithotripsy (EHL) via cholangioscopy is a complex and prolonged endoscopic technique, compared with routine ERCP, carrying a higher risk of aspiration due to continuous water irrigation of the bile duct. It may be performed under general anesthesia with endotracheal intubation or under monitored anesthesia care (MAC). The aim of this study was to evaluate the safety and efficacy of EHL in relation to the afore-mentioned types of sedation.

Methods We retrospectively reviewed all EHL sessions performed in a single tertiary center between 01/01/2023 and 24/06/2025 by an experienced endoscopist. Patients were classified into two groups, based upon on pre-procedure anesthesiology assessment. The first group consisted of high risk patients (ASA>III, sleep apnea, BMI>35, Mallampati IV/difficult airway) who underwent general anesthesia while the second group included patients without increased anesthetic risk who underwent MAC.

Results Over a three years, period, 80 cholangioscopies were performed, including 40 EHL sessions in 33 patients (73 %, female n = 24), with a mean age of 69 ± 21 years. General anesthesia was used in 22 % (n = 9) and MAC in 78 % (n = 31) of the cases. The mean procedure time was 66.6 min (range 40 to 129 min) and the mean fluoroscopy time was 5.22 min (range 0.18 -12.1 min). Procedure duration did not differ significantly between the two groups (70.1 ± 15.5 min general anesthesia vs. 65.8 ± 19.5 min MAC, p = 0.59). Successful completion of ERCP was achieved in 97 % (32/33) patients, requiring a mean number of 1.3 sessions per patient (range 1 – 3). In 82 % of patients (n = 27) one EHL session was required, in 15 % (n = 5) two sessions and in 3 % (n = 1) > 3 sessions. No immediate complications (aspiration, cardiopulmonary event) occurred in patients that underwent MAC.

Conclusions Electrohydraulic lithotripsy via cholangioscopy appears to be both safe and effective when performed under MAC in a well-organized center with expertise in ERCP and Cholangioscopy. MAC represents a feasible alternative to general anesthesia for appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP195 Comparison of endoscopic ultrasound-guided treatment and balloon-enteroscopy-assisted endoscopic retrograde cholangiopancreatography for large bile duct stone removal in patients with surgically altered anatomy: A multi-center study

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DOI 10.1055/s-0046-1821135

Aims Large bile duct stone removal in patients with surgically altered anatomy (SAA) is technically challenging. Although balloon-enteroscopy-assisted endoscopic retrograde cholangiopancreatography (BE-ERCP) has been widely adopted, endoscopic ultrasound-guided treatment (EUS-T) may achieve higher stone removal rates owing to improved device accessibility after anastomosis creation. This multicenter retrospective study aimed to compare the clinical outcomes of EUS-T and BE-ERCP for large bile duct stones in patients with SAA.

Methods Patients with SAA who underwent EUS-T or BE-ERCP for large bile duct stones (≥ 12 mm) between January 2016 and February 2025 were included. The primary outcome was the complete stone removal rate. Secondary outcomes included the number of sessions, procedure time, and adverse events. Propensity score matching was applied to adjust for baseline differences between groups (► **Table 1**).

► Table 1			
	EUS-T (n = 21)	BE-ERCP (n = 21)	P-value
Age, mean ($\pm$ SD), years	78.6 $\pm$ 9.1	79.0 $\pm$ 8.1	.369
Female:Male, n (%)	8:13	8:13	1.000
ASA-PS ≥ 3	1 (4.7)	2 (9.5)	.604
Etiology of surgery, n (%)			.753
Malignant	8 (38.1)	9 (42.9)	
Benign	13 (61.9)	12 (57.1)	
Surgical reconstruction, n (%)			.081
Billroth type 2	0 (0)	4 (19.0)	
Roux-en-Y	16 (76.2)	11 (52.4)	
Others	5 (23.8)	6 (28.6)	
Hepaticojejunostomy, n (%)	8 (38.1)	7 (33.3)	.747
Time from surgery to procedures, years, mean ($\pm$ SD)	18.8 $\pm$ 13.5	19.4 $\pm$ 18.2	.232
Stone diameter, mean ($\pm$ SD)	14.7 $\pm$ 3.2	14.4 $\pm$ 2.8	.581

► **Table 1**

	EUS-T (n = 21)	BE-ERCP (n = 21)	P-value
The number of stone, mean ($\pm$ SD)	2.3 $\pm$ 2.1	2.0 $\pm$ 1.1	.172
Stone location, n (%)			.572
Common bile duct	15 (71.4)	15 (71.4)	
Left intrahepatic duct	5 (23.8)	5 (23.8)	
Right intrahepatic duct	0 (0)	1 (4.8)	
Left and right intrahepatic duct	1 (4.8)	0 (0)	
Complete stone removal, n (%)	19 (90.5)	13 (61.9)	.030*
Complete stone removal at the first procedure time, n (%)	6 (28.6)	10 (47.6)	.204
Total number of sessions, mean ($\pm$ SD)	2.1 $\pm$ 1.1	1.2 $\pm$ 0.4	<.001*
Total procedure time, mean ($\pm$ SD) min	135.1 $\pm$ 94.7	92.4 $\pm$ 39.9	<.001*
Mean procedure time, mean ($\pm$ SD) min	59.8 $\pm$ 27.1	78.9 $\pm$ 30.2	.593
AE, n (%)	2 (9.5)	1 (4.8)	.549

Results In total, 22 EUS-T and 87 BE-ERCP procedures were analyzed. After matching, the complete stone removal rate was significantly higher in the EUS-T group than in the BE-ERCP group (90.5% vs. 61.9%, $P = .030$), despite a greater number of sessions (2.1 vs. 1.2, $P < .001$). Mean procedure times and adverse event rates were comparable. Cumulative success significantly improved up to the third session in EUS-T (first session, 27%; third, 86) and the second in BE-ERCP (first, 46%; second, 69%). Severe adverse events occurred only in the BE-ERCP group.

Conclusions EUS-T achieved a higher complete stone removal rate than BE-ERCP without increased risk, suggesting it may be a viable first-line treatment for large bile duct stones in patients with SAA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP196 Forward-viewing endoscopy with cap-fitting versus side-viewing duodenoscope for ERCP in Billroth II gastrectomy: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1821136

Aims To compare the efficacy and safety of cap-fitted forward-viewing endoscopy versus side-viewing duodenoscopy for ERCP in patients with prior Billroth II gastrectomy.

Methods A systematic-review of PubMed, Scopus, Embase and Cochrane Library was performed to include randomized trials and observational studies evaluating ERCP in Billroth II anatomy comparing cap-fitted forward-viewing endoscopes with duodenoscopes. data extraction. The restricted estimation likelihood random-effects was applied to pool studies effects as risk ratios (RR).

Statistical significance was considered as $p < 0.05$. Outcomes were pooled using both patients and procedures as the units of analysis whenever data allowed [1–7].

Results Seven studies met the inclusion criteria, comprising 433 patients and 516 ERCP procedures. Across all efficacy outcomes, no statistically significant differences were identified between cap-fitted forward-viewing endoscopy and side-viewing duodenoscopy. Afferent limb intubation rates were virtually identical (RR 1.00; 95% CI 0.97–1.04), and cannulation success likewise showed similar performance between techniques (RR 0.96; 95% CI 0.80–1.10). Clinical success rates were also comparable (RR 1.02; 95% CI 0.87–1.20).

Safety outcomes demonstrated comparable overall adverse event profiles between groups. However, relevant non-significant trends were consistently observed. Forward-viewing endoscopy with cap showed a trend toward higher post-ERCP pancreatitis (RR 2.23; 95% CI 0.66–7.54). Conversely, a trend toward lower perforation rates was noted with cap use (RR 0.52; 95% CI 0.09–3.08), in line with reports suggesting that cap-assisted techniques may provide improved visualization and safer advancement in altered anatomy. All pooled analyses exhibited minimal heterogeneity ($I^2 = 0\%$), reinforcing the consistency of results across studies.

Conclusions This is the first meta-analysis to directly compare cap-fitted forward-viewing endoscopy and side-viewing duodenoscopy for ERCP in patients with Billroth II gastrectomy. Our findings demonstrate that both techniques offer comparable overall efficacy and safety. Although no statistically significant differences were identified, consistent trends were observed: the cap-fitted approach showed a tendency toward higher rates of post-ERCP pancreatitis, whereas perforation appeared to be less frequent. These results highlight a more nuanced risk–benefit profile that may support individualized technique selection based on patient anatomy, procedural objectives, and operator expertise. The consistent directionality of these trends reinforces the need for high-quality prospective studies to clarify true risk differences and refine endoscopy selection algorithms in altered anatomy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zhu Y, Liu S, Liang S et al. Retrospective analysis of ERCP for diagnosis and treatment after Billroth II subtotal gastrectomy. *Chinese Journal of Digestive Endoscopy* 2020; 37(11):794–798. doi:10.3760/cma.j.cn321463-20191010-00678
- [2] Marques de Sá I, Chaves CB, Correia de Sousa J, Fernandes J, Araújo T, Canena J, Lopes L. Side-Viewing Duodenoscopy versus Forward-Viewing Gastroscopy for Endoscopic Retrograde Cholangiopancreatography in Billroth II Gastrectomy Patients. *GE Port J Gastroenterol.* 2022; 30 (4): 267–274. doi:10.1159/000524262 PMID: 37767310 PMID: PMC10521316
- [3] Fortunati F, Monino L, Deprez P, Piessevaux H, Moreels T. Endoscopic retrograde cholangiopancreatography in patients with different types of total and partial gastrectomy. *Acta Gastroenterol Belg* 2025; 88 (1): 23–30. doi:10.51821/88.1.13779
- [4] Wang F, Xu B, Li Q et al. Endoscopic retrograde cholangiopancreatography in patients with surgically altered anatomy: One single center's experience. *Medicine (Baltimore)* 2016; 95 (52): e5743. doi:10.1097/MD.0000000000005743
- [5] Kim SB, Kim KH, Kim TN. Comparison of endoscopic retrograde cholangiopancreatography outcomes between cap-fitted forward and side viewing endoscopes in patients with Billroth II anastomosis. *BMC Gastroenterol.* 2023; 23 (1): 115. doi:10.1186/s12876-023-02701-x PMID: 37024780 PMID: PMC10080899
- [6] Tuyet TTA, Thai NV, Thinh NT, Binh MT. Practical application of the modification in endoscopic retrograde cholangiopancreatography treated common bile duct stones in patients with Billroth II gastroenterostomy in Vietnam. *Ther Adv Gastrointest Endosc.* 2024; 17:26317745241251713. doi:10.1177/26317745241251713 PMID: 38745753 PMID: PMC11092305
- [7] Lee KH, Yim GH, Han J, Jeong HT. Clinical outcomes of endoscopic retrograde cholangiopancreatography after Billroth II anastomosis: a comparison of gastroscope and duodenoscope. *BMC Gastroenterol.* 2025; 25 (1): 373. doi:10.1186/s12876-025-03973-1 PMID: 40375138 PMID: PMC12079895

PYP197 Can Ultrasound Alone Guide ERCP? A Large Real-Life Analysis in Clinically Suggestive Choledocholithiasis

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DOI 10.1055/s-0046-1821137

Aims In many healthcare systems, transabdominal ultrasound (US) is still the only morphologic evaluation performed before ERCP, despite its uncertain stand-alone diagnostic value. In settings where access to further imaging may delay care, determining when US alone is sufficient becomes clinically relevant. Whether US can independently justify ERCP in clinically and biochemically suggestive choledocholithiasis remains unclear. We aimed to determine the real-world accuracy of US as the sole pre-ERCP imaging tool and to identify actionable ultrasound criteria that can safely streamline the diagnostic pathway.

Methods All ERCPs performed for suspected CBD stones between 2016–2024 were retrospectively analyzed. Eligible patients had an evocative clinical presentation, a cholestatic profile, and an interpretable pre-ERCP US. US was considered positive when stones were explicitly described; CBD diameter was recorded. The reference standard was cholangiographic stone visualization, stone retrieval, or confirmed complete duct clearance. Diagnostic accuracy parameters were calculated, and CBD diameter cut-offs were evaluated.

Results Among the 1,092 ERCPs performed for suspected CBD stones during the study period, 837 procedures in 515 patients fulfilled inclusion criteria. Choledocholithiasis was confirmed in 510 patients (99.0%). US identified stones in 74.0%. Direct stone visualization yielded a sensitivity of 73.7% and a positive predictive value of 99.1%. No true negative case was observed, resulting in a specificity and negative predictive value of 0%. In the subgroup with measurable CBD diameter ($n = 421$), a threshold of 8 mm achieved a sensitivity of 94.7% and a positive predictive value of 98.7%, clearly outperforming direct stone detection.

Conclusions In clinically and biologically suggestive choledocholithiasis, US used as the sole imaging modality consistently confirmed—but never excluded—the diagnosis. A positive US—either via direct stone detection or a $\text{CBD} \geq 8$ mm—strongly supported proceeding directly to ERCP, enabling timely therapeutic management while avoiding delays linked to additional imaging. In contrast, a negative US remained unsafe and systematically required complementary imaging. These data refine the practical role of ultrasound in the diagnostic algorithm and provide robust real-life evidence relevant to everyday endoscopy practice, particularly in resource-limited settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP198 Endoscopic ultrasound and endoscopic retrograde cholangiopancreatography for bile duct stones – avoiding the avoidable

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DOI 10.1055/s-0046-1821138

Aims The main objective was to assess the rate of EUS choledocholithiasis confirmation in patients with clinical suspicion of CBD stones and to identify predictors for choledocholithiasis. The secondary objective was to develop and

internally validate a simplified clinical prediction score to refine risk stratification in patients with high-risk of choledocholithiasis according to the ESGE criteria [1–3].

Methods We performed a retrospective study including patients who underwent EUS for suspected choledocholithiasis between January 2023 and December 2024 in a tertiary referral center. Multivariate logistic regression was performed to identify independent predictors of retained CBD stones. A simplified score was constructed based of the final model. Internal validation of the score was performed through receiver operating characteristic (ROC) analysis. Sensitivity and specificity for candidate thresholds were obtained from ROC coordinates.

Results Of the 438 patients were evaluated for eligibility, 186 patients were included. 86 patients were diagnosed on EUS with choledocholithiasis and ERCP was performed. After ESGE criteria risk stratification, 10 patients (5.4%) were found to have a low risk for lithiasis, 92 (49.5%) were classified as having intermediate risk, and 84 (45.2%) met high-risk criteria. In the latter subgroup, EUS confirmed choledocholithiasis in 45 patients (53.5%), whereas 39 (46.4%) had spontaneous clearance of the CBD. Multivariate analysis identified acute pancreatitis (aOR 0.075, $p < 0.001$), cholangitis (aOR 6.939, $p = 0.015$), and CBD diameter (aOR 1.220 per mm increase, $p = 0.027$) as independent predictors of retained stones. A three-component score (range – 2 to + 4 points) was developed incorporating these variables. Internal validation showed a good accuracy of the score, with an AUROC of 0.788. A threshold of ≥ 2 points provided optimal performance, with a sensitivity of 85.7% and specificity of 59.0%. Higher thresholds increased specificity (e.g., ≥ 3 points: 89.7%) at the cost of reduced sensitivity.

Conclusions In nearly half of the patients that presented high risk for choledocholithiasis according to ESGE criteria EUS did not confirm CBD stones, suggesting that routine ERCP in this subgroup should be carefully considered. Acute pancreatitis, cholangitis, and EUS-measured CBD diameter independently predicted retained stones and enabled the development of a simple prediction score with good internal discriminative performance. Incorporating EUS into the evaluation of ESGE high-risk patients, and applying refined risk stratification tools may improve diagnostic accuracy and help avoid performing ERCP without a clear benefit.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sirinawasatien A, Chanchairungcharoen J, Yaowmaneerat T, Jirathamopas J, Chanpiwat K, Chantarojanasiri T et al. The use of endoscopic ultrasound in tandem with endoscopic retrograde cholangiopancreatography in the 2019 American Society for Gastrointestinal Endoscopy guideline for patients at high risk of choledocholithiasis can help to avoid diagnostic endoscopic. *DEN Open* [Internet]. 2025
- [2] Chiriac S, Sfarti CV, Stanciu C, Cojocariu C, Zenovia S, Nastasa R et al. The Relation between Post-Endoscopic Retrograde Cholangiopancreatography Pancreatitis and Different Cannulation Techniques: The Experience of a High-Volume Center from North-Eastern Romania. *Life* (Basel) [Internet]. 2023; [cited 2025 Jan 4] 13 (6):
- [3] Gianpiero Manes A, Paspatis G, Aabakken L, Anderloni A, Arvanitakis M, Ah-Soune P et al. Endoscopic management of common bile duct stones: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* [Internet] 2019; [cited 2025 Jan 4] 51: 472–91

PYP199 Antegrade cholangioscopy: A single-centre experience

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DOI 10.1055/s-0046-1821139

Aims Cholangioscopy performed during endoscopic retrograde cholangiopancreatography (ERCP) can facilitate the management of complex biliary stones and improve the evaluation of biliary strictures. Treating biliary disease in patients with surgically-altered anatomy or an inaccessible ampulla, however, remains a particular challenge. Historically, antegrade cholangioscopy (AC) has been performed through the tract of a prior percutaneous transhepatic biliary drain (PTBD). More recently, options for AC have included cholangioscope insertion following EUS-guided hepatico-gastrostomy (HGS). The aim of this study was to review the approach and outcomes of AC in patients treated at a large specialist hepatopancreatobiliary (HPB) centre.

Methods We performed a retrospective review of all patients who underwent AC at a large HPB centre between January 2020 and October 2025. Procedures were performed either via IR-PTBD or EUS-HGS using a Spyglass cholangioscope (Boston Scientific Inc) (with Spyglass Discover used for percutaneous cases since 2021). Patient demographics, surgical anatomy, procedural indications, techniques, and clinical outcomes were analysed.

Results A total of 25 patients underwent AC (median age was 64 years, 52% male), within an overall total of 3019 biliary endoscopic procedures/ERCPs (< 1%). All patients were discussed in a multi-disciplinary team meeting (MDM) prior to their procedure. Indications for cholangioscopy included management of stone disease (19 patients (76%)) and biliary stricture assessment (6 (24%)). An antegrade approach was required in 23 patients (92%) due to surgically-altered anatomy which precluded transpapillary access. Of these 13 (52%) had a Roux-en-Y hepaticojejunostomy, 5 (20%) had a Roux-en-Y gastric bypass, 2 (8%) had a Roux-en-Y Whipple's procedure, 2 (8%) had a total gastrectomy with Roux-en-Y reconstruction and 1 (4%) had a Billroth II gastrectomy. In the 2 patients (8%) without surgically-altered anatomy, one patient had had extensive head and neck surgery which precluded oesophageal intubation, and in the other patient an uncovered metal stent through the right hepatic system prevented retrograde left-sided access via ERCP. AC was performed via PTBD in 22 (88%) patients and EUS-HGS in 3 (12%) patients. All procedures were performed with anaesthetic support (Propofol or general anaesthesia). In those undergoing percutaneous AC, prior PTBD was inserted between 4–365 days (median 59 days) prior to AC. Extended duration of PTBD related to intervention prior to referral for consideration of AC. Patients with HGS had their fully covered metal stents changed to plastic double pigtail stents to retain access. 23 patients (92%) had antibiotics at the time of AC, and these were continued for at least 3 days afterwards. Clinical success, defined as stone clearance or diagnosis clarification, was achieved in all patients. In 2 patients with intrahepatic stones above a previous biliary anastomosis, a biodegradable balloon-expandable stent (Unity B™, Q3-Medical) was placed to facilitate biliary patency and stone fragment passage. One patient (4%) developed post-procedure bleeding following PTBD catheter removal requiring IR-guided embolisation and a 6-day ICU admission. There was no mortality at 30 days from the procedure. In 3 of 6 patients undergoing AC for stricture assessment, a diagnosis of malignancy was made on Spybite biopsy-directed histology.

Conclusions In this single-centre experience, AC was required in < 1% of cases but provided a valuable tool where conventional papillary access was precluded. Biliary access, intraductal visualisation, and therapy were successful via both PTBD and EUS-HGS, and insertion of the 3.5mm (10F) cholangioscope to the required site within the biliary tree was achieved in all cases. Stone therapy with EHL for stone disease was effective, but it was observed that clearing stone fragments from the biliary tree was more challenging with an antegrade approach than with a conventional ERCP. AC appears to be safe, with the only observed complication related to prior PTBD insertion. Further advances in cholangioscope development (e.g. smaller-calibre cholangioscopes) and the expanding use of EUS-guided antegrade biliary access may broaden the role and clinical applications of AC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP200 Effectiveness and Safety of ERCP and Cholecystectomy in Pregnant Women with Biliary Pancreatitis

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DOI 10.1055/s-0046-1821140

Aims Biliary acute pancreatitis (AP) in pregnancy poses unique management challenges, and current guidelines in pancreatology, obstetrics, and surgery lack specific recommendations. This study evaluated the safety and effectiveness of cholecystectomy and endoscopic retrograde cholangiopancreatography (ERCP) performed during pregnancy.

Methods This international retrospective multicenter cohort study collected data on demographics, clinical presentation, management strategies, timing and type of cholecystectomy, procedural approaches, complications, and outcomes. Continuous variables were reported as medians with interquartile ranges, while categorical variables were presented as frequencies and percentages. Group comparisons were performed using Welch's t-test, Pearson's chi-squared test, or Fisher's exact test.

Results A total of 101 cases from 14 countries and 19 centers were included. Following mild AP during pregnancy, cholecystectomy was associated with a lower readmission rate due to recurrent AP or other gallstone-related complications compared with conservative management (0% vs 24%; $n = 0/17$ vs $n = 12/49$; $p = 0.027$). Cholecystectomy during pregnancy had a low complication rate, comparable to postpartum surgery (12% vs 10%; $n = 2/17$ vs $n = 3/30$; $p > 0.999$). Preterm birth occurred in 7.1% ($n = 1/14$) of patients who underwent cholecystectomy versus 11% ($n = 5/45$) without surgery. Fetal loss after surgery was observed only during the first trimester ($n = 3/17$ vs $n = 1/49$). Regarding ERCP, no significant differences were observed between the surgical and ERCP groups in rates of readmission (5%, $n = 1/21$ vs 27%, $n = 4/15$; $p = 0.138$), fetal loss (5%, $n = 1/21$ vs 27%, $n = 4/15$; $p = 0.138$), or preterm birth (6%, $n = 1/17$ vs 8%, $n = 1/12$; $p > 0.999$). Likewise, among patients who underwent ERCP versus those who did not, fetal loss (9.1%, $n = 2/22$ vs 5.4%, $n = 4/74$; $p = 0.618$) and preterm birth rates (5.9%, $n = 1/17$ vs 12%, $n = 8/65$; $p = 0.677$) did not differ significantly.

Conclusions Cholecystectomy is safe and effective in the second and third trimesters after a mild biliary pancreatitis during pregnancy, while ERCP can be safely performed in any trimester.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

All around Endoscopic nursing

15/05/2026, 12:30–13:30

Emerald 4

PYP201 Innovative Nursing Maneuvers for Difficult Colonoscopies

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DOI 10.1055/s-0046-1821141

Aims Nursing support plays a crucial role during colonoscopy, particularly when anatomical complexity impedes progression to the cecum (1). In our unit, four non-standardized maneuvers have proven effective in improving scope advancement during challenging cases. We aim to describe and propose these techniques as part of the nursing endoscopic toolbox.

Methods

1. "Jockey maneuver" for sigmoid reduction

When the scope tip stalls in the ascending colon and fails to reach the cecum, the nurse applies pressures from the left iliac fossa and flank area, directing the sigmoid and descending colon toward the umbilicus. This maneuver mobilizes and straightens redundant sigmoid loops that may be stealing propulsion force or forming a hidden loop.

2. "Cyclist maneuver" – variant of the "Jockey maneuver"

When the scope tip stalls in front of the ileocecal valve and fails to reach the cecum, the nurse applies a single, pulsating pressure from the left iliac fossa and flank area toward the umbilicus. This maneuver can provide just enough additional propulsion force to reach the cecum.

3. "Jingle maneuver" – exploratory rhythmic pressure

When scope advancement is impaired and it is unclear where support is needed, the nurse applies light, rhythmic, pulsating pressure over different areas of the abdomen. This technique helps identify hidden loops and the most effective location for abdominal pressure to assist progression.

4. Lever-based maneuver for the hepatic flexure

The nurse places their hand under the right costal margin and applies a downward and medial pressure, mimicking the action of a crowbar. This creates a mechanical leverage effect, helping to straighten the hepatic flexure and facilitate forward scope movement through the ascending colon.

Results In our preliminary observational experience, these maneuvers improved cecal intubation rates, enhanced patient comfort, and reduced the need

for scope withdrawal due to looping. They are simple, reproducible, and expand the active role of trained endoscopy nurses during procedures.

Conclusions These hands-on techniques may be standardized in nursing protocols and deserve further clinical validation. Their inclusion could help optimize difficult colonoscopies and enhance the technical contribution of nursing staff in the endoscopic setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose. Giuseppe Gizzi, Valeria Villani, Lucio Petruzzello, Tecniche ancillari per la colonoscopia, GIED dicembre 2016

PYP202 Nursing clinical competence in the management of percutaneous endoscopic gastrostomy (PEG): a prospective observational study among hospital and community nurses of AUSL Piacenza

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DOI 10.1055/s-0046-1821142

Aims This study aimed to assess the level of clinical competence of nurses in managing percutaneous endoscopic gastrostomy (PEG) within the AUSL of Piacenza [1–8].

The objectives were to explore differences between hospital and community nurses regarding theoretical knowledge, perceived competence, and training needs, in order to identify gaps and promote the development of standardized clinical protocols.

Methods A prospective descriptive observational study was conducted in September 2025 among nurses working in hospitals, community services, and accredited private facilities of AUSL Piacenza. Data were collected using a structured questionnaire specifically developed and validated by a panel of experts. The tool included three sections: (1) general information, (2) theoretical knowledge and perceived competencies, and (3) training needs.

The survey was distributed through the REDCap platform to ensure anonymity and confidentiality. Descriptive statistics were used to analyze the data.

Results A total of 112 complete responses were analyzed.

Most participants worked in hospital settings (96.4%) and had over 10 years of professional experience. Although nearly all respondents had managed PEG patients (96.4%), only 27.7% did so more than three times per month.

Knowledge levels were heterogeneous, with only 10.7% of participants answering all theoretical questions correctly.

Perceived competence was high in site hygiene and patient positioning, but lower in emergency management and caregiver education.

Overall, 79.5% of nurses had never received specific training on PEG management, yet 83% expressed the need for a shared protocol and 65% were willing to participate in future educational programs. Key findings indicate a gap between theoretical knowledge and clinical practice, particularly in emergency procedures and educational communication.

Conclusions Nursing clinical competence in PEG management within AUSL Piacenza is generally adequate but uneven across care settings.

The findings emphasize the importance of continuous professional development, interprofessional collaboration, and the adoption of standardized care pathways.

Structured and targeted training programs could enhance nurses' theoretical and practical skills, strengthen their educational role with patients and caregiv-

ers, and ultimately improve the quality, safety, and continuity of PEG care in both hospital and community contexts.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kurtović B, Gulić P, Čukljek S, Sedić B, Smrekar M, Ledinski Fičko S. The Commitment to Excellence: Understanding Nurses' Perspectives on Continuous Professional Development. *Healthc Basel Switz*. 1 febbraio 2024; 12 (3): 379
- [2] Wang S, Liang J, Zhang X, Xiang X, Song L, Wu X et al. Clinical nurses' evidence-based healthcare competence and associated factors: a regional cross-sectional study. *BMC Nurs*. 19 agosto 2025; 24 (1): 1091
- [3] Zaitoun RA, Said NB, De Tantilillo L. Clinical nurse competence and its effect on patient safety culture: a systematic review. *BMC Nurs*. 19 maggio 2023; 22 (1): 173
- [4] Federazione Nazionale degli Ordini delle Professioni Infermieristiche (FNOPI) Codice Deontologico delle Professioni Infermieristiche. Roma: FNO-PI; 2025
- [5] Arvanitakis M, Gkolfakis P, Despott EJ, Ballarin A, Beyna T, Boeykens K, Elbe P, Gisbertz I, Hoyois A, Mosteanu O, Sanders DS, Schmidt PT, Schneider SM, van Hooft JE. Endoscopic management of enteral tubes in adult patients – Part 1: Definitions and indications. *European Society of Gastrointestinal Endoscopy (ESGE) Guideline. Endoscopy* 2021; 53 (1): 81–92. doi:10.1055/a-1303-7449
- [6] Kahveci G, Akin S. Knowledge Levels and Practices About the Enteral Nutritional Practices of Informal Caregivers Caring for Patients Fed Through a Percutaneous Endoscopic Gastrostomy Tube: A Descriptive Observational Study. *Gastroenterol Nurs*. settembre 2021; 44 (5): E80–90
- [7] Hobbs K. How to administer a percutaneous endoscopic gastrostomy (PEG) feed. *Nurs Stand*. 5 marzo 2025; 40 (3): 55–60
- [8] Kawalec-Kajstura E, Bańdo K, Sraga J, Falkowska A, Wiczowska M, Majkut M et al. Preparing Nurses For Taking Care Of Patients With Percutaneous Endoscopic Gastrostomy And Their Sense Of Selfefficacy. *Pielęgniarstwo W Opiece Długoterminowej* 2020; 5 (3): 207–18

PYP203 Implementation of the esophageal VacStent in patient management: Case Report

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DOI 10.1055/s-0046-1821143

Aims This case report describes the successful use of a VacStent, a hybrid device that combines a fully covered self-expanding metal stent (SEMS) with an external polyurethane sponge cylinder connected to continuous negative-pressure therapy, in the management of an esophageal fistula that developed after surgical resection of an adenocarcinoma located in the distal esophagus and cardia. The aim is also to highlight the essential role of the endoscopy nurse in ensuring safe and effective treatment.

Methods Following surgery, the patient developed post-procedural complication, a stapler-related anastomotic esophageal stenosis, with a residual lumen of 2 mm. Subsequently, endoscopic dilatation was performed to sufficiently widen the esophageal lumen, allowing safe placement of the VacStent. The stent was placed endoscopically in the endoscopy room, under X-ray fluoroscopy. The stent was withdrawn 9 days later, following the same endoscopic protocol. The endoscopy nurse prepared all endoscopic accessories – including the VacStent delivery system, suction catheter, and vacuum pump – ensured proper setup, and verified negative-pressure function before the procedure. During placement, the nurse assisted by handling the endoscopic accessories, adjusting suction in real time, and coordinating with the endoscopist to achieve precise positioning of the device. After deployment, the nurse continuously monitored the vacuum system, checked for signs of discomfort or complications, and collaborated with the multidisciplinary team to optimize timing based on healing progress.

Results Literature supports the VacStent's safety and efficacy: in a prospective multicenter study, 41 implants in 15 patients achieved a healing rate of 80% with no severe device-related adverse events. [1] A systematic review of 65 patients showed 100% technical success and 77% clinical success. Moreover, in

a pilot study, preemptive application of the VacStent after esophagectomy demonstrated feasibility and no major complications [2].

Conclusions This report highlights the therapeutic potential of the VacStent in managing postoperative esophageal fistulas and underscores the indispensable role of the endoscopy nurse in ensuring safe, efficient, and patient-centered care in the endoscopy suite.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lange J, Eisenberger C, Knievel J, Linderer T, Heiss MM. Preemptive endoluminal vacuum therapy with the VACStent—A pilot study to reduce anastomotic leakage after Ivor Lewis hybrid esophagectomy. *Langenbecks Arch Surg.* 2023
- [2] Lange J, Knievel J, Linderer T, Heiss MM. The VACStent trial: combined treatment of esophageal leaks by covered stent and endoscopic vacuum therapy. *Gut.* 2023; multicenter study

PYP204 New tool for EUS-guided tissue acquisition

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DOI 10.1055/s-0046-1821144

Aims Standard endoscopic ultrasound-guided biopsy procedures (FNB) for sampling gastrointestinal tract solid tumors have become routine practice, but a histological diagnosis is not always possible, and multiple needle passes are often required to obtain an adequate sample for analysis. A new motorized EUS-guided biopsy device has recently become available. Our institution was among first four centers worldwide that had the opportunity to test it.

Methods At Sestre milosrdnice University Hospital Centre, six patients have undergone biopsy with this method so far. Basic education on how to operate the device was done on-site by the manufacturer. Biopsies were obtained using a flexible, electrically powered, high-speed rotating device equipped with a 17G needle that collects samples through controlled passes across targeted lesions. Nurses play a key role in ensuring the procedure is performed safely and efficiently. Responsibilities of nurses include preparing the endoscopy room, checking the functionality of the EUS equipment, preparing the biopsy system, and maintaining sterile conditions. Before the procedure, the nurse participates in informing the patient, verifies documentation, and ensures that informed consent has been signed. During the biopsy procedures the nurse assists the physician, monitors the patients' vital signs, and ensures timely preparation and delivery of the required instruments. After the procedure, the nurse monitors the patient during recovery, observes potential immediate complications, and documents all relevant information regarding the procedure and the patients' condition.

Results In all six patients, the first and only EUS-guided tissue acquisition pass was sufficient to obtain diagnostic tissue. The only adverse event was mild bleeding in one patient, which was successfully stopped endoscopically and did not require blood transfusion. All patients underwent the procedure under anesthesia. Investing in nurses education for EUS-guided biopsy procedures increases patient safety, improves sample quality, and contributes to a more efficient diagnostic process.

Conclusions The nurse is a key link connecting the technical demands of the procedure with patient care and safety. Overall, initial experience with this new motorized EUS device was positive. Advantages include a higher likelihood of obtaining an adequate sample, which ultimately results in fewer repeated procedures, less discomfort for the patient, and lower overall diagnostic costs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP205 Green endoscopy: a new paradigm

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DOI 10.1055/s-0046-1821145

Aims Introduction: Green endoscopy refers to efforts and measures aimed at making endoscopic procedures more environmentally sustainable. ESGE-ES-

GENA recommends that endoscopy units assess, disclose, and audit their environmental impact. International Societies have developed practical measures including waste reduction, implementation of recycling programs, and reuse of equipment whenever possible. The goal is to create a more sustainable endoscopy unit by reducing waste and costs.

Methods Methods: We conducted a descriptive, quantitative, cross-sectional study and subsequently implemented a continuous improvement project in the digestive endoscopy unit to address this issue. In phase 1, we weighed the waste produced in the unit during 10 random shifts in January and February 2025. In phase 2, the multidisciplinary team received training on waste management, segregation, and recycling. In phase 3, waste was weighed again after the implementation of the new measures.

Results Results: In phase 1, 125 endoscopic procedures (EGD and colonoscopy) were performed in 74 patients. Group I/II waste totaled approximately 31 kg, Group III waste amounted to 104.8 kg, and Group IV waste reached 10 L. In phase 3, we observed a significant reduction in waste production and, consequently, in costs [1–6].

Conclusions Green endoscopy has the potential to revolutionize healthcare by promoting sustainability and minimizing environmental impact. The key to the future lies in adopting innovative practices, fostering education, and encouraging collaboration among healthcare professionals, patients, and the community. Engaging unit managers and educating healthcare professionals are essential to promote ecological practices and reduce costs. Reflecting to evolve: reflection is a commitment to continuous improvement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Blanco M. 2024; Rumo a uma endoscopia mais verde: Impacto de uma intervenção sustentável na pegada de carbono e nos custos de processamento dos resíduos endoscópicos. NOVA – Escola Nacional de Saúde Pública. Curso de Especialização em Administração Hospitalar
- [2] Donnelly L. 2022; Green endoscopy: practical implementation. *Frontline Gastroenterol* e7–e12. doi:10.1136/flgastro-2022-102116
- [3] Pohl H. 2023; Transitioning to Sustainable Care and Green Endoscopy. *Gastroenterology & Hepatology.* 19:
- [4] Ribeiro T., Morais R., Monteiro C., Carvalho A., Barros S., Fernando A., Macedo G. 2024; Estimating the environmental impact of endoscopic activity at a tertiary center: a pilot study. *European Journal of Gastroenterology & Hepatology* 39–44. doi:10.1097/MEG.0000000000002667
- [5] Rodriguez E., Dinis-Ribeiro M., Pohl H., Agrawal D., Arvanitakis M., Baddeley R., Messmann H. 2022; Reducing the environmental footprint of gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement. *Endoscopy* 797–826. doi:10.1055/a-1859-3726
- [6] Rowan N., Kremer T., McDonnell G. 2023 A review of Spaulding's classification system for effective cleaning, disinfection and sterilization of reusable medical devices: Viewed through a modern-day lens that will inform and enable future sustainability. *Elsevier-Science of the Total Environment.* doi:10.1016/j.scitotenv.2023.162976 oUIE/DRS/ACSS. (2008). Guia para organização e dimensionamento de ecocentro hospitalar. Administração Central do Sistema de Saúde, IP(ACSS). doi:ISSN: 1646-8228

PYP206 Establishment of the digestive endoscopy on-call nursing team in a tertiary hospital

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DOI 10.1055/s-0046-1821146

Aims An endoscopic emergency is defined as any procedure performed to diagnose and/or treat gastrointestinal conditions that require immediate attention and/or pose a threat to the patient's life.

During routine care, urgent endoscopic procedures are performed by the unit's staff. However, emergencies outside working hours were handled by the hospital's backup staff.

Since April 2023, these procedures have been carried out by an on-call team consisting of an endoscopist, a registered nurse and a nursing assistant [1, 2].

Methods Urgent endoscopies are arranged via a call from the hospital switchboard to each member of the on-call team's corporate telephone.

The on-call duty hours are from 3 p.m. to 8 a.m. Monday to Friday, and 24 hours on Saturdays, Sundays and national holidays.

Depending on the patient's condition and haemodynamic stability, urgent digestive endoscopies can be performed in the Unit itself, the Emergency Department's resuscitation room, the Intensive Care Unit or the Surgical Area.

During on-call shifts, urgent digestive endoscopies on children can be performed at the Maternal and Child Hospital, which are always carried out in the Surgical Area.

Endoscopies performed at the Digestive Endoscopy Unit are carried out under deep sedation, guided by the endoscopist.

Upon arrival at the hospital, the nursing assistant is responsible for preparing the necessary equipment for the procedure, assisting the rest of the team during the procedure and reprocessing the endoscope and cleaning all equipment used safely and correctly. The nursing assistant's work is complete once the endoscope has been properly dried and stored.

Registered nurses are responsible for caring for patients during endoscopic procedures and performing the necessary techniques to control or resolve any emergencies. Once the patient has been transferred back to their original unit, their work is complete.

Results The presence of on-call nursing staff with the specific knowledge, training and skills required to perform urgent digestive endoscopies has significantly improved the safety, attention and quality of care provided to our patients (► **Table 1**).

► **Table 1**

YEAR	2022	2023	2024	2025 (nov)
emergency procedures performed outside working hours	600	780	906	803

There has been a significant increase in the number of emergency procedures performed outside working hours since the introduction of the on-call team, rising from 600 in 2022 to 906 in 2024. By 1 November 2025, a total of 803 emergency endoscopies had been performed.

Likewise, the complexity of therapeutic procedures performed during these urgent endoscopies has increased.

Conclusions Effective and safe care depends on the training, coordination and communication of the multidisciplinary team.

A well-trained team improves patient experience and safety.

Keeping up to date is essential for maintaining service quality.

Success lies not only in the technique, but also in the knowledge, ethics and professionalism of the people performing it.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lau JYW, Yu Y, Tang RSY, Chan HCH, Yip HC, Chan SM, Luk SWY, Wong SH, Lau LHS, Lui RN, Chan TT, Mak JWY, Chan FKL, Sung JJY. <https://orcid.org/0000-0003-0122-4068> Timing of Endoscopy for Acute Upper Gastrointestinal Bleeding. *N Engl J Med* 2020; 382: 1299–1308. doi:10.1056/NEJ-Moa1912484 382: NO. 14

[2] Lau JYW, Yu Y, Tang RSY, Chan HCH, Yip HC, Chan SM, Luk SWY, Wong SH, Lau LHS, Lui RN, Chan TT, Mak JWY, Chan FKL, Sung JJY. <https://orcid.org/0000-0003-0122-4068> Timing of Endoscopy for Acute Upper Gastrointestinal Bleeding. *N Engl J Med* 2020; 382: 1299–1308. doi:10.1056/NEJ-Moa1912484 382 NO. 14

PYP207 The role of nurses in the use of duodenoscopes in emergency situations: towards a specific on-call system

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DOI 10.1055/s-0046-1821147

Aims Endoscopy technical platforms are facing an increase in interventional endoscopy procedures in emergency situations, particularly ERCP, which requires the use of a duodenoscope. This specific device presents a high risk of microbiological contamination [1–7].

Operating units are encountering difficulties in managing the organization of these procedures in emergencies and are sometimes forced to refer patients to other facilities.

Indeed, the multi-skilled staff on-call are not sufficiently trained in digestive endoscopy—neither for providing technical assistance in the procedure room nor for the reprocessing of duodenoscopes.

In France, several cases of cross-contamination have been reported due to inadequate endoscope reprocessing, and our study aims to demonstrate that these emergencies should be handled by nurses specialized in endoscopy.

Their specific skills and knowledge will enable patients to access emergency techniques in complete safety.

Methods As part of research proposed by the University of Limoges, a study was conducted at the “Clinique de l'Anjou” in Angers between 2021 and 2023. A review of the literature compiled the recommendations issued by learned societies and their requirements concerning the continuity of care in digestive endoscopy.

Data collected in several European countries revealed several cases of duodenoscope contamination, highlighting the importance of duodenoscope reprocessing, particularly in the context of on-call duty.

Quantitative and qualitative studies in France assessed respectively, the evolution of the number of emergency ERCP performed and the level of practice of nurses in relation to the use of duodenoscopes.

Results These studies have shown an increase in the number of ERCP performed in emergency situations.

Technical platform managers face significant difficulties in scheduling emergency ERCP and managing duodenoscopes.

The data extracted and analyzed showed that the skill level of multi-skilled nurses was not sufficient for these on-call duties, either in terms of the technical procedures performed in the operating room or the handling of the duodenoscope.

Conclusions Following the development of interventional activities and endoscopic techniques in technical platforms, it seems important to consider reorganizing on-call nursing duties by calling on specialized staff to ensure optimal and safe care. However, parameters such as human resources and funding will need to be considered to enable this to be put into practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Conditions of implementation and description of the main techniques used during emergency endoscopy, P.Ah-Soune, M.Barthet, M.Robaszkievicz, P.Bulois et le CA de la SFED, *Acta endoscopica* DOI 10.1007/s10190-016-0562-1 (Lavoisier 2016) <https://www.sfed.org/actualites/recommandations-sfed-lendoscopie-urgence/>

[2] Real emergency in digestive endoscopy, Marine Camus, Post'U 2019 <https://www.fmcgastro.org/texte-postu/postu-2019-paris/la-vraie-urgence-en-endoscopie-digestive/>

[3] Recommendations of the SFED, of the SF2H and of the GIFE for the organization and the management of a technical platform in digestive endoscopy», J.B.Chevaux, C.Dananché, J.Jézéquel, T.Degand, F.Durand, H.Boulestreau, J.Hajjar, M.Kaasis, J.Lizon, C.Barrué, D.Imbert, M.Mochet, C.Ray, A.Houdard, C.Lefort, A.Vienne, S.Koch, O.Gronier, *Hépatogastro et Oncologie Digestive*, Vol-

ume 30, numéro1, Janvier 2023 <https://www.sfed.org/actualites/nouvelles-recommandations-sfed-sf2h-du-gife/> Results of the survey [4] emergency endoscopic procedure in France, SFED, Forum endoscopie CREGG, 8 décembre 2018 <https://www.cregg.org/wordpress/wp-content/uploads/2018/08/2-dr-bernardini-samedi-endoscopie.pdf> [5] Infections associated with reprocessed duodenoscopes www.fda.gov 2022 [6] Role of a duodenoscope in the occurrence of grouped cases of carbapenemase producing enteric bacteria in an intensive care unit : myth or reality ?, SF2H, XXVIII Congrès national de la Société Française d'Hygiène Hospitalière-Nice-7,8 et 9 juin 2017 https://www.sf2h.net/k-stock/data/uploads/2017/01/BOURIGAULT_Celine_20170608_1115_Salle_Erato-Uranie.pdf [7] Recommendations relating to staff in endoscopy, P. Pienkowski / I. Joly Le Floch / L. Parois / D. Heresbach / B. Richard-Molard / M. Robaszkiewicz et la commission juridique de la SFED, *Acta Endoscopica* (2014) 44:196-200 DOI 10.1007/s10190-014-007-7 <https://www.sfed.org/wp-content/uploads/2021/10/Personnelendoscopie-bf0.pdf> <https://www.actusoins.com/384777/infirmier-den-doscopie-ne-simproviser-pas.html>

PYP208 The environmental impact of gastrointestinal endoscopy: a single-Center analysis of waste segregation

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DOI 10.1055/s-0046-1821148

Aims Gastrointestinal endoscopy is a major contributor to the large amount of medical waste generated by the hospital activities. Simple measures like implementation of waste segregation may impact substantially on sustainability without affecting the quality of gastrointestinal endoscopic procedures. **Methods** We conducted a prospective exploratory study on the amount of waste generated in the three rooms of our Endoscopy Unit from 1 September to 31 October 2025. At the end of each day of endoscopic activity, we weighed the amount of waste in each one of the segregated fractions.

Results We segregated the waste produced in our Endoscopy Unit into regulated medical waste and non-regulated medical waste, including paper, plastic and non-recyclable waste. Over the course of the study period (61 days), the Endoscopy Unit was fully active on 53 days. The overall amount of waste produced by our Endoscopy Unit was 1830 kg of regulated medical waste, 1142 kg of paper, 954 kg of plastic, and 636 kg of non-recyclable waste. Over the course of one year, this would mean approximately 10980 kg of regulated medical waste, 6852 kg of paper, 5724 kg of plastic, and 3816 kg of non-recyclable waste.

Conclusions Our small exploratory study confirms that routine gastrointestinal endoscopy activity produces very large amounts of waste. Simple measures like the implementation of a structured protocol for waste segregation lead to the efficient management of medical waste, and contribute substantially to improve the environmental sustainability of gastrointestinal endoscopy. Our preliminary data provide the basis for a larger analysis aiming to quantify the reduction in greenhouse gas emission after the adoption of the current waste segregation protocol in our Endoscopy Unit.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP209 Application of “Patient Safety Strategy of SERMAS 2027” in Endoscopy Unit

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DOI 10.1055/s-0046-1821149

Aims To describe the activities of endoscopy clinic that follow the Patient Safety Strategy SERMAS.

Methods Patient Safety is a global priority which requires an urgent action to reduce preventable harm, World Health Organization says in Global Patient Safety Action Plan 2021-2030 [1, 2].

The Consejería de Sanidad de la Comunidad de Madrid (Regional Office of Health in Madrid-SERMAS) has published the New Patient Safety Strategy 2027. It includes 12 strategic lines to outline the actions that will be addressed by Health Care Centres and Hospital Units.

Every month around 400 endoscopies are performed in our endoscopy unit at Hospital Universitario del Henares (Madrid), both outpatients or inpatients. Concern for patient safety is growing with the aim of preventing or at least reducing adverse events related to medical procedures, therefore nursing staff have sought out the bibliography published by SERMAS to improve patient care. The document was studied by the nursing staff and a critical review was carried out to choose the activities that could be applied in the daily practice of Endoscopy unit. The document consisted of 12 strategic lines that are developed into 92 strategic objectives.

Results Of the 12 strategic lines (S.L.), 3 were selected for their relevance: S.L. 7.9 “Nursing care and procedures”, S.L. 7.11 “Safe use of drugs” and S.L. 7.12 “Healthcare-associated infection”.

S.L.7.9:

Strategic objective (S.O.) 7.9.1 “To enhance leadership in care”, Action 7.9.1.2: “To promote the implementation of nursing care safety protocols”: Protocols are drafted and updated.

S.O. 7.9.2 “To reduce variability in nursing practice through standardisation of care”: preventing falls, management of infection, placement of ostomies. The existing protocols at our centre are implemented, with special attention to frailty.

S.O. 7.9.3 “Promoting safety through specific nursing interventions”: the medication used during endoscopic procedure is studied to ensure its proper administration and the transfer of information.

S.O. 7.9.4: “Promoting training in care safety”: The welcome document for new staff members is prepared.

S.L. 7.11 “Safe use of drugs”:

S.O. 7.11.1 “Promoting culture to encourage safe use of medicines”: application of 5 secure moments for medication safety and to report incidents related to medication administration.

S.L.7.12: “Healthcare-associated infection”

S.O. 7.12.1 “Preventing healthcare-associated infections in Primary care and other healthcare settings”, by promoting regular training among professionals.

Conclusions Through the use of the document “New Patient Safety Strategy 2027 in SERMAS”, nursing procedures in Endoscopy unit have been standardised to improve patient safety.

We recommend using the official bibliography as a basis for improving the performance of nursing staff in patient care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dirección General de Humanización y Atención al Paciente. Estrategia de Seguridad del Paciente del Servicio Madrileño de Salud 2027. Consejería de Sanidad D.G. de Humanización, Atención y Seguridad del Paciente. Sermas, 2022
- [2] Global patient safety action plan 2021–2030: towards eliminating avoidable harm in health care. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO

PYP210 Standing Strong: Overcoming Ergonomic Challenges in Endoscopy Nursing

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DOI 10.1055/s-0046-1821150

Aims Endoscopy nurses face continuous ergonomic challenges that stem from the physical demands of endoscopic procedures. These include prolonged standing in fixed positions, working with monitors placed at suboptimal heights, repetitive hand and wrist movements during scope handling assistance, frequent bending or twisting of the spine, and the need to lift, push, or reposition equipment. Over time, these stressors contribute to neck, shoulder,

and lower back pain, joint stiffness, reduced dexterity, fatigue, and an increased risk of long-term musculoskeletal disorders. Such strain not only affects individual well-being but may also influence procedural flow, team coordination, and overall patient safety

Methods Drawing on observations and experience in our endoscopy unit, nursing staff identified key ergonomic risk factors and implemented targeted strategies to reduce daily physical load. Adjustments included optimizing workspace layout, individualizing monitor height and distance, using adjustable stools for prolonged procedures, integrating brief stretching routines between cases, and ensuring rotation of roles to avoid repetitive strain. Staff also engaged in ongoing peer education to reinforce awareness of proper body mechanics and early recognition of overuse symptoms.

Results These collective efforts have led to noticeable improvements, including reduced discomfort, better concentration, increased energy levels, and higher job satisfaction. Importantly, procedural efficiency and patient safety have improved through smoother workflow and enhanced staff resilience.

Conclusions This work underscores the essential role of endoscopy nurses in recognizing and proactively managing ergonomic risks. It highlights that even low-cost, practical interventions can meaningfully enhance the quality of practice, protect musculoskeletal health, and strengthen patient safety. The strategies implemented in our unit may serve as a practical model for other endoscopy departments seeking to elevate professional performance and create safer, more sustainable working conditions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Gallbladder disease and cholecystitis

15/05/2026, 14:30–15:30

Emerald 3

PYP211V EUS-Guided Embolization of a Pancreatic Pseudoaneurysm

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Abstract Text

Visceral artery pseudoaneurysms are rare but serious complications of chronic pancreatitis, often presenting with upper gastrointestinal bleeding (UGIB). A 68-year-old man with alcohol-related chronic pancreatitis and liver disease presented with recurrent UGIB. Initial endoscopic and radiologic studies were unremarkable. During a new episode, CT angiography showed a 20 mm lesion near the main pancreatic duct consistent with a pseudoaneurysm. Angiographic embolization failed due to non-identification of the lesion. Using a linear echoendoscope with Doppler from the distal duodenum, the pseudoaneurysm was located in the pancreatic uncinate process. EUS-guided thrombin injection (500 IU) achieved complete Doppler resolution. CT at 24 hours confirmed thrombosis, and the patient remained clinically stable. EUS-guided thrombin embolization is a safe, effective alternative when angiographic treatment is not feasible.

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/287ff9df-4dcf-4c4a-b8ea-f22020d8bc3a/Uploads/19978_Endoscopic_ultrasound%20\(EUS\)-Guided%20embolization%20of%20a%20pancreatic....mp4](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/287ff9df-4dcf-4c4a-b8ea-f22020d8bc3a/Uploads/19978_Endoscopic_ultrasound%20(EUS)-Guided%20embolization%20of%20a%20pancreatic....mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP212 Efficacy of a Plastic Stent-Based Gallbladder Flushing Technique in EUS-Guided Gallbladder Drainage for Acute Cholecystitis

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DOI 10.1055/s-0046-1821152

Aims Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) has emerged as an important alternative for high-risk surgical candidates with acute cholecystitis. While lumen-apposing metal stents (LAMS) are widely reported, their impact on subsequent cholecystectomy remains a concern. We have adopted a gallbladder flushing technique using a plastic stent during EUS-GBD. This study aimed to evaluate the technical and clinical outcomes of this approach and compare them with the transpapillary technique.

Methods We retrospectively reviewed 63 patients who underwent endoscopic treatment for acute cholecystitis at Showa Medical University Koto Toyosu Hospital between April 2023 and October 2025. Outcomes assessed included technical and clinical success, adverse events, procedure time, and postoperative surgical course.

Results A total of 63 patients were included, with a median age of 81 years (range 28–98). The transpapillary approach was performed in 43 patients, whereas 20 underwent EUS-GBD. Among the EUS-GBD procedures, technical success was achieved in 95% (19/20), with one case requiring conversion to LAMS placement. Clinical success was obtained in all patients who underwent EUS-GBD. The median procedure time was 30 minutes (range 17–44). Two patients (10%) developed peritonitis after the procedure, and both recovered with conservative management. In the transpapillary group, the cystic duct was successfully selected and the guidewire advanced into the gallbladder in 37 of 43 patients (93.3%). Whenever guidewire placement was successful, endoscopic gallbladder stenting was completed without failure. No adverse events occurred in this group. The median procedure time was 38 minutes (range 18–118), which was significantly longer than that of EUS-GBD ($p=0.004$). Importantly, seven patients from the EUS-GBD group subsequently underwent cholecystectomy, and none experienced complications attributable to the prior procedure. No difficulties related to the plastic stent or the flushing method were encountered during laparoscopic dissection, suggesting that the procedure is unlikely to interfere with subsequent surgery.

Conclusions A plastic stent-based gallbladder flushing method in EUS-GBD demonstrated excellent technical and clinical success. Although minor adverse events were observed, overall procedure time was significantly shorter than the transpapillary approach. Importantly, no difficulties were encountered during subsequent cholecystectomy. In addition, plastic stents may offer advantages in terms of medical cost compared with metallic stents. These findings suggest that this technique is a useful and feasible therapeutic option for acute cholecystitis, particularly in patients unsuitable for immediate surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP213 The role of contrast-enhanced endoscopic ultrasound (CH-EUS) in endoscopic ultrasound gallbladder drainage: a pilot study

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DOI 10.1055/s-0046-1821153

Aims Acute cholecystitis (AC) in patients unfit for surgery requires prompt minimally invasive management. Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) using lumen-apposing metal stents (LAMS) has emerged as an effective alternative to percutaneous drainage, but success and safety depend on accurate assessment of gallbladder wall integrity and vascularity before stent deployment. Contrast-enhanced harmonic EUS (CH-EUS) with Sonovue allows real-time visualization of perfusion and microvascular changes, potentially improving detection of complicated AC such as gangrene or wall discontinuity. The aim of this study was to evaluate the pre-procedural utility of CH-EUS in characterizing gallbladder wall alterations in high surgical-risk patients with AC and to assess its concordance with CT imaging, diagnostic impact on procedural planning, and association with outcomes following EUS-GBD.

Methods We retrospectively analyzed a prospectively maintained database of eighteen consecutive patients with moderate-to-severe AC according to Tokyo Guidelines 2018, all considered unfit for cholecystectomy after multi-disciplinary review. Prior transabdominal ultrasound and/or contrast-enhanced CT were available in all cases, and findings were compared with endosonography. CH-EUS with Sonovue was used to assess wall thickness, layer structure, perfusion behavior, intramural necrosis, and suspected wall interruption. When feasible, EUS-GBD was performed during the same session using a cautery-enhanced LAMS. Primary outcomes included characterization of enhancement patterns and their complementary value vs radiology. Secondary outcomes included technical/clinical success and adverse events of EUS-GBD.

Results Eighteen patients (67 % male, median age 78 years [range 44–91]) were included. Cardiovascular comorbidities were frequent (Charlson Comorbidity Index mean 5.5 ± 1.6), and 44.4 % were receiving anticoagulation. All cases were classified as moderate-to-severe AC. Transabdominal ultrasound was performed in 83.3 % and CT in 38.8 %, revealing gallbladder wall thickening in 77.7 % and suspected necrosis in three cases.

On EUS, 100 % exhibited wall thickening > 3 mm, loss of normal stratification in 61.1 %, and a hypoechoic inflammatory pattern in 66.6 %. Gallstones or sludge were detected in 83.3 %, and common bile duct stones in 16.6 %, confirming higher sensitivity than CT for intraluminal pathology.

At CH-EUS, **7/18 patients (38.8 %) showed hypo-enhancement**, consistent with ischemia/gangrenous evolution, while **11/18 (61.2 %) presented iso-/hyper-enhancement**. Perfusion defects indicating necrosis or focal wall disruption were visualized in 22.2 %. CH-EUS confirmed or clarified radiological suspicion in cases with ambiguous CT findings, demonstrating that **TC and CH-EUS provide complementary structural and perfusion-based information** crucial for selecting the safest entry site for LAMS deployment.

Fourteen patients (77.7 %) underwent same-session EUS-GBD with 100 % technical and clinical success and only one self-limiting bleeding episode (5.5 %). No adverse reactions to Sonovue occurred.

Conclusions In high-risk AC patients, CH-EUS with Sonovue provides actionable characterization of gallbladder wall viability by detecting perfusion defects associated with ischemia or perforation. This information **complements CT rather than replacing it**, refining eligibility and guiding a safe stent trajectory for EUS-GBD. The excellent clinical success and low complication rate support routine pre-procedural contrast enhancement during EUS in fragile patients. Larger studies are needed to confirm these findings and validate perfusion-based criteria for risk stratification before gallbladder drainage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP214 Elective Endoscopic GallBladder Treatment (EEGBT) in high surgical risk patients with benign diseases: a prospective multicentre study

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DOI 10.1055/s-0046-1821154

Aims Elective endoscopic gallbladder treatment (EEGBT) may represent a minimally invasive alternative to cholecystectomy in fragile elderly patients with benign gallbladder disease who are considered at high surgical risk (HSR). Evidence in this specific setting remains scarce and largely retrospective. We conducted a multicenter prospective study to evaluate safety and long-term clinical efficacy of EEGBT using lumen-apposing metal stents (LAMs) in a large cohort of elderly HSR patients.

Methods Prospective, multicentre study over a 4-year period, involving elderly (≥ 70 yrs) HSR patients (ASA score ≥ 3) with benign gallbladder disease in whom indication to cholecystectomy was made. Patients first underwent EUS-guided gallbladder drainage using LAMs, which worked as a port of entry for intracholecystic procedure(s) when needed. Primary endpoint was safety, defined by rate of intraprocedural, early (< 14 days), or late (> 14 days) adverse events (AEs) graded according AGREE classification. Secondary endpoints included: (i) long-term clinical success, defined as the absence of biliary recurrence within 24 months, in patients achieving either a full 2-years follow-up or ≥ 1 year of follow-up before death; (ii) predictors of biliary recurrence and mortality calculated by univariate and multivariate analysis.

Results A total of 95 consecutive frail elderly patients (mean age 83.9 ± 7.2 years; 80 % ASA III) with benign gallbladder disease deemed at high surgical risk for cholecystectomy underwent EEGBT. A transduodenal approach was performed in 55.8 % of procedures, and a 10×10 mm LAMS was used in 82.1 % of cases. Technical success was achieved in 94/95 patients (98.9 %). Median procedural time was 10 minutes (IQR 8–16), and median hospital stay was 5 days (IQR 3–8.25). Intracholecystic lithotripsy (mechanical or holmium laser) was performed after EEGBT in 10/95 patients (10.5 %), without any adverse events. Overall, EEGBT-related adverse events occurred in 21/95 patients (22.1 %). Among these, 5 patients experienced intraprocedural AEs only, 12 experienced late AEs only, and 4 patients (4.2 %) developed both an intraprocedural and a delayed AE. Severe AEs—defined as those requiring surgery or resulting in death—were observed in 2/95 patients (2.1 %). Intraprocedural AEs occurred in 5.3 % of cases (4 minor bleedings and one stent misdeployment), all successfully managed endoscopically or conservatively. Late AEs occurred in 20/95 patients (21.05 %). Among these, biliary recurrences were documented in 12 patients (12.6 %), including 10 recurrent cholecystitis and 2 choledocholithiasis (one presenting with acute pancreatitis). Most late AEs were managed with conservative or endoscopic therapy. Other delayed AEs included 5 cases of minor bleeding and 3 buried-LAMS events, one of which required cholecystectomy.

During a median follow-up of 27 months (IQR 24–37), we observed an overall mortality of 18.9 %, with one procedure-related death (1.2 %). Fifteen patients were lost to follow-up or died before completing 12 months. Among 80 patients eligible for secondary endpoints, clinical success was achieved in 68 (85 %). At univariate analysis, the transgastric approach showed a borderline association with increased biliary recurrence compared with the transduodenal route ($p = 0.050$). At multivariate analysis, LAMS removal followed by placement of a double-pigtail plastic stent was independently associated with biliary recurrence compared with leaving the LAMS indwelling ($p = 0.028$). Age was the only independent predictor of all-cause mortality ($p = 0.020$).

Conclusions In fragile elderly HSR patients with benign gallbladder disease, EEGBT provides very high technical success and favourable procedural safety. Long-term clinical success was high, and most late adverse events were manageable endoscopically or conservatively. LAMS removal emerged as the main driver of biliary recurrence, suggesting that long-term stent strategy is clinically relevant. With the aging of the population, this approach opens the possibility to treat electively an increasing number of elderly fragile patients with vulnerability and decreased physiological reserve, preventing or impairing post-procedural recovering and the return to preexisting functional level.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP215 Incidence and Risk factors for Acute Cholecystitis following ERCP with Metal stenting of malignant distal biliary obstruction (SCANSION Study): a prospective cohort study

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DOI 10.1055/s-0046-1821155

Aims Incidence and risk factors for Acute cholecystitis (AC) following ERCP with self-expandable metal stents (SEMS) for distal malignant biliary obstruction (DMBO) have been scarcely explored in retrospective studies.

Methods Between Feb-2024 and Apr-2025, all consecutive candidates to ERCP with a partially covered SEMS were enrolled in a single-centre prospective study (ClinicalTrials.gov NCT04813055). Two independent endoscopists blindly assessed morphological risk factors at EUS and ERCP. Clinical outcomes were evaluated by one independent assessor during admission and every 60 days. Multivariate logistic regression for Post-ERCP AC (PEC) was performed.

Results 130 patients with DMBO were included (median age 71 [IQR 62-77], pancreatic adenocarcinoma 84.6%). At EUS, cystic duct (CD) was infiltrated in 16.9% and closer than 10 mm from the neoplasia in 14.6% of cases. At ERCP the SEMS covered the CD in 38.3% of the procedures.

Median follow-up was 119 [54-204] days. Ten (7.7%) patients experienced post-ERCP pancreatitis whereas twelve (9.2%) experienced PEC, after a median time of 5.5 [5-51] days.

At multivariate logistic regression, the only independent predictor of PEC was a high-risk CD location (namely infiltrated or <10mm from the neoplastic stenosis (OR [95% CI] = 5.2 [1.5-18.3])

Conclusions In the context of SEMS placement for DMBO, PEC is relatively more frequent than post-ERCP pancreatitis. EUS ahead of ERCP can reliably predict this event as a high-risk CD location seems to independently predict this event.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP216 The placement of naso-cystic tube for lavage in Endoscopic ultrasound-guided gallbladder drainage with LAMS does not affect the outcome

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DOI 10.1055/s-0046-1821156

Aims Endoscopic ultrasound guided gallbladder drainage (EUS-GBD) with lumen apposing metal stent (LAMS) has become a favourite drainage option

for high surgical-risk patients with acute cholecystitis and as rescue treatment for the relief of jaundice in patients with distal malignant biliary obstruction (DMBO) with high technical and clinical success.

The placement of naso-cystic drainage (NCD) to favour drainage and for lavage is not routinely recommended and there are no data on its use.

We aim to assess the role of NC tube in term of rate of length of hospitalization, rate of obstruction and unplanned readmissions and re-interventions.

Methods Single center retrospective analysis of all consecutive cases of EUS-GBD with LAMS acceding to the Therapeutic Endoscopy Unit of Fondazione Policlinico Universitario Campus Bio-Medico of Rome. Data about LAMS features and procedure were collected.

Results From January 2019 to October 2025 sixty-seven patients were enrolled (50.7% male; 77 ± 12 years old). The 65.6% of them underwent EUS-GBD for acute cholecystitis. In 51% patients the trans-gastric access was performed. In 71.7% patients a Hot-Axios LAMS was used and in the majority of procedure (79.1%) a calibre bigger than 10 mm was used. Overall technical success was obtained in 98.5% of procedures.

A naso-cystic tube was placed inside the LAMS in 33/67 (49.3%) patients. Regarding the adverse events rate, in one patient distal flange misdeployment occurred. LAMS obstruction occurred in 7/67 patients (10.4%) and need of reintervention in 11/67 (16.4%).

There was no difference in term of drainage indication (61.7% vs 69.6% p 0.6), LAMS size (70.5% vs 87.8% p 0.13) and the placement of NCD. The rate of LAMS obstruction (6.7% vs 15.2% p 0.45) and reintervention (20.8% vs 25% p 1) was similar between the group of patients with NCD and without. The mean time of hospitalization after gallbladder drainage was not different between the two groups (11 ± 9 vs 8 ± 6 p 0.09).

Conclusions EUS-GBD is a safe technique with high technical success rate. The placement of naso-cystic drainage doesn't affect the post procedure outcome and doesn't reduce the length of hospital stay.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP217 Endoscopic ultrasound for nodal staging in patients with resectable gallbladder cancer

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DOI 10.1055/s-0046-1821157

Aims Lymph node (LN) involvement is a well-recognized adverse prognostic factor in gallbladder cancer (GBC), and accurate preoperative nodal staging is critical for improving treatment decisions and thereby optimizing patient management. Cross-sectional imaging has limited accuracy in LN staging. Endoscopic ultrasound (EUS) with tissue acquisition (EUS-TA) offers a minimally invasive method to sample suspicious LNs [1-4]. This study aimed to evaluate the impact of EUS for nodal staging in patients with presumed resectable GBC.

Methods In this retrospective, single-center cohort study at the Asian Institute of Gastroenterology, Hyderabad, India, consecutive patients with potentially resectable GBC who underwent preoperative EUS between January 2019 and November 2024 were included. Regional LNs were identified according to the 8th edition of the AJCC staging system as those located at the liver hilum, cystic duct, common bile duct, hepatic artery and adjacent to the gallbladder. Extraregional LN consisted of LNs located distal to the hepatoduodenal liga-

ment. EUS-TA was performed at the discretion of the endosonographer. The primary outcome was the impact of EUS on clinical decision making, measured as the percentage of patients in whom surgical exploration was precluded due to pathologically confirmed LN metastasis identified by EUS-TA. The secondary outcome was the incidence of adverse events, classified according to the AGREE classification.

Results A total of 56 patients were included (median age in years: 58.5, 51.8 % female). Preoperative cross-sectional imaging was performed in 94.6 % of patients with lymphadenopathy reported in 54.7 %. Across 59 EUS procedures, 46 LNs were identified, and EUS-TA was performed in 24 nodes from 21 patients. LN metastases were detected by EUS-TA in 10.7 % of patients, leading to the exclusion of these patients from surgical treatment. Notably, among patients who underwent surgical exploration after a median period of 18 days [IQR: 7.3 – 34.5], regional LN metastases were identified in nine of 31 patients and extraregional LN metastases in one patient. There were no complications reported related to the EUS or EUS-TA.

Conclusions Preoperative EUS significantly influenced clinical decision making in patients with presumed resectable GBC by identifying LN metastases and thereby altering patient management. Notably, multiple LN metastases were missed at preoperative screening. Future prospective studies employing standardized EUS protocols or integrating advanced imaging modalities are warranted to improve preoperative nodal staging and optimize management strategies in GBC.

Conflicts of Interest M.J. Bruno received research grants from Boston Scientific, Cook Medical, Pentax Medical, InterScope, 3M, and Mylan, and performed as a consultant for Boston Scientific, Cook Medical, and Pentax Medical.

References

- [1] Malikowski T, Levy MJ, Gleeson FC, Storm AC, Vargas EJ, Topazian MD et al. Endoscopic Ultrasound/Fine Needle Aspiration Is Effective for Lymph Node Staging in Patients With Cholangiocarcinoma. *Hepatology*. 2020; 72 (3): 940–8
- [2] de Jong DM, den Hoed CM, Willemsen FEJA, Thomeer MGJ, Bruno MJ, Koerkamp BG, et al. Impact of EUS in liver transplantation workup for patients with unresectable perihilar cholangiocarcinoma. *Gastrointestinal Endoscopy* 2024; 99 (4): 548–56
- [3] de Jong DM, van de Vondervoort S, Dwarkasing RS, Thomeer MGJ, Doukas M, Voermans RP et al. Endoscopic ultrasound with tissue acquisition of lymph nodes in patients with potentially resectable intrahepatic cholangiocarcinoma. *Endosc Int Open* 2024; 12 (8): E998–E1005
- [4] de Jong DM, van de Vondervoort S, Dwarkasing RS, Doukas M, Voermans RP, Verdonk RC et al. Endoscopic ultrasound in patients with resectable perihilar cholangiocarcinoma: impact on clinical decision-making. *Endosc Int Open* 2023; 11 (2): E162–E8

PYP218 Trans-Gastric versus Trans-Duodenal EUS-Guided Gallbladder Drainage (EUS-GBD): A Large International Multicenter Comparative Study

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DOI 10.1055/s-0046-1821158

Aims EUS-guided gallbladder drainage (EUS-GBD) with LAMS is increasingly used in management of acute cholecystitis (AC) in patients unfit for surgery or with malignant distal biliary obstruction. Evidence comparing the trans-gastric (TG) and trans-duodenal (TD) routes remains limited.

Methods This international, multicenter retrospective study included all consecutive patients undergoing EUS-GBD from January 2019 to August 2025 across five tertiary centers (Italy, France, India). Standardized data collection included baseline characteristics, procedural variables, technical success (TS), clinical success (CS), adverse events (AEs; AGREE classification), recurrence, and recurrence-free survival (Kaplan–Meier). TS was defined as successful LAMS deployment; CS as resolution of the index condition without further intervention. Recurrence was defined as symptomatic or infectious relapse requiring reintervention.

Results A total of 194 patients were included (84 TG; 110 TD). Indications were acute cholecystitis in 69.6 % and malignant biliary drainage in 30.4 %. Overall TS and CS were 98.5 % and 96.9 %, respectively, with 5.9 % recurrence. TS was comparable between groups (TG 98.8 % vs TD 98.2 %; $P=0.726$). However, CS was significantly lower in the TG group (92.8 % vs 100 % in TD; $P=0.0046$). Procedural time was also significantly longer in TG (17 vs 10 minutes; $P=0.0073$). Hospital stay did not differ (6 vs 6 days; $P=0.385$). Overall AEs were similar (19.0 % vs 14.5 %; $P=0.404$), but LAMS obstruction occurred significantly more frequently in TG (8.3 % vs 1.8 %; $P=0.033$). Other AEs – LAMS migration (1.2 % vs 0.9 %; $P=0.866$), bleeding (2.4 % vs 2.7 %; $P=0.907$), and cholangitis (5.9 % vs 5.4 %; $P=0.882$) – did not differ significantly. Recurrence remained similar (5.2 % vs 6.5 %; $P=0.716$). Kaplan–Meier analysis confirmed no difference in recurrence-free survival between TG and TD (log-rank $P=0.986$).

Conclusions EUS-GBD is highly feasible, effective, and safe across international real-world settings. The transduodenal approach demonstrated significantly higher clinical success and significantly shorter procedure time, while safety and recurrence outcomes were comparable. When anatomically possible, TD drainage may represent the preferred route.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP219 Transduodenal versus Transgastric Endoscopic Ultrasound-guided Gallbladder Drainage: a prospective comparative study

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DOI 10.1055/s-0046-1821159

Aims Endoscopic Ultrasound guided-Gallbladder Drainage (EUS-GBD) is an established non-invasive approach for gallbladder drainage in elderly/comorbid patients. Technical guidelines suggest that a transduodenal versus transgastric route should be preferred due to the lower risk of stent occlusion and migration, despite the absence of any head-to-head comparison.

Methods This is a single tertiary center prospective study conducted between Jan-2021 and Mar-2025. All consecutive patients treated with EUS-GBD with Lumen Apposing Metal Stents (LAMS) were enrolled in a Prospective Registry

of Therapeutic EUS (PROTECT, ClinicalTrials.gov NCT04813055), with daily follow-up during admission and every 60 days after discharge. Baseline characteristics and Technical / Clinical outcomes were compared between the transduodenal versus transgastric access.

Results A total of 57 patients were enrolled, 47 (82.5%) and 10 receiving respectively transduodenal versus transgastric drainage. There was no difference in background characteristics between the groups. However, there were more EUS-GBD performed for biliary drainage in the transgastric (40%) versus transduodenal (2.1%) route, which also resulted in a higher prevalence of 8 mm LAMS use (30% versus 2.1%). Technical Success (100%) was similar between groups. However, the transgastric route showed lower rate of Clinical Success (70% versus 95.7%, $p = 0.01$) and higher rate of Adverse Events (50% versus 14.9%, $p = 0.01$). In this group, all adverse events were severe/fatal according to ASGE lexicon, and included 4 clinical failures of EUS-GBD for biliary drainage (of which 2 with endoscopic finding of buried LAMS). After a median follow-up of 215 [61-404] days, there was no significant difference in the rate of recurrence of biliary events, despite the risk tended to be higher in the transgastric route (14.3% versus 6.7, $p = 0.5$). Median estimated survival was shorter in the transgastric route ($p = 0.0045$).

Conclusions Despite the small sample size and the likely selection bias, this prospective comparison suggests that the transgastric route for EUS-GBD is more prone to clinical failure and adverse events, such as LAMS occlusion or burial. The transduodenal route should be preferred, whenever feasible, for long-term LAMS indwell.

Conflicts of Interest Giuseppe Vanella reports consultancy or lecture fees from Boston Scientific and Euromedical and travel grants from Pentax Medical and Euromedical. Gabriele Capurso reports consultancy for Boston Scientific, Amgen, Pangenix,

PYP220 EUS guided Gallbladder Drainage in Acute disrupted cholecystitis with a capsulated fluid collection: a multicenter retrospective experience

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DOI 10.1055/s-0046-1821160

Aims A non-negligible proportion of patients suffering from acute cholecystitis develop a perforated cholecystitis characterized by the formation of an encapsulated pericholecystic collection (PC). Current guidelines do not provide a specific indication for EUS-GBD in perforated cholecystitis with an encapsulated PC. Currently, unfit patients presenting with perforated cholecystitis and encapsulated PC are generally managed via a percutaneous approach driven by safety concerns regarding EUS-GBD to avoid the theoretical risk of placing a LAMS into a perforated organ. Consequently, the presence of PC is often viewed as a relative or absolute contraindication for EUS-GBD. The aim of this retrospective study is to explore the safety of EUS-GBD in patients with acute cholecystitis complicated by an encapsulated fluid collection.

Methods This was a retrospective international study conducted in 10 tertiary centers. Acute cholecystitis was defined and graded according to Tokyo criteria. Encapsulated PC was defined as collection adjacent to gallbladder with clearly demarcated wall without detectable interruption at CT scan or intra-procedural echoendoscopic evaluation. The primary outcome was safety, evaluated by assessing adverse events according to the ASGE lexicon. Secondary outcomes were technical success, clinical success and the rate of PC resolution. Procedural features have also been reported. Technical success was defined as adequate LAMS placement confirmed by endoscopic and radiologic assessment, clinical success was defined as resolution of symptoms along with available objective improvements in biochemical and/or radiological findings of cholecystitis within 3 days after. PC resolution was defined as the absence of the PC at the last radiological assessment performed during the available follow-up.

Results The study included 57 patients (24 females 42.1% with a median age of 81 years IQR:73–85). Regarding the access route, 79% of procedures were performed via the transgastric approach, while 21% were performed via the transduodenal window. The most used LAMS diameter was 10 mm (60%). All LAMS were deployed using the intra-channel release technique for the distal flange, and 87% were placed using a free-hand technique. Technical success was achieved in all patients (100%). Adverse events (AEs) occurred in 7 patients (12.3%), classified as mild in three cases, moderate in three, and fatal in one. One AE occurred intra-procedurally, while the remaining six were classified as post-procedural. The single intra-procedural event involved the misdeployment of the LAMS distal flange and it was managed endoscopically. Post-procedural AEs included four bleeding episodes, one liver abscess and one perforation. One bleeding was secondary to cystic artery pseudoaneurysm and it required radiological embolization; the other three were treated endoscopically. The perforation was diagnosed 36 h after the procedure and was treated conservatively with antibiotics therapy. Clinical success was achieved in 52 out of 54 patients (96%). The median length of hospital stay post-procedure was 6 days (range: 3–10). Resolution of the PC was observed in 94.4% of patients. Among the three patients who did not achieve PC resolution, one developed a liver abscess, and two required subsequent percutaneous drainage, which successfully resolved the collection. A total of five deaths were recorded during the study period. One death was considered procedure-related secondary to the liver abscess, while the remaining four were unrelated to either the procedure or the cholecystitis.

Conclusions This study suggests the feasibility to treat acute cholecystitis with encapsulated PC through LAMS placement in patients declared unfit for surgery.

Conflicts of Interest Author B. M. is consultant for Taewoong, Author A. F.: Consulting fees for Boston Scientific, Author C.H has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co, Author A.R has received fees for serving as a consultant from Fujifilm Co., Medtronic Co., and Olympus Corp.

The Esophagus – Interesting Case-Based Discussions

15/05/2026, 14:30–15:30

Emerald 4

PYP221V Esophageal Endoscopic Muscularis Dissection with “tunnel first” approach as a palliative local therapy of a deeply Invasive Barrett’s Adenocarcinoma in a Patient With Metastatic Squamous Cell Cancer

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DOI 10.1055/s-0046-1821161

Problem to solve In selected cases complete endoscopic removal of deep submucosal esophageal cancer is appropriate when surgery is not feasible. In order to achieve R0 resection the superficial circular muscle layer has to be dissected.

In non-surgical candidates, achieving R0 resection of deep submucosal esophageal cancer requires adequate prediction of how far the dissection must extend beyond the tumor. The problem is to determine the minimal depth that ensures complete tumor removal while still preventing perforation of the esophagus.

Innovation The innovative aspect of this case is the application of endoscopic muscularis dissection (EMD) in the esophagus, supported by a “tunnel first” evaluation approach. A submucosal tunnel was created to directly visualize the lesion in relation to the muscular layer. After creating the tunnel, the invasion area became clearly identifiable, and dissection was extended along the right and left sides to determine both the depth and the longitudinal extent of involvement. This “tunnel first” approach added a safety advantage by allowing precise assessment of how deep and how long the infiltration extended, guiding a controlled proper dissection plane to keep the risk of perforation low. Dissection is performed with the TTJ Neo knife, followed by the ClutchCutter, which enables efficient dissection and hemostasis simultaneously.

Results A 45-year-old male with metastatic esophageal squamous cell carcinoma, under systemic therapy, presented with a newly detected early Barrett’s adenocarcinoma at the Z-line. Pre-procedural imaging and EUS suggested deep submucosal infiltration, but endoscopic resection was considered feasible as part of a palliative local-control strategy. The procedure began with creation of a submucosal tunnel to directly assess the tumor–muscularis infiltration. Within the tunnel, a clear muscular traction sign indicated superficial invasion into the muscle layer, prompting the decision to proceed with an endoscopic intramuscular dissection. The specimen was retrieved en bloc. A 4 × 3 cm R0 intramuscular resection was achieved without complications. Histopathology confirmed adenocarcinoma with sm2 invasion (1.1 mm), lymphatic invasion, and clear vertical and horizontal margins. No vascular or perineural invasion was present. At 6-month follow-up, endoscopy showed a completely healed, smooth scar with no residual or recurrent tumor. Biopsies were normal, and the patient remained under systemic treatment with stable local conditions.

Conclusions This case illustrates that EMD, supported by a tunnel-first evaluation, enables assessment of invasion depth and effective intramuscular dissection in a palliative case. Even when deep submucosal involvement is predicted, EMD can provide complete local removal while preserving esophageal integrity. This approach may be considered for select patients in whom local control of the tumor is clinically significant

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ab595509-1577-438f-b697-4a30e16d11a7/Uploads/19990_123360_EMD%20Eso%20Final.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP222 Circumferential ESD for long-segment verrucous carcinoma of the esophagus is a feasible option for curative treatment: a case series of two patients

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DOI 10.1055/s-0046-1821162

Introduction Verrucous carcinoma of the esophagus (VCE) is a rare, slowly growing malignant subentity of squamous cell carcinoma, first described in 1967. The most common symptoms are dysphagia, chest pain, and weight loss. The tumor typically shows local invasion; lymph node positivity is rare, and organic metastasis hasn’t yet been described. Typical endoscopic findings include exophytic growth of a whitish warty mass, hyperkeratotic plaques, and candidal esophagitis. Histopathological findings include squamous proliferation and a so-called church spire appearance of hyperkeratosis and parakeratosis within the thickened spinous cell layer. Diagnosis is complex and may require multiple biopsies, up to endoscopic mucosal resection (EMR). An association with alcohol, tobacco, and human papillomavirus is discussed. Since its first description, just around sixty cases have been published. The most common treatment is esophagectomy. Other treatment options, such as (repeated) piecemeal EMR, endoscopic submucosal dissection (ESD), and radiochemotherapy, are documented in only a few case reports.

Case description Thus, we present the first circumferential ESD using the double-tunneling technique in two patients with extended early VCE. A 77-year-old female patient and a 76-year-old male patient were recently diagnosed with early-stage VCE in our department. The endoscopic findings were an exophytic, cauliflower-like, warty mass measuring approximately 8 cm in length in the middle part of the esophagus (female patient) and a flat, hyperkeratotic lesion measuring approximately 10 cm in length in the middle and distal parts (male patient). Although the histology report showed only hyperkeratosis and candidal esophagitis, even in the snare resection specimens, the endoscopic image led to the decision to perform ESD in both cases. The procedure was performed using the double-tunneling technique over lengths of 9 and 12 cm, respectively, due to circumferential growth. The histology report of both resected specimens confirmed the diagnosis of mucosal VCE (female patient) and early submucosal VCE (male patient). The vertical margin was R0 in both patients. A microscopic edge-forming invasion of the upper horizontal margin on mucosal level was shown in both patients. Both patients received early post-interventional balloon dilatation of the esophagus two weeks after the procedure and corticosteroid treatment for four weeks. Clinical and endoscopic follow-up time is now two years and 15 months, respectively, without recurrence of carcinoma. Sequential balloon dilatation and temporary stent implantation due to post-procedural stenosis were required in the female patient [1–6].

Conclusion ESD is a feasible and promising curative treatment option even for patients with extended early-stage VCE. Recurrence rates should be low regarding submucosal tumor clearance (vertical R0 resection). Esophageal stenosis, as the main post-procedural complication, must be considered. Early balloon dilatation and corticosteroid treatment are effective in reducing the risk of post-procedural stenosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Minielly JA et al. Verrucous squamous cell carcinoma of the esophagus. *Cancer*. 1967; 20: 2078–2087
- [2] Hashimoto M et al. Verrucous carcinoma of the esophagus with complete response after chemoradiotherapy. *Surgical case reports* 2022; 8: 128–133

[3] Abe T et al. Endoscopic submucosal dissection for an atypical small verrucous carcinoma. *Journal of Medical Case Reports* 2016; 10: 74–77

[4] Tabuchi S et al. Verrucous carcinoma of the esophagus: a case report and literature review. *Surgical case reports* 2020; 6: 35–42

[5] Soota K et al. Experience with endoscopic resection of oesophageal verrucous carcinoma and literature review. *BMJ Case Rep* 2019; 12:e229576

[6] Di L et al. Early verrucous cell carcinoma of the esophagus: a case report and endoscopic and histologic features. *BMC Gastroenterology* 2021; 21: 466–470

PYP223V Circumferential Esophageal Endoscopic Submucosal Dissection as a Salvage Treatment for Recurrent Barrett’s Neoplasia After Endoscopic Mucosal Resection and Radiofrequency Ablation

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DOI 10.1055/s-0046-1821163

Abstract Text

A 68-year-old man with long-segment Barrett’s esophagus (BE) repeatedly failed to achieve re-epithelialization after endoscopic mucosa resection (EMR) and multiple radiofrequency ablation (RFA) sessions. During follow-up, he developed intramucosa carcinoma with multiple non-visible high-grade dysplasia (HGD) in random biopsies. Circumferential salvage endoscopic submucosal dissection (ESD) for the entire BE was performed using a bipolar knife with tunnel creation and clip-band-line traction to enhance visualization. Microwave coagulation minimized bleeding, and the 459-minute procedure was completed safely despite the severe fibrosis. Stricture prevention included triamcinolone injection and Purastat polymer application, followed by high-dose proton-pump inhibition and oral viscous budesonide for 12 weeks. This multimodal approach effectively reduced stricture risk after circumferential ESD [1–4].

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/730cbee7-4a18-4389-8159-fdd5ff55d099/Uploads/19978_DSE_rescate%20cESD%20Barrett%20mp4%20\(video-converter-com\).avi](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/730cbee7-4a18-4389-8159-fdd5ff55d099/Uploads/19978_DSE_rescate%20cESD%20Barrett%20mp4%20(video-converter-com).avi)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Weusten B, Bisschops R, Coron E et al. Endoscopic management of Barrett’s esophagus: European Society of Gastrointestinal. Endoscopy (ESGE) Position Statement. *Endoscopy* 2017; 49: 191–198

[2] Pasricha S, Bulsiewicz WJ, Hathorn KE et al. Durability and predictors of successful radiofrequency ablation for Barrett’s esophagus. *Clin Gastroenterol Hepatol* 2014; 12: 1840–7.e1

[3] Fraile-López M, Parra-Blanco A. Double-tunnel circumferential endoscopic submucosal dissection with double clip-band-line traction for an esophageal squamous neoplasm. *Endoscopy*. 2020; 52: E303–E305

[4] Mesureur L, Deprez PH, Bisschops R et al. Safety and efficacy of salvage endoscopic submucosal dissection for Barrett’s neoplasia recurrence after radiofrequency ablation. *Endoscopy*. 2024; 56: 653–662

PYP224 Predictors of Clinical Success in the Endoscopic Management of Gastrointestinal Transmural Defects: A Multivariate Analysis of 95 Cases

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DOI 10.1055/s-0046-1821164

Aims Gastrointestinal transmural defects, especially postoperative leaks and fistulas, are associated with substantial morbidity and increasing incidence due to more complex surgery. Endoscopic therapy is the preferred minimally invasive alternative to rescue surgery, but clinical success varies widely and depends on anatomical, physiological, and technical factors. This study aimed to identify predictors of technical and clinical success in endoscopic management of gastrointestinal wall defects and to develop a prognostic nomogram for personalized decision-making.

Methods A retrospective cohort study was conducted at a tertiary referral center including all patients who underwent endoscopic treatment of postsurgical or iatrogenic gastrointestinal transmural defects from 2014 to 2024. Demographic, anatomical, and clinical variables were collected, along with defect size, location, and distance from natural orifices. Endoscopic therapies were classified as mechanical closure (clips or suturing) or coverage/drainage approaches (stents, vacuum therapy). Technical success was defined as complete closure or successful placement of the selected technique, and clinical success as definitive resolution without further intervention or surgery. Temporal trends were evaluated comparing early and recent periods, corresponding to wider adoption of drainage-based strategies. Univariate logistic regressions identified candidate predictors for inclusion in a multivariate logistic regression model, which was assessed for calibration and goodness of fit and used to generate a prognostic nomogram (► Table 1).

► Table 1

Variable	Effect direction	Odds Ratio (95% CI)	p-value
Low anatomical location	↑ Higher success	81.2 (3.6–1834)	0.012
Distance to natural orifices (per cm)	↑ Higher success	1.13 (1.03–1.25)	0.011
Procedures performed ≥ 2022	↑ Higher success	7.16 (1.89–27.2)	0.0047
Mechanical techniques vs coverage/drainage	↓ Lower success	0.05 (0.009–0.27)	0.001
Defect size (per mm)	↓ Lower success	0.95 (0.91–0.99)	0.024
ASA III	↓ Lower success	0.26 (0.07–0.97)	0.045

Results A total of 95 procedures were performed in 83 patients, mostly postoperative defects (81.1 %) and predominantly located in the upper gastrointestinal tract (94.7 %). Technical success was 93.7 %, while clinical success reached 52.6 %. Outcomes improved over time, increasing from 45.1 % in 2014–2021 to 61.4 % in 2022–2024 with greater use of drainage and negative-pressure techniques (p = 0.149). In the multivariate analysis, lower gastrointestinal location (OR 81.2; p = 0.012), greater distance from natural orifices (OR 1.13 per cm; p = 0.011), and procedures performed from 2022 onwards (OR 7.16; p = 0.0047) independently predicted higher clinical success. Mechanical closure techniques (OR 0.05; p = 0.001), larger defect size (OR 0.95 per mm; p = 0.024), and ASA III status (OR 0.26; p = 0.045) were associated with lower success. The final model demonstrated good calibration and allowed development of a nomogram for individualized prognostic assessment.

Conclusions Endoscopic treatment of gastrointestinal transmural defects achieves high technical success but only moderate clinical success, although outcomes have improved significantly with the adoption of drainage-based and negative-pressure approaches. Clinical success is influenced by anatomical complexity, patient physiological status, and appropriate technique selection. The resulting predictive nomogram may support individualized risk stratifica-

tion and guide optimal endoscopic management of gastrointestinal leaks and fistulas.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP225V A simplified strategy for stent fixation using a defect-closure system in refractory esophageal stricture

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DOI 10.1055/s-0046-1821165

Abstract Text

Refractory benign esophageal strictures are commonly treated with fully covered stents, but migration occurs in up to 40 % of cases. Endoscopic fixation methods have been introduced to resolve this issue. The X-Tack system, originally designed for GI defect closure, has been repurposed for stent anchoring. We report a simplified tack-only fixation approach that omits the suture component to streamline deployment. A 19-year-old patient with severe caustic-induced stricture, refractory to repeat dilations, experienced early migration of an initial stent. A second fully covered stent was placed and individually secured along the proximal stent edge using sequential helical tacks deployed through the stent mesh into healthy esophageal tissue. At 4-week follow-up, stent removal showed marked luminal improvement. This suture-less tack-only method appears feasible and reproducible.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/5c263514-81b6-46ad-8d1f-75f926724b81/Uploads/19978_video_X-Tack%20simplified%20ESGE.mp4

Conflicts of Interest MS: Boston Scientific (consultancy). MC: Boston Scientific (speaking honorarium). AF: Boston Scientific (consultancy). AR: Boston Scientific (consultancy).

PYP226 From Innovation to Standard Practice: A 100-Case Experience with Z-POEM in a Single Tertiary Center

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DOI 10.1055/s-0046-1821166

Aims Traditional management of Zenker's diverticulum (ZD) has relied on rigid endoscopic septotomy or open surgical approaches, both associated with higher procedural burden and complication rates, particularly in elderly or comorbid patients. Over the past two decades, flexible endoscopy has become an important minimally invasive alternative, offering flexible endoscopic septotomy (FES) as a valid therapeutic option with shorter recovery time and fewer complications. However, despite its advantages, FES remains limited by incomplete myotomy and technically challenging exposure in certain anatomies, which can lead to recurrence. Zenker's peroral endoscopic myotomy (Z-POEM) has emerged over the past decade as a minimally invasive alternative that enables a controlled submucosal tunneling approach and complete septal division. Although Z-POEM adoption has increased internationally, high-volume single-center analyses with consecutive, prospectively collected cases remain limited. This study aimed to evaluate the safety profile, efficacy and degree of procedural standardization achieved throughout our experience with the first 100 consecutive Z-POEM procedures at a tertiary referral center.

Methods We conducted a retrospective analysis of all consecutive patients undergoing Z-POEM between October 2020 and November 2025. Demographic characteristics, symptom duration, and diverticulum size were recorded. Diverticulum dimensions were extracted both from endoscopy (EGDS) and radiographic imaging (Rx). Procedural data included type of knife, use of guide-

wire, myotomy length, number of clips for mucosal closure, procedure duration, and in-hospital course. Clinical outcomes were assessed through symptom scores (Kothari), adverse events (AEs) graded according to ASGE lexicon, technical success, clinical success, and need for retreatment. Follow-up was performed through scheduled visits, telephone interviews, and additional endoscopy when indicated.

Results A total of 100 patients (61 % male; mean age 70.5 ± 10.4 years; BMI 24.6 ± 3.1 kg/m²) were included. Pretreatment symptoms persisted for a mean of 29 ± 39 months, and 95 % of patients were treatment-naïve, reflecting the role of our center as a primary referral site. Mean diverticulum size measured 14.7 ± 7.9 mm on EGDS and 24.9 ± 13.1 mm on Rx. All procedures were performed by three expert endoscopists using low-flow CO₂ insufflation and the TT-knife J in 98 % of cases, supporting high procedural standardization. Guide-wire placement was required in only 3 % of cases, predominantly in anatomically challenging presentations. The mean myotomy length was 19.7 ± 7.2 mm, and closure was achieved with an average of 3.4 ± 0.8 clips. Technical success reached 98 %, two procedures were aborted due to the inability to obtain sufficient exposure of the diverticular septum during the tunneling. Procedures were efficient, with a mean duration of 17.9 ± 7.3 minutes and a mean hospitalization of 2.2 ± 1.5 days. During the index procedure, two mucosal perforations occurred but were immediately identified and managed endoscopically without clinical sequelae. No AEs occurred or conversions to alternative techniques were reported. At final follow-up (mean 22.2 ± 12.6 months; 23 % lost), 88 % of patients maintained sustained symptom relief (Kothari ≤ 4). The mean Kothari score showed a significant improvement, decreasing from 3.12 pre-procedure to 1.22 at the final follow-up, corresponding to a mean difference of 1.90 (95 % CI 1.36–2.44; p < 0.05). Retreatment was required in eight patients (8 %): repeat Z-POEM in 3 % and FES in 5 %. All reinterventions were completed endoscopically, without further complications, underscoring the manageable nature of recurrent symptoms.

Conclusions Our experience demonstrates that Z-POEM is a highly effective, safe, and reproducible technique for the management of Zenker's diverticulum. Technical success was consistently high across operators, while procedure time, resource utilization, and length of stay remained low, reflecting progressive standardization within the center. The absence of severe AEs or surgical conversions, and excellent long-term clinical response reinforce the role of Z-POEM as a first-line endoscopic therapy for ZD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP227 Findings from a United Kingdom multi-centre study on the use of VacStent for treating transmurals Gastrointestinal defects in the oesophagus

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DOI 10.1055/s-0046-1821167

Aims Gastrointestinal transmural defects refer to a spectrum of conditions characterized by full-thickness rupture of the gastrointestinal wall. These defects are associated with high morbidity and mortality rates and often require prolonged hospital stays. Endoscopic vacuum therapy (EVT) has played an increasingly important role in managing these defects. The VacStent GI (Micro-Tech) is a novel device that synergistically combines the advantages of fully covered self-expanding metal stents (fcSEMS) with the principles of EVT.

Methods We prospectively analysed patients who underwent treatment for transmural oesophageal defects using VacStent between October 2023 and November 2025 at two tertiary referral centers in the United Kingdom. The primary outcome was clinical success, defined as the endoscopic and radiological evidence of defect closure. Secondary outcomes included the number of VacStent exchanges, technical success, serious adverse device effects (SADE), and time to defect closure.

Results Of the 22 patients treated (median age 66 years, IQR 58–73.5; 73 % male), 12 (55 %) had anastomotic leakage after oesophageal resection, 6 (27 %) had iatrogenic defects post gastroscopy, and 4 (14 %) had Boerhaave's syndrome. The median defect size was 9 mm (IQR 6–13.5). Clinical success was achieved in 73 % of cases, with a technical success rate of 100 %. The median time to defect closure was 11 days (IQR 5–14), requiring a median of 1 VacStent exchange (IQR 0–2). Of the 6 patients in which VacStent failed, 3 had defects within the surgical conduit, 2 had large associated cavities, and 1 was clinically unstable; thus, stent exchange was abandoned.

Conclusions Our multi-centre data demonstrates that VacStent therapy for transmural GI defects in the oesophagus is both safe and effective, with a clinical success rate of 73 %. A standardised pathway and protocol are needed to optimise management and improve outcomes for this challenging patient population. Higher quality data is needed as most of the literature consist of case series.

Conflicts of Interest VS – receives research and infrastructure support from Micro-Tech.

PYP228 Clinical Utility of the Water Pressure Method in Endoscopic Submucosal Dissection for Challenging Lesions: A Retrospective Study

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DOI 10.1055/s-0046-1821168

Aims The water pressure method (WPM) was developed to perform endoscopic submucosal dissection (ESD) in the duodenum—a technically challenging procedure—safely and reliably. WPM is a type of underwater ESD that utilizes the endoscope's water jet function to create space beneath the mucosal flap, thereby improving visualization of the submucosal layer. Additionally, maintaining low intraluminal pressure increases the thickness of the submucosal layer compared to air insufflation, facilitating safer dissection. Its efficacy has also been reported in colorectal and pharyngeal ESD. At our institution, WPM is actively employed for ESD in the pharynx, esophagus, duodenum, and colon, particularly for lesions considered technically demanding. This study aimed to evaluate the effectiveness of WPM through a retrospective analysis of ESD cases performed at our institute [1, 2].

Methods We retrospectively analyzed cases of ESD for pharyngeal, esophageal, and colorectal lesions performed between January 2023 and October 2025. Patients were divided into two groups: conventional ESD under air insufflation (C group) and WPM-assisted ESD (W group). For pharyngeal/esophageal and colorectal lesions, patient characteristics and treatment outcomes were compared between the groups. The primary endpoint was treatment efficiency, calculated as dissection area per unit time (mm²/min), where the resected specimen area was estimated as πab (a = long axis, b = short axis). Secondary endpoints included en bloc resection rate and incidence of perioperative adverse events. Cases with incomplete procedures or missing data were excluded.

Results Pharyngeal/esophageal ESD was performed in 59 patients with 78 lesions. The C group included 52 patients (median age 72.5 years, range 49–88; 84.6 % male) with 6 pharyngeal and 54 esophageal lesions. The W group included 7 patients (median age 70 years, range 46–76; 85.7 % male) with 2 pharyngeal and 6 esophageal lesions. The W group comprised technically chal-

lenging lesions, such as lesions at the pharyngoesophageal junction, circumferential or near-circumferential cervical esophageal lesions, and lesions arising within an esophageal diverticulum lacking muscularis propria. Pharyngeal/cervical esophageal involvement was significantly more frequent in the W group (62.5 % vs. 10 %, $p < 0.01$). Treatment efficiency did not differ significantly (C group: 12.6 mm²/min; W group: 10.2 mm²/min, $p = 0.17$). En bloc resection was achieved in all cases. Perioperative adverse events included one post-procedural bleeding and one delayed perforation in the C group; none occurred in the W group. No intraoperative perforations were observed in either group.

Colorectal ESD was performed in 95 patients with 102 lesions. The C group included 82 patients (median age 73 years, range 42–88; 51.2 % male) with 51 right-sided and 37 left-sided lesions. The W group included 13 patients (median age 74 years, range 55–85; 53.8 % male) with 7 right-sided and 7 left-sided lesions. Baseline characteristics were comparable between the groups. Lesion size was significantly larger in the W group (median 40.5 mm vs. 35 mm, $p = 0.01$). Treatment efficiency was significantly higher in the W group (22.1 mm²/min vs. 8.4 mm²/min, $p < 0.01$). Intraoperative perforation occurred in one case per group. Delayed perforation (4 cases, 4.5 %) and post-procedural bleeding (2 cases, 2.3 %) were observed only in the C group.

Conclusions In pharyngeal/esophageal ESD, WPM did not improve treatment efficiency but enabled the successful completion of procedures for high-risk lesions that were anticipated to be challenging with conventional ESD. In contrast, WPM significantly enhanced treatment efficiency in colorectal ESD. Perioperative adverse events were less frequent in WPM-assisted procedures for both pharyngeal/esophageal and colorectal lesions. WPM may improve both the safety and efficiency of ESD and facilitate treatment of lesions previously considered technically prohibitive.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Yahagi N, Nishizawa T, Sasaki M et al. Water pressure method for duodenal endoscopic submucosal dissection. *Endoscopy*. 2017; 49 (10): E227–E228

[2] Kato M, Takatori Y, Sasaki M et al. Water pressure method for duodenal endoscopic submucosal dissection (with video). *Gastrointest Endosc* 2021; 93 (4): 942–949

PYP229 Endoscopic management of Post-Bariatric Fistulas with the use of Double Layer Stents: a Retrospective Study with Long-Term Outcomes

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DOI 10.1055/s-0046-1821169

Aims Post-bariatric anastomotic leaks are serious complication following sleeve gastrectomy or gastric bypass procedures. Traditional management often requires surgical reintervention, but endoscopic techniques, particularly the use of self-expanding metal stents (SEMS), offer a minimally invasive alternative. This retrospective study evaluates the efficacy of endoscopic management of post-bariatric fistulas including the use of a double layer stent (Niti-S Beta Esophageal Stent), focusing on resolution rates, complications, and the number of procedures required for successful resolution [1–4].

Methods We retrospectively reviewed patients who developed an anastomotic leak following bariatric surgery between 2014 and 2023. These patients were treated endoscopically with the placement of a double layer stent (Niti-S Beta Esophageal Stent). The primary endpoint was resolution of the fistula considered achieved when the patient healed without requiring surgical reinterven-

tion. Secondary outcomes included adverse events, number of procedures required to achieve fistula resolution and late recurrence.

Results Data from 20 patients were collected (17 sleeve gastrectomy, 3 gastric bypass). Effective leak/fistula closure was obtained in 18/20 patients (90%) who achieved resolution of the fistula without the need for subsequent surgical intervention. The mean number of procedures required for resolution was 3 while mean stent indwell time was 26.5 days. Adverse events occurred in 3 patients: 1) stent migration, 1) esophageal perforation and 1) esophageal stenosis. All the adverse events were managed endoscopically respectively with 1) stent retrieval and double pig tail stents placement 2) closure with over the scope clip 3) mechanical esophageal dilations.

Regarding long-term outcomes, the mean follow-up duration was 39.3 months. A recurrence of the fistula occurred in 1 patient at 24 months post-treatment. The recurrence was also managed endoscopically. There were no further complications or recurrences during the follow-up period.

Conclusions Endoscopic management of post-bariatric anastomotic leaks using double layer stents (Niti-S Beta Esophageal Stent) is a safe and effective approach, with a high-resolution rate (90%) and a reasonable complication rate (15%) in our population. The mean follow-up of 39.3 months demonstrated long-term success, with only a single recurrence managed without surgery. The low need for additional surgical interventions and the ability to manage complications endoscopically further emphasize the value of double layer stents in the management of post-bariatric fistulas. These findings suggest that these stents could be considered as first-line treatment for anastomotic leaks after bariatric surgery, offering a non-invasive alternative with favourable long-term outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rogalski P, Swidnicka-Siergiejko A, Wasilica-Berger J, Zienkiewicz D, Wieckowska B, Wroblewski E, Baniukiewicz A, Rogalska-Plonska M, Siergiejko G, Dabrowski A, Daniluk J. Endoscopic management of leaks and fistulas after bariatric surgery: a systematic review and meta-analysis. *Surg Endosc*. 2021; 35 (3): 1067–1087. doi:10.1007/s00464-020-07471-1 Epub 2020 Feb 27 PMID: 32107632 PMID: PMC7886733
- [2] Benosman H, Rahmi G, Perrod G, Bruzzi M, Samaha E, Vienne A, Cuenod CA, Chevallier JM, Douard R, Cellier C. Endoscopic Management of Post-bariatric Surgery Fistula: a Tertiary Care Center Experience. *Obes Surg* 2018; 28 (12): 3910–3915. doi:10.1007/s11695-018-3432-4 PMID: 30074143
- [3] Tringali A, Bove V, Perri V, Landi R, Familiari P, Boškoski I et al. Endoscopic treatment of post-laparoscopic sleeve gastrectomy leaks using a specifically designed metal stent. *Endoscopy* 2017; 49 (1): 64–68. doi:10.1055/s-0042-117235
- [4] Mandarinov FV, Esposito D, Spelta GNE, Cavestro GM, Rosati R, Parise P, Gemma MF, Fanti L. Double layer stent for the treatment of leaks and fistula after upper gastrointestinal oncologic surgery: a retrospective study. *Updates Surg*. 2022; 74 (3): 1055–1062. doi:10.1007/s13304-021-01155-8 Epub 2021 Sep 12 PMID: 34510378

PYP230 Endoscopic Dilation of Benign Oesophageal Strictures: A Large Multicentre Evaluation of Real-World Practice

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DOI 10.1055/s-0046-1821170

Aims Although overall prevalence of benign oesophageal strictures (BOSs) is low, a rising prevalence of associated risk factors, such as increased life expectancy, gastro-oesophageal reflux disease and eosinophilic oesophagitis is predicted to contribute to an increased incidence and evolving aetiology. Endoscopic dilation (ED) currently remains the primary treatment modality. This study aimed to evaluate the current most common aetiologies for BOSs, alongside evaluating the success of ED.

Methods Between January 2021 and December 2023, 1994 upper GI endoscopies (UGIEs) with endoscopic dilatation of a BOS were identified using electronic patient records across 11 UK centres. Details of procedures were then collected in a retrospective observational fashion at each site before central pooling of pseudo-anonymised data for analysis [1–5].

For both individual UGIEs with dilatation and given “sessions” of dilatations (defined as consecutive UGIEs separated by ≤ 6 months), treatment was deemed successful if the lumen was confirmed to be dilated to a diameter of ≥ 14mm (confirmed on a check procedure > 4 weeks after, and/or not requiring further dilatation to maintain diameter within a 6-month period).

Results Eight hundred and eighteen patients (328[40%] female; mean age 64.3[SD 15.52]) were followed-up for a mean of 20.5 (range 4–62) months, from time of initial stricture diagnosis. The most common aetiology of BOS were peptic in 38% (313/818), post-op anastomotic in 13% (105/818), post-radiotherapy in 6% (48/818), post-operative (non-anastomotic) in 6% (47/818), Schatzki rings in 6% (46/818), and eosinophilic oesophagitis in 5% (37/818). Less common aetiologies seen included: post-endoscopic mucosal resection (EMR), post-radiofrequency ablation (RFA), post-caustic injury, webs, lichen planus, and connective tissue disease (see ► Table 1).

► Table 1 Most common aetiology of benign oesophageal strictures for patients (N = 818).

Stricture Aetiology	Number of patients n	Percentage of patients n/N (%)
Peptic	313	38
Post-operative (anastomotic)	105	13
Post-radiotherapy	48	6
Post-operative (non-anastomotic)	47	6
Schatzki ring	46	6
Eosinophilic oesophagitis	37	5
Other*	222	26

*‘Other’ includes (in order of frequency, though all representing < 5%) cases of: unidentifiable aetiology, post-endoscopic mucosal resection (EMR), post-radiofrequency ablation (RFA), post-caustic injury, webs, lichen planus, connective tissue disease, and miscellaneous

Successful dilatation for a single UGIE procedure with ED was achieved in 875/1994 (43.9%) of procedures. With respect to ‘sessions’ of consecutive dilatations, success was achieved within three months in 44.2% (388/878) of patients, and within six months in 60.6% (530/878) of patients. For successful sessions, mean number of dilatations required was 2.2 (SD 2.4), and median number of weeks to successful dilatation was 15 (IQR 7–30).

Conclusions Peptic strictures remain the most common aetiology of BOS. A significant proportion of patients (39.4%) with BOS failed to achieve success following ED. This may reflect both the inherent limitations of ED and subop-

timal adherence to guidelines, particularly regarding the recommended frequency of dilations until treatment success is achieved.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vermeulen BD, de Zwart M, Sijben J, Soons E, van der Weerd L, Arese D, von den Hoff DW, Craviopio V, Tan ACITL, Groenen MJM, Bogte A, Repici A, Spaander MCW, Siersema PD. Risk factors and clinical outcomes of endoscopic dilation in benign esophageal strictures: a longterm follow-up study. *Gastrointest Endosc*. 2020; 91 (5): 1058–1066. doi:10.1016/j.gie.2019.12.040 Epub 2020 Jan 7 PMID: 31917167
- [2] Sami SS, Haboubi HN, Ang Y, Boger P, Bhandari P, de Caestecker J, Griffiths H, Haidry R, Laasch HU, Patel P, Paterson S, Ragunath K, Watson P, Siersema PD, Apwood SE. UK guidelines on oesophageal dilatation in clinical practice. *Gut*. 2018; 67 (6): 1000–1023. doi:10.1136/gutjnl-2017-315414 Epub 2018 Feb 24 PMID: 29478034 PMID: PMC5969363
- [3] Kochman ML, McClave SA, Boyce HW. The refractory and the recurrent esophageal stricture: a definition. *Gastrointest Endosc* 2005; 62 (3): 474–5. doi:10.1016/j.gie.2005.04.050 PMID: 16111985
- [4] Pereira-Lima JC, Ramires RP, Zamin I Jr, Cassal AP, Marroni CA, Mapos AA. Endoscopic dilatation of benign esophageal strictures: report on 1043 procedures. *Am J Gastroenterol* 1999; 94 (6): 1497–501. doi:10.1111/j.1572-0241.1999.01061.x PMID: 10364013
- [5] Richter JE, Rubenstein JH. PresentaAon and Epidemiology of Gastroesophageal Reflux Disease. *Gastroenterology*. 2018; 154 (2): 267–276. doi:10.1053/j.gastro.2017.07.045 Epub 2017 Aug 3 PMID: 28780072 PMID: PMC5797499

Innovation in adversity: Advanced solutions for complex biliopancreatic interventions

15/05/2026, 14:30–15:30

Emerald 5

PYP231 Tale of two cases: ERCP in situs inversus totalis

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DOI 10.1055/s-0046-1821171

Abstract Text

Introduction: Situs inversus totalis (SIT) is a rare congenital anomaly in which internal organs are mirrored along the sagittal plane. The incidence is 1.25–16.7/100,000 individuals, with a slight male predominance. Altered anatomy in SIT presents a challenge in performing endoscopic retrograde cholangiopancreatography (ERCP). Technical difficulty is greater due to an inverted endoscopic view, altered fluoroscopic orientation, and a different direction of common bile duct (CBD) cannulation. Most data on the performance of ERCP in SIT are based on clinical cases [1–5].

Case 1: A 78-year-old female patient with known gallstones was admitted for acute cholangitis, Tokyo grade 1. Magnetic resonance imaging (MRI) revealed choledocholithiasis, and ERCP was indicated. However, the patient's SIT and other co-morbidities (non-ischemic dilated cardiomyopathy, chronic kidney disease, chronic atrial fibrillation on anticoagulant therapy, and ascending aortic aneurysm) posed a challenge. Firstly, gastroscopy was performed to assess the anatomy of the upper gastrointestinal tract. ERCP was performed in standard settings with the patient in the left semi-prone position and the endoscopist on the right side of the table. A technique with 180° rotation in the stomach and shortening of the endoscope in the duodenum in the opposite direction from usual was used. With standard cannula and guide wire cannulation of the CBD was achieved and confirmed with fluoroscopy and bile aspiration. Sphinc-

terotomy was performed using a standard papillotome and manipulation of the duodenoscope tip. Successful balloon extraction of the stone followed with no complications.

Case 2: A 93-year-old male patient with SIT was admitted with signs of acute cholangitis, Tokyo grade 2. CT on admission showed small gallbladder stones and dilatation of the CBD to 12 mm with a thickened wall. We proceeded with ERCP, which was performed in the same position as previously described, and the same 180° rotation in the stomach technique was used. In this case, cannulation of CBD was achieved using a standard papillotome and guide wire, and successful balloon extraction of microliths following sphincterotomy. We performed stenting using a biodegradable biliary stent, and no complications occurred.

Conclusion: SIT presents a significant anatomical challenge during endoscopic procedures. The literature provides insufficient evidence to determine the optimal approach, and currently, no standard patient or endoscopist position for ERCP in SIT is recommended. Recognizing the reversed anatomy and the experience of the endoscopist are essential for safe and effective ERCP performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Emmanuel J, Sriram N, Muthukaruppan R. Endoscopic retrograde cholangiopancreatography in a patient with complete situs inversus viscerum: A case report and literature review. *DEN Open*. 2022; 2 (1):
- [2] Le L, McDonald N, Westanmo A, Bilal M, Sunjaya D. Outcomes of endoscopic retrograde cholangiopancreatography in patients with situs inversus viscerum. *Clin Endosc* 2023; 56 (6): 790–4
- [3] Ding B, Wang J, Wei X, Du Y, Xia L, Sun C et al. Efficacy and safety of ERCP in patients with situs inversus totalis: multicenter case series and literature review. *BMC Gastroenterol*. 2022; 22 (1):
- [4] Alrufay B, Almutairi S, Zagnoon A. Successful Endoscopic Retrograde Cholangiopancreatography for Management of Choledocholithiasis in a Patient With Situs Inversus Totalis: A Case Report and Literature Review. *Gastro Hep Advances*. 2025; 4 (2):
- [5] Aujla UI, Malik AK, Saeed A, Rafi K, Syed IA. Situs Inversus Totalis: Challenges and Anatomical Considerations in Endoscopic Retrograde Cholangiopancreatography. *Cureus [Internet]*. 2025; Available from: <https://www.cureus.com/articles/378374-situs-inversus-totalis-challenges-and-anatomical-considerations-in-endoscopic-retrograde-cholangiopancreatography>

PYP232V Reconnection of the bile duct using magnets in a re-transplanted patient with a non-dilated bile duct

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DOI 10.1055/s-0046-1821172

Abstract Text

Complete bile duct disconnections after liver transplantation usually require surgical repair, but advanced endoscopic techniques can resolve selected cases. Patient retransplanted in 2024 for ischemic cholangiopathy with Roux-en-Y hepaticojejunostomy and complete ductal disconnection. A duodeno-jejunostomy access with an apposition stent and a hepaticogastrostomy to segment II with a 6-mm covered stent were performed. The first hepaticogastrostomy attempt failed, later corrected with percutaneous drainage and saline distension. ERCP confirmed patency and an anatomical variant, enabling placement of proximal and distal magnets to induce a new anastomosis. One week later, reconnection was documented. Magnetic biliary reconstruction through DY-USE avoided surgical intervention [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/68f6bc23-f106-44bb-ba46-3f16299f6560/Uploads/19978_magnets.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jang SI, Lee KH, Yoon HJ, Lee DK. Treatment of completely obstructed benign biliary strictures with magnetic compression anastomosis: follow-up results after recanalization. *Gastrointest Endosc*. 2017; 85 (5): 1057–1066. doi:10.1016/j.gie.2016.08.047 Epub 2016 Sep 9 PMID: 27619787
- [2] Parlak E, Koksas AS, Kucukay F, Eminler AT, Toka B, Uslan MI. A novel technique for the endoscopic treatment of complete biliary anastomosis obstructions after liver transplantation: through-the-scope magnetic compression anastomosis. *Gastrointest Endosc*. 2017; 85 (4): 841–847. doi:10.1016/j.gie.2016.07.068 Epub 2016 Aug 24 PMID: 27566054
- [3] Jang SI, Lee SY, Jang S, Cho JH, Jo JH, Jung CM, Lee HS, Jeon S, Lee KH, Joo SM, Yum TJ, Lee DK. Long-term follow-up results after the recanalization of completely obstructed benign biliary strictures using magnetic compression anastomosis. *Endoscopy*. 2025. doi:10.1055/a-2732-2028 Epub ahead of print PMID: 41135589

PYP233 Endoscopic reconstruction of complete common bile duct transection after right hepatectomy using an innovative cholangioscopy-assisted ERCP-EUS rendezvous technique

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DOI 10.1055/s-0046-1821173

Abstract Text

A 58-year-old man with chronic hepatitis B underwent right hepatectomy for a 58mm hepatocellular carcinoma. Postoperatively, persistent bilious drainage suggested a biliary leak.

ERCP revealed contrast extravasation from the proximal common bile duct (CBD) into two ill-defined collections adjacent to the surgical drain. The left intrahepatic ducts (LIHD) were not opacified, and the guidewire could only be directed toward the leak, indicating complete discontinuity. Persistent bleeding during biliary sphincterotomy prompted placement of a fully covered self-expandable metal stent (FCSEMS) for hemostasis and biliary decompression. Magnetic resonance cholangiography confirmed complete transection, showing non-dilated LIHD with no communication to the proximal CBD, which was intercepted by a perihepatic biloma.

After multidisciplinary discussion, a second ERCP with peroral cholangioscopy was proposed to guide LIHD cannulation. A 3.2mm cholangioscope (EyeMAX) was advanced to the disrupted CBD, revealing a loculated cavity containing devitalized tissue and purulent bile. Multiple attempts to pass the guidewire into the LIHD failed, as the hepatic end of the transection was not observed. A linear echoendoscope enabled EUS-guided transgastric puncture with a 19G needle, achieving LIHD cholangiogram and antegrade cannulation. Guidewire passage into the CBD was hindered by repeated coiling within the cavity. The wire was left inside, the echoendoscope withdrawn, and the duodenoscope was reintroduced at the papilla to repeat cholangioscopy. Using a biopsy forceps through the cholangioscope, the guidewire was captured, pulled into the duodenum, and recovered to the working channel in a rendezvous procedure. A cannula was advanced into the LIHD, and the wire exchanged for retrograde access. Both transection ends were dilated with an 8mm balloon, and a 120x8mm FCSEMS was deployed, restoring biliary continuity.

The patient was discharged uneventfully a few days later. Follow-up CT showed resolution of collections, and the FCSEMS was removed after four months. Final cholangiography confirmed CBD reconstruction and complete leak resolution. This case highlights the effectiveness of a combined EUS-ERCP-Cholangioscopy approach in managing major leaks with complete CBD transection, avoiding surgical reintervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP234V Temporizing Hepaticogastrostomy (EUS-HGS) to Reconnect a Strasberg E3 Bile Duct Injury (BDI) via Retrograde Cholangiopercutaneous Rendezvous (RCR)

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DOI 10.1055/s-0046-1821174

Abstract Text

Severe post-Chole BDI needs surgery, but morbidity is high. A frail patient with Strasberg E3 BDI underwent segment-3 EUS-HGS. Following leak control, magnetic compression anastomosis was attempted via HGS. Opposing magnets failed to couple across a wide gap. Endoscopic repair was offered to avoid surgery/permanent HGS. Cystotome/balloon access via ERCP allowed nasobiliary drain (NBD) placement into the subhepatic space. The NBD was targeted with a cystotome via HGS under fluoroscopy, coiling a wire into the subhepatic, and stabilizing it by an ultrathin scope. Parallel ERCP with cholangioscopy allowed subhepatic access and guidewire retrieval. Following this RCR, 2 plastic stents were placed by ERCP across the BDI. Uneventful recovery; patient awaits healing of reconnected duct before definitive stent removal.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/53ce133f-3089-4e3e-83cf-7b48a385cf05/Uploads/19978_ESGE_26_TDC_Reconnection.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP235V EUS-guided coil embolization as rescue therapy for aberrant arterial compression by LAMS in a traumatic pancreatic collection

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DOI 10.1055/s-0046-1821175

Abstract Text

A 25-year-old man with polytrauma and splenic laceration underwent splenic artery (SA) embolization. He subsequently developed an infected traumatic pancreatic collection which was treated with EUS-guided drainage using a LAMS. Four weeks later, he presented with upper gastrointestinal bleeding. CT-angiography revealed distal SA irregularity; however endovascular access was not feasible. EUS identified two SA-dependent arterial branches in direct contact with the LAMS. Both were punctured transgastrically with a 22G needle and successfully embolized with coils (18S, 10/5–Tornado), allowing safe subsequent stent extraction. Post-procedure CT confirmed successful embolization and resolution of the collection. No further bleeding was documented during follow-up. This case highlights EUS-guided vascular embolization as an effective alternative when interventional radiology is not feasible [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/6f7cdfb9-f7be-44ac-9d47-1b12582bf5aa/Uploads/19978_CoilsLAMS_DefinitiuRevisat_SEED_25_MP23-7-25.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] García-Sumalla A, Maisterra S, Amador-Navarrete A, Castellote J, Gornals JB. Nonadhesive massive coiling endoscopic ultrasound-guided embolization in a single session for treatment of gastric varices: learning points of a technical variant. *Endoscopy*. 2022; 54: 228–229

[2] Romero-Castro R, Ellrichmann M, Ortiz-Moyano C, Subtil-Inigo JC, Junquera- Florez F, Gornals JB, Repiso-Ortega A, Vila-Costas J, Marcos-Sanchez F, Muñoz- Navas M, Romero-Gomez M, Brullet-Benedi E, Romero-Vazquez J, Caunedo-Alvarez A, Pellicer-Bautista F, Herrerias-Gutierrez JM, Fritscher-Ravens A. EUS-guided coil versus cyanoacrylate therapy for the treatment of gastric varices: a multicenter study (with videos). *Gastrointest Endosc* 2013; 78: 711–21

PYP236 Through-the-LAMS Retrograde Access ERCP (TRAE) in Patients with Native Upper GI Anastomy: A Novel Endoscopic Approach for Combined Biliary and Gastric-outlet Obstruction (CBGO)

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DOI 10.1055/s-0046-1821176

Problem to solve Biliary drainage in patients with CBGO (benign or malignant). Anterograde transpyloric access to the papilla for ERCP is difficult in the most common type I/II stenosis. Extrahepatic EUS-guided biliary drainage (EUS-BD) achieves suboptimal outcomes in the setting of CBGO, whereas intrahepatic EUS-BD is limited by lack of intrahepatic dilation and by ascites.

Innovation To solve this problem, we propose TRAE (Through-the-LAMS Retrograde Access ERCP). This approach adapts the concept of through-the-LAMS ERCP, currently widely used in patients with post-surgical anatomy, to patients with native anatomy and CBGO. To circumvent antegrade blockage preventing access to the papilla, EUS-guided gastroenterostomy (EUS-GE) with a lumen-apposing metal stent (LAMS) is first performed. Once EUS-GE is established, a duodenoscope or a therapeutic forward viewing upper endoscope is passed through-the-LAMS to access the papilla. We evaluated the safety and efficacy of TRAE for biliary drainage in non-surgical patients with native anatomy and CBGO [1–3].

Results A descriptive multicenter study was undertaken. Nineteen patients (71 % male; age: 69 [62–83]) from seven hospitals were retrospectively identified with 26 attempts at TRAE between 1/1/20 and 26/6/25. Definitions: index procedure (first successful attempt or definitive ERCP failure) or follow-up procedure. Technical success (TS): cannulation/intervention by ERCP. Clinical success (CS): resolution of cholangitis/jaundice. Baseline clinical data and technique modifications were recorded.

There were 26 TRAEs (19 index/6 scheduled revisions/1 failed prior to index TRAE) in 19 patients. TS/patient during index TRAE was 13/19 (68.5%); one failed TRAE was salvaged at on a repeat attempt using double guidewire traction, following antegrade transpyloric rendezvous, with guidewire retrieval towards the EUS-GE through the LAMS. TS/procedure = 19/26 (73 %), with 6 failed TRAE salvaged by EUS-BD. Failed TRAE incidence: 5 (70 %) without papillary access, and 2 without cannulation. TS in follow-up TRAE was 6/6 (100 %). CS was obtained in 100 % of patients/procedures with TS.

Biliary stent carriers and patients with prior GOO treated with LAMS predominated (▶ **Table 1**). AE: 2 LAMS dislodgement (7.7 %), one required surgery and another underwent laparotomy despite successful salvage and died of postoperative AEs. Dual guidewire traction effectively prevented LAMS dislodgement

(0/13 vs 2/13). During follow-up, 2 transpapillary stent dysfunctions (15 %), required conversion to EUS-BD.

▶ **Table 1**

CBGO Benign/Malignant	13/6 (70/30 %)
Follow-up days	197 (IQR 18–842)
Dysfunction rate	15 %
Gastroscope/Duodenoscope	16/12 (57/43 %)
Native papilla/Biliary stent	16/10 (62/38 %)
Single-session /2-Stage TRAE	9/17 (35/65 %)
Days between GE-USE/ERCP	42.5 (IQR 0–336)
Dual guidewire traction	13 (50 %)
TS/CS/AE	73/100/7.7 %

Conclusions TRAE allows biliary drainage in anatomically challenging patient with native upper GI anatomy and CBGO, it is facilitated by a therapeutic gastroscope with dual guidewire traction, and is particularly suited for nonsurgical patients requiring revisions. This novel approach appears to avoid less invasive therapeutic options

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Wannhoff A, Canakis A, Shariha RZ, Fayyaz F, Schlag C, Sharma N, El-sayed I, Khashab MA, Baron TH, Caca K, Irani SS. Endoscopic ultrasound-guided gastroenterostomy for the treatment of gastric outlet obstruction secondary to acute pancreatitis. *Endoscopy*. 2025; 57 (3): 249–254. doi:10.1055/a-2452-5307 Epub 2024 Nov 11 PMID: 39529322

[2] Kesar V, Abel WF, Bapaye J, Wasserman RD, Rozenberg J, Garikipati S, Mönkemüller KE, Kesar V, Yeaton P. EUS-directed transduodenal ERCP in concomitant gastric outlet and biliary obstruction. *Gastrointest Endosc*. 2025; 101 (4): 885–889. doi:10.1016/j.gie.2024.12.003 Epub 2024 Dec 9 PMID: 39662635

[3] Garcia-Alonso FJ, Chavarria C, Subtil JC, Aparicio JR, Busto Bea V, Martinez-Moreno B, Vila JJ, Martín-Álvarez V, Sanchez-Delgado L, de la Serna-Higuera C, Perez-Miranda M. Prospective multicenter assessment of the impact of EUS-guided gastroenterostomy on patient quality of life in unresectable malignant gastric outlet obstruction. *Gastrointest Endosc*. 2023; 98 (1): 28–35. doi:10.1016/j.gie.2023.02.015 Epub 2023 Feb 18 PMID: 36801458

PYP237 EUS-guided ring drainage of the pancreas in surgically altered anatomy: A multicenter proof-of-concept study

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DOI 10.1055/s-0046-1821177

Aims Surgically altered anatomy may complicate retrograde endoscopic pancreatic duct access. Endoscopic ultrasound (EUS)-guided ring drainage has been suggested as an effective alternative for this specific population by providing simultaneous bidirectional trans-anastomotic and transmural drainage using double pigtail plastic stents. Our aim was to evaluate the technical and clinical outcomes of EUS-guided ring drainage in surgically altered anatomy and describe technical aspects of the procedure.

Methods In this retrospective international evaluation, patients from 6 referral centers with surgically altered enteral and/or pancreatic anatomy were included who had undergone EUS-guided ring drainage between 2013 and May 2025. Primary outcome was technical success, secondary outcomes were intra- and postprocedural adverse events. Technical approach and follow-up are furthermore described.

Results Overall, 58 patients (median age 58 years, IQR 50-65, 47 % female) were included in this study. Indication for endoscopic intervention was pain and/or repeated acute pancreatitis in 51 (88 %) patients. Most patients had a history of pancreatoduodenectomy (N = 43, 74 %) and failed enteroscopy-assisted endoscopic retrograde pancreatography (N = 22, 38 %). Technical success with complete ring drainage was achieved in 51 patients (88 %). Technical failures (N = 7, 12 %) were attributed to failure to manipulate the guidewire across the anastomosis (N = 6, 10 %) and wire rupture (N = 1, 1.7 %). In 3 primary technical failures (5.2 %), pancreatic duct drainage was achieved via pancreaticogastrostomy, which could be converted to ring drainage in a second procedure. All centers had a similar technical approach with use of a 19G needle for access and 6 French (Fr) cystotome insertion + - balloon dilation for tract preparation and trans-anastomotic access. All ring drainages were performed using double pigtail stents, most common stent diameters were 7 Fr (N = 25) and 8.5 Fr (N = 24). In 6 patients (8.6 %), intraprocedural complications occurred in form of bleeding (N = 2, 3.4 %), stent dislocation (N = 2, 3.4 %) and loss of wire access (N = 2, 3.4 %). Post-procedural adverse events were recorded in 19 patients (32 %), namely acute pancreatitis (N = 7, 12 %), abdominal pain (N = 5, 8.6 %), bleeding (N = 4, 6.9 %), leak/exudation (N = 2, 3.4 %), stent dislocation (N = 1, 1.7 %) and others (N = 3, 5.2 %). Clinically, complications were graded AGREE I (N = 1, 1.7 %), II (N = 13, 22 %), IIIa (N = 4, 6.9 %), and IIIb (N = 1, 1.7 %). One patient (1.7 %) underwent surgery after stent dislocation with subsequent intramural gastric hematoma. All other complications were managed conservatively with medical and/or endoscopic treatment. During a median follow-up of 284 (IQR 95-556) days, one patient (1.7 %) underwent elective surgery because of insufficient clinical success. Planned endoscopic reintervention was performed in a median interval of 104 (IQR 84-180) days in 41 cases (71 %). In 28 patients (48 %), final stent extraction was performed after a median interval of 151 (IQR 97-382) days.

Conclusions Our data suggests that EUS-guided ring drainage in surgically altered anatomy is feasible and relatively safe. By providing effective bidirectional drainage using a homogenous technical approach across centerselective conversion to surgery was clinically warranted only in one patient. Since this procedure is often applied in highly selected cases, prospective randomized studies are unlikely to be performed, but long-term clinical data from larger samples are required to investigate optimal follow up strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP238V Endoscopic ultrasound-directed transgastric intervention (EDGI) with LAMS fixation using a defect-closure system for the management of a difficult case of afferent limb syndrome

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DOI 10.1055/s-0046-1821178

Abstract Text We report the case of a patient with pancreatic adenocarcinoma who underwent pancreatoduodenectomy and later developed two malignant afferent-loop strictures causing biliary tract dilation and jaundice. An in-

ital EUS-guided gastroenterostomy (EUS-GE) was created using a 15 × 10 mm LAMS placed between the stomach and the best visualized segment of the afferent loop, located between the strictures. Despite technical success, the patient developed cholangitis due to an unaddressed proximal stricture. The initial LAMS was secured with an X-Tack system to prevent migration. Through an endoscopic ultrasound-directed transgastric intervention (EDGI), a second 15 × 15 mm LAMS was deployed across the proximal stricture. This stepwise strategy achieved full symptom resolution and biochemical normalization. The case highlights effective combined use of EUS-GE and EDGI in post-surgical anatomy [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ef45a04f-5f51-4591-ae8b-7b9c610584df/Uploads/19978_EDGI_versione%20corta.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Monino L, Marique L, Deswysen Y, Navez B, Danse E, Moreels T. Alternative endoscopic salvage therapies using lumen-apposing metal stents for stent misdeployment during endoscopic ultrasound-directed transgastric intervention. *Endoscopy* 2024; 56 (S 01): E892–E893. doi:10.1055/a-2422-5789
- [2] Spadaccini M, Giacchetto CM, Fiacca M et al. Endoscopic Biliary Drainage in Surgically Altered Anatomy. *Diagnostics* 2023; 13: 3623. doi:10.3390/diagnostics13243623
- [3] Pérez-Cuadrado-Robles E, Bronswijk M, Prat F et al. Endoscopic ultrasound-guided drainage using lumen-apposing metal stent of malignant afferent limb syndrome in patients with previous Whipple surgery: Multicenter study (with video). *Dig Endosc* 2022; 34 (7): 1433–1439. doi:10.1111/den.14330

PYP239V A New Error, A New Solution: Successful Endoscopic Rescue Of A Type III Misdeployment During EUS-Guided Gastroenterostomy

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DOI 10.1055/s-0046-1821179

Abstract Text

Lumen-apposing metal stent (LAMS) misdeployment occurs in ~10 % of EUS-guided gastroenterostomies (EUS-GE). Type III misdeployments (proximal flange in peritoneum) usually require surgery.[1, 2] We report the case of a patient with malignant gastric outlet obstruction who experienced a type III misdeployment during EUS-GE. Using EUS/fluoroscopic guidance, a transgastric puncture with a 19G needle allowed guidewire advancement into the malpositioned LAMS and jejunal loop, enabling successful LAMS-in-LAMS placement. Post-procedure imaging confirmed correct lumen apposition and no leak. After resuming a solid diet the patient was discharged. To our knowledge, this is the first report of successful endoscopic rescue of a type III misdeployment, demonstrating its feasibility and potential to avoid surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ce3ff6f8-a3cc-403b-9230-930e4861b714/Uploads/19978_Successful_Endoscopic%20Salvage%20of%20a%20Type%20III%20Misdeployment%20durin....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanella G, Leone R, Frigo F et al. Best practices for Endoscopic Ultrasound-guided Gastroenterostomy: technical recommendations from an International modified Delphi process. *Gastrointest Endosc*. Published online 2025. doi:10.1016/j.gie.2025.10.026
- [2] Ghandour B, Bejjani M, Irani SS et al. Classification, outcomes, and management of misdeployed stents during EUS-guided gastroenterostomy. *Gastrointest Endosc* 2022; 95 (1): 80–89. doi:10.1016/j.gie.2021.07.023

PYP240 Combined Endoscopic Ultrasound and Endoscopic Retrograde Cholangiopancreatography using a single endoscope

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DOI 10.1055/s-0046-1821180

Aims Endoscopic Ultrasound Retrograde Cholangiopancreatography (EURCP) is a procedure that combines EUS and ERCP during the same endoscopic session. This study aimed to evaluate the feasibility, procedural success, and safety of performing single-session endoscopic ultrasound (EUS) and endoscopic retrograde cholangiopancreatography (ERCP) using a new linear EUS echoendoscope (EG-740UT, Fujifilm, Japan). We hypothesized that the unified platform is feasible, potentially reduces procedural time, and maintains a favorable adverse-event profile compared with multiple endoscope workflows.

Methods We conducted a retrospective analysis of consecutively performed EURCP procedures at two European tertiary centers between 2024 and 2025. All procedures were performed with the new linear EUS echoendoscope in a single-session format. Extracted variables included indication, duct cannulation outcomes, need for advanced cannulation techniques, completion of intended ERCP therapy, stent placement, EUS-guided therapy, and adverse events.

Results Twenty-three patients were included. The median age was 63 years (range 31–82); 15 females; 13 patients had a malignant indication. The primary endpoint—completion of both diagnostic EUS and therapeutic ERCP without endoscope exchange—was achieved in 22 of 23 cases (95.7 %). In the single case in which the primary endpoint was not met, ERCP could not be performed with the EUS scope, and conversion to a standard duodenoscope was required. Bile duct cannulation was successful in 21 patients (91.3 %), and procedural success, defined as successful cannulation followed by completion of the intended ERCP therapy, was achieved in 20 patients (87.0 %). Pancreatic duct cannulation occurred in three cases. Adjunctive cannulation techniques were required infrequently, with the double-guidewire method and needle-knife access each used in two cases (8.7 %). Therapeutic ERCP with transpapillary stenting was performed in 17 patients (73.9 %), including 11 plastic and six fully covered metal stents. Same-session therapeutic EUS was additionally performed in eight patients, comprising hepaticogastrostomy (n = 5), gastroenterostomy (n = 2), and combined gastropancreatostomy with biliary drainage (n = 1). Cholangioscopy was performed in one case. No severe adverse events occurred. Mild post-procedural abdominal discomfort was reported in two patients (8.7 %), cholangitis in 3 patients, and no instances of post-ERCP pancreatitis, bleeding, perforation, or infection were observed.

Conclusions EURCP using the new linear EUS echoendoscope demonstrated high technical feasibility, high procedural success, and an excellent safety profile. The ability to perform both diagnostic and therapeutic interventions with a single scope may streamline workflow, reduce scope exchanges, and enhance procedural efficiency. Future multicenter studies with larger cohorts are needed to compare this approach directly with conventional dual-scope strategies.

Conflicts of Interest Akin Inderson is a speaker for Fujifilm and OlympusPham KDC is a consultant for Ambu, Olymus, Fujifilm, Ovesco

From Clinicopathological Features to Management, Preferences and Attitudes

15/05/2026, 16:00–17:00

Emerald 4

PYP241 Clinicopathological features associated with submucosal invasive cancer (SMIC) in large non-pedunculated colorectal polyps: defining the risk in morphological subtypes

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DOI 10.1055/s-0046-1821181

Aims Large series from eastern expert centres have defined the rate of submucosal invasive cancer (SMIC) in large non-pedunculated colorectal polyps (LNPCP) according to subtype along with associated clinicopathological features. Large western studies are limited and provide conflicting results leading some authors to suggest differences in invasive potential between eastern and western patients with LNPCP. Notable differences exist between studies in reported associations between incidence of submucosal invasion and clinicopathological features which can influence therapeutic recommendations. We aimed to define the true risk of SMIC by morphological subtype and clinicopathological features of LNPCP in patients referred to our tertiary centre.

► Table 1 Rates of SMIC according to group

Morphological subtype:	
Is	12.9%
LST G H	2.8%
LST G NM	13.4%
LST NG FE	17.3%
LST NG PD	51.6%
Size:	
20-30mm	9.8%
31-40mm	12.3%
41-60mm	11.4%
> 60mm	12.2%
Location:	
Right colon	5.7%
Left colon	14.9%
Sigmoid/rectum	15.3%

LST G H: laterally spreading tumour, granular, homogeneous; LST G NM: laterally spreading tumour, granular, nodular mixed; LST NG FE: laterally spreading tumour, non-granular, flat elevated; LST NG PD: laterally spreading tumour, non-granular, pseudodepressed

Methods All patients with LNPCP referred for consideration of treatment by endoscopic resection at a tertiary referral centre between January 2011 and December 2024 were included. Data collected included morphological subtype of LNPCP, size, location, sex and age. The incidence of SMIC by morphological subtype was determined and significant differences in SMIC by clinicopathological features were sought.

Results 1641 LNCP (median size 40mm, range 20–210mm) were treated by endoscopic resection. 43 % of lesions were located in the right colon, 20 % in the left colon and 37 % in the rectum. 45 % were treated using ESD whilst 57 % were resected en bloc. Laterally spreading tumours which were non-granular and had pseudodepression had the highest risk of SMIC with SMIC incidence of 51.6 % (► **Table 1**). The rate of target SMIC was similar across size groups from 22) to 12.2 % ($p = 0.59$). No association was found between SMIC and age ($p = 0.35$) or sex ($p = 0.12$). Rectal or left colonic LNCP were associated with higher risk of SMIC ($p < 0.001$). In a subgroup of patients with right colonic LNCP, the incidence of SMIC in LST G NM was 7.0 %, LST NG 14.3 % and LST NG PD 50.0 %.

Conclusions This is a large western series allowing the assessment of SMIC risk according to clinicopathological features of LNCP. High rates of en bloc resection increase the validity of these results. The risk of SMIC is largely determined by morphological subtype with comparable results to that in eastern centres, suggesting similar tumour biology. Contrary to findings from some studies, size of LNCP, age or sex are of limited significance. Although right colon LNCP have a lower overall risk of SMIC, specific morphological subtypes carry a higher risk of SMIC justifying en bloc resection in these cohorts.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP242 Oncological outcome in patients with positive resection margins (R1) after endoscopic resection of T1 colorectal cancer: a retrospective single-center study

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DOI 10.1055/s-0046-1821182

Aims Colorectal cancer (CRC) remains one of the leading causes of cancer-related morbidity and mortality worldwide. The widespread implementation of screening programs led to an increased detection of T1-CRC, defined as CCR with submucosal invasion, and accounting for approximately 40 % of cancers identified during screening colonoscopy [1]. These lesions are potentially curable through endoscopic resection (ER). ER offers a less invasive alternative to surgery, with lower morbidity and shorter hospital stays [2, 3]. According to current international guidelines [4–6], when histopathological analysis reveals high-risk features [lymphovascular invasion (LVI), poor differentiation, high-grade budding, deep submucosal invasion, positive resection margins (R1 or Rx)], surgical intervention with lymphadenectomy is recommended. However, only 10 % of patients (pts) with T1-CRC exhibit lymph node metastasis (LNM) following surgery [7–9], indicating a high percentage of overtreatment. On the other hand, the definition of a "free resection margin" (FRM) is highly variable in literature: most guidelines suggest that an R0 resection requires a distance from the nearest tumor cell to the deep resection margin of > 1 mm, some studies have perhaps indicated that a margin of 0.1 mm may suffice [10], while a large meta-analysis assessing pathological factors associated with LNM in early CCR found no increased risk associated with R1 [11].

On this basis, there is a need for a more precise strategy for oncological risk assessment (local residual, LNM, distant metastasis (M) and recurrence) following ER of early CCR in order to minimize unnecessary surgeries. This study aims to evaluate the risk of local residual cancer, LNM, M, and recurrence in pts who underwent ER for T1-CRC with a positive resection margin (R1) and without other risk factors except deep submucosal invasion.

Methods Single-center retrospective study conducted in our academic tertiary referral center evaluating pts diagnosed with T1-CRC with positive resection margin irrespective of subsequent surgery (2013–2025). Inclusion criteria were: ER of T1-CRC; R1 (FRM ≥ 0 mm); deep submucosal invasion (sm2–sm3) as the

unique risk factor; at least 1 year follow-up; evaluability of the margins in case of piece-meal resection of T1 CRC (no Rx). Exclusion criteria were: hereditary CRC syndrome; inflammatory bowel disease; preoperative radio-chemotherapy; presence of synchronous CRC; diagnosis of CRC $> T2$ in the 5 years before; Rx margins.

FU comprehended endoscopic evaluation (at 6 and 12 months for piece-meal resections and at 12 months for en-bloc resections) and a CT scan at 12 months.

Results A total of 39 pts were included. These were divided in 2 groups: 1) R1 margin of 0 mm (17pts; 43.6%); 2) R1 margin between 0.1 and 1 mm (22 pts; 56.4 %). At diagnosis, none of the pts had LNM, while local residual cancer was found in 2 pts of group 1 (5.13 % [95 % CI: 1.07 % – 17.72 %]) and in none of group 2. At 1 year, none of the pts developed LNM, distant metastasis, nor local recurrence.

Conclusions Our study shows that in endoscopically resected T1-CRC the risk of LNM at diagnosis is extremely low (0 pts), while local residual cancer was observed in a small percentage of pts, irrespective of the entity of R1 (no statistical difference between 0 mm-R1 and 0.1–1mm-R1). The absence of LNM, M, and recurrence at 1 year FU further strengthens the notion that close monitoring may be sufficient for these pts, avoiding overtreatment surgery. To support and to refine risk assessment strategies in early-stage CRC, larger, multi-center studies are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gijsbers KM, van der Schee L, van Veen T et al. Impact of 0.1-mm free resection margins on local intramural residual cancer after local excision of T1 colorectal cancer. *Endosc Int Open*. 2022
- [2] Oka S, Tanaka S, Kajiura Y, Saito S, Fukunaga Y. Treatment Decision for Locally Resected T1 Colorectal Carcinoma Verification of the Japanese Guideline Criteria for Additional Surgery Based on Long-Term Clinical Outcomes. *AM J Gastroenterology*.
- [3] Ebbelhøj AL, Jørgensen LN, Krarup PM et al. Histopathological risk factors for lymph node metastases in T1 colorectal cancer: meta-analysis. *Br J Surg* 2021; 108: 769e76
- [4] Ikematsu H, Yoda Y, Matsuda T, Yamaguchi Y, Hotta K, Kobayashi N et al. Long-term outcomes after resection for submucosal invasive colorectal cancers. *Gastroenterology*. 2013; 144 (3): 551–9. quiz e14
- [5] Shaikat A, Kaltenbach T, Dominitz JA, Robertson DJ. Endoscopic Recognition and Management Strategies for Malignant Colorectal Polyps: Recommendations of the US Multi-Society Task Force on Colorectal Cancer.
- [6] Tanaka S, Kashida H, Saito Y. Japan Gastroenterological Endoscopy Society guidelines for colorectal endoscopic submucosal dissection/endoscopic mucosal resection.
- [7] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. 2022; 54: 591–622
- [8] van de Ven SEM, Backes Y, Hilbink M, Seerden TCJ, Kessels K et al. Periprocedural adverse events after endoscopic resection of T1 colorectal carcinomas. *Gastrointest Endosc* 2020; 91 (1): 142–52 e3
- [9] Kim JB, Lee HS, Lee HJ, Kim J, Yang DH, Yu CS et al. Long-term outcomes of endoscopic versus surgical resection of superficial submucosal colorectal cancer. *Dig Dis Sci* 2015; 60 (9): 2785–92
- [10] Choi JY, Jung SA, Shim KN, Cho WY. Meta-analysis of Predictive Clinicopathologic Factors for Lymph Node Metastasis in Patients with Early Colorectal Carcinoma.
- [11] Toes-Zoutendijk E et al. Stage distribution of screen-detected colorectal cancers in the Netherlands. *Gut*. 2018

PYP243 Prevalence of Endoscopically Curable Cancer in Large Non-Pedunculated Left Colonic Polyps

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DOI 10.1055/s-0046-1821183

Aims To determine the prevalence of submucosal invasive cancer and assess curative endoscopic resection outcomes for large low-risk LNPCs (≥ 20 mm) located in the left colon.

Methods A prospective multicentre cohort of patients referred for ER of LNPCs between October 2008 and February 2025 was reviewed. All centres were tertiary referral hospitals performing both endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD). The left colon was defined as rectosigmoid to the splenic flexure inclusive. The primary outcome was to determine the rate of endoscopically curable SMIC in left colon LNPCs.

Results 867 patients with sporadic left colon LNPCs were included (median age 68, gender male 440 (50.7 %)). 842 underwent ER, and 25 did not have ER attempted due to either suspicion of deep SMIC ($n = 22$) or technical reasons ($n = 3$). Of those that underwent ER, SMIC was present in 100/842 (11.9 %), and in those who went direct to surgery, the SMIC rate was 16/25 (64.0 %). Thus, the overall rate of SMIC was 116/867 (13.4 %). 105/116 (90.5 %) cancers had full histopathological data to assess endoscopic curability. 13/105 (12.4 %) were considered low-risk. The rate of endoscopically curable SMIC of the entire cohort analysed was 13/856 (1.5 %).

Conclusions In a large Western multicentre cohort, the rate of SMIC in left colon LNPCs was 13.4 %. Endoscopically curable cancer was 1.5 %. A selective resection algorithm that identifies curable SMIC is required to facilitate selection between different ER modalities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP244 Resection of pT1 Colorectal Polyps: Experience from a Tertiary Care Center

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DOI 10.1055/s-0046-1821184

Aims pT1 colorectal polyps represent an early stage of colorectal cancer with a variable risk of lymph node involvement and recurrence. Treatment selection—endoscopic resection (ER) versus surgery—relies on the presence of high-risk histological features. Although the Japanese Society for Cancer of the Colon and Rectum (JSCCR) criteria are widely applied, their predictive accuracy remains controversial. This study evaluated our center's experience with pT1 colorectal polyp management and analyzed the association between histological risk factors and oncological outcomes.

Methods We performed a retrospective descriptive study of 154 patients with pT1 colorectal polyps resected between 2010 and 2022. Patients were classified according to initial treatment: ER alone ($n = 75$), ER followed by immediate surgery (ER + S, $n = 26$), or primary surgery (S, $n = 53$). Clinical, histological, and oncologic variables were collected. Univariable logistic regression analyses were used to assess associations between histological features and lymph node metastasis.

Results Among the 154 patients, 4 developed recurrence and 12 died, none of the deaths directly attributable to the pT1 lesion. All recurrences occurred in the high-risk group. High-risk histological features were present in 72.1 % of patients ($n = 111$). Lymph node metastasis was identified in 12 patients, all within the surgically treated groups. Among these, 5 (41.7 %) had perineural invasion and 4 (33.3 %) had lymphovascular invasion. In the surgical subgroup, both features were independently associated with lymph node metastasis ($p = 0.01$).

Conclusions ER appears to be a safe and effective treatment for selected pT1 colorectal polyps, even when some high-risk features are present. PNI and LVI emerged as the strongest predictors of lymph node metastasis. These findings support an individualized approach to decision-making, prioritizing histological factors with proven prognostic relevance and potentially reducing unnecessary surgical interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP245 Advanced multimodal rectal dissection (ESD/EID/EFTR) for malignant rectal lesions enables ultra-low organ preservation: a multicentre cohort from three ESD referral centres in Greece

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DOI 10.1055/s-0046-1821185

Aims Apart from endoscopic submucosal dissection (ESD), endoscopic intermuscular dissection (EID) and exposed full-thickness resection (EFTR) extend curative endoscopic resection to the ultra-distal rectum, but multicenter outcome data are scarce. We evaluated oncological adequacy, safety and rectal preservation of a multimodal dissection strategy for malignant rectal lesions.

Methods We analyzed a prospectively maintained database of 275 consecutive advanced endoscopic rectal resections performed in three Greek ESD referral centers (Dec-2021 to Oct-2025). All lesions classified as malignant (pT1a or more) were included. Resections were categorized as ESD or EID $\pm$ EFTR. R0 required clear lateral and vertical margins. High-risk histology was defined as pT1a lesions with, lymphovascular or perineural invasion, poor differentiation or tumor budding Bd2–3 or pT1b and PT2 lesions. Primary outcomes were en-bloc and R0 resection; secondary outcomes were adverse events (AEs), local recurrence and need for radical rectal surgery (TME). Statistical analysis was performed using R Statistical Software (v4.4.1; R Core Team 2021).

Results Among 275 rectal resections, 46 (16.7 %) malignant lesions were analyzed (ESD 30, EID $\pm$ EFTR 16). EID $\pm$ EFTR was mainly used for ultra-distal lesions (median distance from anal verge 10 vs 75 mm for ESD, $p = 0.044$) with higher rates of fibrosis (57 % vs 21 %) and previous neoadjuvant therapy (31 % vs 4.3 %). Pathological staging was also more advanced in the EID $\pm$ EFTR group, with a higher proportion of pT2 cancers (38 % vs 6.9 %). Despite this selection bias toward technically challenging lesions, en-bloc and R0 resection rates remained high at 96 % and 80 %, respectively, with similar R0 between ESD and EID $\pm$ EFTR (86 % vs 69 %; $p > 0.2$). High-risk histology was present in 31/46 (69 %). AEs occurred in 5/46 (11 %), all managed non-surgically. Radical surgery was required in 10/46 (22 %), yielding a rectal-preservation rate of 78 %. A median follow up of 14 months (IQR: 7–32) was available in 18 patients, local recurrence

occurred in 3 (17 %) with no significant differences in recurrence or survival outcomes between techniques. Full data are provided on ► **Table 1**.

► **Table 1** Baseline characteristics by type of resection

Characteristic	EID +/-EFTR N = 16	ESD N = 30	p-value
Lesion size (mm)	25 (20, 43)	39 (25, 65)	0.073
Distance from anus (mm)	10 (0, 30)	75 (5, 145)	0.044
Preoperative neoadjuvant treatment	4 (31 %)	1 (4.3 %)	0.047
Postoperative adjuvant treatment	4 (31 %)	3 (13 %)	0.2
R0	11 (69 %)	25 (86 %)	0.2
En bloc resection	16 (100 %)	27 (93 %)	0.5
Fibrosis	8 (57 %)	5 (21 %)	0.035
Pathological staging			0.016
pT1a	4 (25 %)	12 (41 %)	
pT1b	5 (31 %)	15 (52 %)	
pT2	7 (44 %)	2 (6.9 %)	
High risk histology	12 (75 %)	19 (66 %)	0.7
Complications	1 (6.3 %)	4 (14 %)	0.6
Follow up months	17 (8, 30)	14 (6, 32)	0.8
Recurrence	2 (25 %)	1 (10 %)	0.6
Surgery	3 (19 %)	7 (23 %)	>0.9
Rectal preservation	13 (81 %)	23 (77 %)	>0.9

Conclusions In this three-center cohort, a multimodal dissection strategy combining ESD, EID and EFTR safely extends curative intent to the ultra-distal rectum, with high R0 rates, low morbidity and > 75 % of rectal preservation despite a substantial burden of high-risk histology. Although the retrospective, observational design introduces expected selection bias between resection methods, these data remain particularly valuable given the scarcity of evidence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP246 The Validation of the Predictive Performance of a Nomogram for Synchronous Lymph Node Metastasis in pT1 Colorectal Cancer after Endoscopic Resection: A Multicenter Cohort Study

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DOI 10.1055/s-0046-1821186

Aims The Japan Society for Cancer of the Colon and Rectum (JSCCR) developed a nomogram predicting lymph node metastasis (LNM) in T1 colorectal cancer (CRC) through a nationwide multicenter study [1]. Although the nomogram demonstrated good predictive performance, it has not been validated exclusively in endoscopically resected T1 CRC, which represents the intended target population of the nomogram. The nomogram is expected to identify patients who require additional surgery after endoscopic resection, although its optimal

cutoff value has not yet been established. This study aimed to validate the predictive performance of the nomogram for synchronous LNM in patients with endoscopically resected T1 CRC and to explore an optimal threshold for identifying patients at low risk of synchronous LNM.

Methods Patients who underwent endoscopic resection for pT1 CRC between 2018 and 2024 at multiple institutions were retrospectively reviewed. Among 1,037 endoscopically resected cases, 490 underwent additional surgery. After applying exclusion criteria, 323 cases were analyzed. Predictive performance was evaluated using the area under the receiver operating characteristic curve (AUC).

Based on data from the Japanese National Clinical Database, surgery-related mortality for colorectal cancer ranges from 0.6 % to 2.1 % [2]. Given these figures, surgery-related mortality for pT1 colorectal cancer would conservatively be expected to remain below 1 %. Consequently, in patients categorized as low risk by the nomogram, an incidence of synchronous LNM exceeding 1 %—the assumed surgical mortality rate—would be clinically unacceptable. On this basis, the cutoff value of the nomogram was set at < 1 %.

A logistic regression analysis was performed to determine a nomogram score threshold corresponding to an estimated LNM rate below 1 %. Patients were then divided into low- and high-score groups, and actual LNM rates were compared.

Results Among the 323 patients (median age, 68 years [IQR: 60–74]; 189 men and 134 women), the primary tumor locations were as follows: cecum (n = 20), ascending colon (n = 59), transverse colon (n = 29), descending colon (n = 14), sigmoid (n = 109), rectosigmoid (n = 33), rectum Ra (n = 20), and rectum Rb (n = 39). The median tumor size was 21 mm (IQR: 15–33). The median submucosal invasion depth was 2,480 µm (IQR: 1,478–4,000), and lesions were classified as < 1,000 µm (n = 36), 1,000–1,999 µm (n = 92), and ≥ 2,000 µm (n = 195). Histologic grading revealed G1 in 271, G2 in 51, and G3 in 1. Lymphovascular invasion (LVI) was negative in 154 lesions and positive in 169. Tumor budding (BD1/2/3) was observed in 264, 41, and 18 lesions, respectively.

Synchronous LNM was identified in 30 patients (9.3 %). The nomogram demonstrated good predictive performance for synchronous LNM, with an AUC of 0.772. The optimal nomogram score threshold corresponding to an expected LNM risk < 1 % was 87.3. Based on this cutoff, 12 patients were classified as low-score and 311 as high-score, with observed LNM rates of 0 % and 9.6 %, respectively.

Conclusions A nomogram-based risk classification using a threshold to maintain a synchronous LNM rate below 1 % accurately identified LNM-negative patients after endoscopic resection for pT1 CRC. However, the potential to reduce overtreatment remains limited, and further study is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ito S. et al. Annual report on National Clinical Database 2021 for gastroenterological surgery in Japan. *Ann Gastroenterol Surg* 2025; 9 (1): p 32–59
- [2] Kajiwar Y. et al. Nomogram as a novel predictive tool for lymph node metastasis in T1 colorectal cancer treated with endoscopic resection: a nationwide, multicenter study. *Gastrointest Endosc* 2023; 97 (6): p 1119–1128.e5

PYP248 The Impact of the Location of T1 Colorectal Cancer on Metastasis Risk -Multicenter Prospective Cohort Study in Japan-

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Aims The risk factors for metastasis in T1 colon cancer and the criteria for additional resection following endoscopic treatment are important topics. In recent years, several reports have emerged suggesting that among risk factors, the depth of invasion shows a weak correlation with metastasis. Furthermore, there are reports indicating differences in recurrence risk and prognosis between the rectum and the colon. Therefore, we aimed to clarify the impact of tumor location on metastasis risk using a multicenter prospective registry database of colorectal T1 cancers without considering invasion depth. The risk factors for metastasis in T1 colon cancer and the criteria for additional resection following endoscopic treatment are important topics. In recent years, several reports have emerged suggesting that among risk factors, the depth of invasion shows a weak correlation with metastasis. Furthermore, there are reports indicating differences in recurrence risk and prognosis between the rectum and the colon. Therefore, we aimed to clarify the impact of tumor location on metastasis risk using a multicenter prospective registry database of colorectal T1 cancers without considering invasion depth.

Methods Patients aged 20 years or older diagnosed with colorectal pT1 cancer and resected endoscopically or surgically at 48 Japanese institutions were prospectively enrolled after obtaining consent for cohort study participation. Exclusion criteria were inflammatory bowel disease associated colorectal cancer, familial adenomatous polyposis, coexisting or past history of invasive colorec-

tal cancer, and active cancer in other organs. The rectum was defined as the upper rectum (Ra) and the lower rectum (Rb), and the colon as all other locations. The metastasis high-risk group was defined as cases not meeting all of the following pathological criteria without considering invasion depth: 1) no lymphatic invasion (Ly0), 2) no venous invasion (V0), 3) tumor budding grade 1 (BD1), and 4) well to moderate differentiated tubular adenocarcinoma (tub1 or tub2). This study compared the proportion of high-risk groups for metastasis in the rectum and colon using data at the time of registration.

Results Between May 2017 and January 2021, 1527 patients were registered, and 1479 patients were included after excluding ineligible cases. The final analyzable patients were 351 rectal cases and 1128 colon cases. Their respective backgrounds were: male 67%/58%, median age 68/70 years old, macroscopic type including depressed type 27%/31%, median tumor size 20/18 mm, and initial endoscopic treatment (including surgical local resection) 78.0%/68.1%. The proportion of high-risk groups for metastasis was 55.0% in the rectal group and 40.3% in the colonic group ($P < .001$), with an odds ratio of 1.18 (95% confidence interval 1.42-2.30). Furthermore, when limited to cases with a lesion diameter < 10 mm, the rectal group was 78.6% and the colonic group was 38.1%, with an odds ratio of 5.95 (95% confidence interval 1.56-22.72).

Conclusions When evaluating the risk of metastasis in T1 colorectal cancers without considering invasion depth, the rectum was found to be a significantly higher risk than the colon. This was particularly pronounced in cases with a diameter of less than 10 mm. A careful pre-treatment evaluation is necessary, and caution should be exercised against performing cold snare polypectomy too readily.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP249 A Novel Diagnostic Algorithm for the Detection of Submucosal Invasive Cancer in Large Colorectal Polyps: Results from a Multicentre Prospective Study

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DOI 10.1055/s-0046-1821189

Aims Accurate optical assessment of submucosal invasive cancer (SMIC) in large non-pedunculated colorectal polyps (LNPCs) is crucial for selecting appropriate treatment. Current classification systems are complex and vary in accuracy. We developed a simple diagnostic algorithm combining gross morphological assessment (Blink impression: spontaneous bleeding, extra redness, depression, fold deformation, ulceration, chicken-skin mucosa), the presence of a ≥ 10 mm Paris 0-Is nodule and a validated simplified vascular pattern score (Colorectal Regular-Irregular Score, CRIS) [1]. This multicentre prospective study evaluated the real-time accuracy of this algorithm for SMIC detection by trained endoscopists.

Methods We conducted a prospective study across four centres (three Belgian, one Italian; August 2023–November 2025). Consecutive LNPCs were assessed in vivo before resection. For each lesion, a structured approach was followed: (1) Blink impression, positive when ≥ 2 gross morphologic features present using high definition white light; (2) presence of a ≥ 10 mm Paris 0-Is nodule; (3) CRIS as regular (R), regularly irregular (RI), or irregular (I), positive when RI or I using virtual chromoendoscopy plus up to 80x magnification. Blinded histopathologic identification of SMIC served as the reference standard. Diagnostic performance and odds ratios (OR) with 95% confidence intervals (CI) were calculated using generalized linear mixed models.

► Table 1

	Sensitivity	Specificity	Accuracy	OR (95% CI)	p value
Blink (≥ 2 features)	76.0 % (61.8–86.9)	69.2 % (62.0–75.7)	70.6 % (64.4–76.4)	2.3 (1.7–3.0)	<0.001
CRIS (RI/I)	82.0 % (68.6–91.4)	71.6 % (64.6–77.9)	73.7 % (67.7–79.2)	11.5 (5.4–26.7)	<0.001
≥ 10 mm Paris 0-Is nodule	40.0 % (26.4–54.8)	63.1 % (55.9–70.0)	58.3 % (51.8–64.6)	1.1 (0.6–2.1)	0.682
Blink or CRIS positive	84.0 % (70.8–92.8)	61.6 % (54.2–68.7)	66.4 % (59.9–72.4)	8.4 (3.9–20.3)	<0.001

Results Overall, 240 LNCPs from 240 patients were assessed by 10 endoscopists (3 experts, 7 fellows). SMIC prevalence was 20.8 % (50/240), of which 70 % (35/50) had deep SMIC. Median polyp size was 30mm (IQR 40–20); 33.8 % were rectal (► Table 1).

For SMIC detection, Blink (≥ 2 features) achieved sensitivity of 76.0 % (95 % CI 61.8–86.9), specificity of 69.2 % (62.0–75.7), and accuracy of 70.6 % (64.4–76.4), with OR 2.3 (1.7–3.0; $P < 0.001$). CRIS (RI/I) achieved sensitivity of 82.0 % (68.6–91.4), specificity of 71.6 % (64.6–77.9), and accuracy of 73.7 % (67.7–79.2), with OR 11.5 (5.4–26.7; $P < 0.001$).

The ≥ 10 mm Paris 0-Is nodule showed poor diagnostic performance: sensitivity 40.0 % (26.4–54.8), specificity 63.1 % (55.9–70.0), accuracy 58.3 % (51.8–64.6), with non-significant OR 1.1 (0.6–2.1; $P = 0.682$) and was excluded from the final algorithm.

When either Blink or CRIS was positive, sensitivity increased to 84.0 % (70.8–92.8), specificity was 61.6 % (54.2–68.7), and accuracy 66.4 % (59.9–72.4), with OR 8.4 (3.9–20.3; $P < 0.001$).

Conclusions This novel, simple diagnostic algorithm, where either Blink impression or vascular pattern assessment (CRIS) was positive achieved high sensitivity for SMIC detection. For general endoscopists evaluating LNCPs, prioritizing high sensitivity is crucial to minimize the risk of missing malignancy. A sensitivity-first approach can naturally trigger thorough photo-documentation and clear signposting for multidisciplinary review, while the accompanying modest drop in specificity may be a reasonable and clinically acceptable trade-off. In this way, the algorithm functions as a practical, easy-to-apply aid for real-time decision-making, with the potential to shorten diagnostic pathways, reduce delays, and lessen the need for repeat procedures, ultimately easing the burden on patients.

Conflicts of Interest D.J. Tate is a consultant for and has received research support from Fujifilm and Olympus. The other authors declare that they have no conflict of interest.

References

[1] CRIS: A Novel Tool Described Using Only Three Self-Explanatory Words Performs Similarly To JNET Amongst Western Experts In The Detection Of Cancer And Determination Of Correct Treatment In Large Non-Pedunculated Colorectal Polyps ME Argenziano, L Debels, S Smeets, M Montori... – Endoscopy 2024;

PYP250 RUBATO-study: Exploring preferences and attitudes of Both patients And doctors Towards surveillance after local resection of high-risk T1 colorectal cancer

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DOI 10.1055/s-0046-1821190

Aims Intensive surveillance instead of completion surgery is being more widely adopted after local resection of high-risk T1 colorectal cancer (T1CRC) for early detection of recurrences. However, due to limited evidence, the optimal surveillance intensity remains unknown. This study examined the preferences and attitudes of high-risk T1CRC patients and their physicians toward surveillance.

Methods We conducted a multicenter cross-sectional survey in five Dutch hospitals. Eligible patients had an histologically confirmed high-risk T1CRC treated with local organ-preserving resection after January 2018. Physicians actively involved in T1CRC management were also invited. Participants completed an Adaptive Conjoint Analysis (ACA) to evaluate the relative importance

of surveillance attributes (mortality, endoscopy, imaging, laboratory testing and incidental findings) in context of T1CRC follow-up. Participants compared pairs of hypothetical surveillance scenarios varying across these attributes and selected their preferred option. Choices revealed the relative importance of each attribute and the trade-offs they are willing to make. Furthermore, participants completed the Medical Maximizer–Minimizer Scale (MMMS), a validated tool assessing individuals' general tendency to favor more (maximizers) or less (minimizers) medical intervention across all healthcare decisions. Patients additionally completed the Cancer Worry Scale (CWS), and the EQ-5D-5L to assess cancer-related worry and quality of life.

Based on ACA results, we developed a preference simulator, a tool integrating utility scores from individual participants to predict the proportion of patients or physicians likely to favor specific surveillance strategies under varying clinical scenarios.

Results In total, 104 patients and 40 physicians participated. Patients had a mean age of 66.1 years (Standard Deviation (SD) 9.0), with balanced sex distribution (48.9% male). Most patients had one histological high-risk feature (66%). Adjuvant therapy was given in 57.9%, mostly surgery (70.5%). Median follow-up was 46 months, with 6% recurrence (3% local, 3% distant).

Among patients, 55.3% were medical maximizers (MMMS score ≥ 40) and 44.7% minimizers (MMMS score < 40). All physicians were medical minimizers. Overall, 39.4% of patients reported high levels of cancer worry (CWS score ≥ 20) and the mean EQ-5D-5L score was 0.90 (SD 0.13).

Mortality was the most important ACA attribute for patients and physicians (relative importance of 31.4 and 32.3, respectively), followed by endoscopy frequency (21.3 and 20.5). Imaging frequency (17.2 and 16.6), risk of incidental findings (15.3 and 19.3), and lab testing (14.8 and 11.4) had lower but non-negligible relative importance.

Our simulator enabled modelling and comparison of multiple surveillance scenarios. Two scenarios were modeled in our simulator: (1) standard surveillance according to Dutch guidelines, consisting of five endoscopies, five imaging sessions and ten laboratory tests over five years, with 3% mortality and 20% risk of incidental findings; and (2) reduced surveillance, consisting of three endoscopies, three imaging sessions and five laboratory tests over five years, with 6% mortality and 15% risk of incidental findings. Under these assumptions, 91.7% (Standard Error (SE) = 0.7%) of patients and 83.0% (SE = 2.0%) of physicians preferred the reduced surveillance strategy. A further comparison was made between (1) guideline surveillance and (2) a lower-intensity scenario, consisting of two endoscopies, two imaging sessions and five laboratory tests over five years, with 10% mortality and 15% risk of incidental findings. In this comparison, 84.5% of patients (SE = 1.5%) and 62.4% of physicians (SE = 4.4%) favored the reduced surveillance strategy.

Conclusions Patients and physicians were willing to accept higher mortality in exchange for reduced surveillance, despite ranking mortality as the most important attribute. Using our simulator, a modest reduction in surveillance with higher mortality risk was preferred by most patients (91.7%) and physicians (83.0%), with patients showing stronger preference. This highlights the importance of considering patient perspectives in T1CRC surveillance. Our simulator can help predict and incorporate these perspectives in surveillance guidelines.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

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PYP251 Outcomes of double-balloon enteroscopy in the management of Peutz-Jeghers syndrome small bowel polyps: a UK tertiary centre experience

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DOI 10.1055/s-0046-1821191

Aims Peutz-Jeghers syndrome (PJS) an autosomal dominant polyposis syndrome with a predisposition to hamartomatous polyps in the small bowel (SB) and emergent risk of intussusception, obstruction and intestinal surgery. The aim of this study is to examine outcomes of balloon-assisted enteroscopy (BAE) in Sheffield, UK, and published world data.

Methods In Sheffield, patients undergoing BAE for PJS polypectomy between 1st January 2010 and 31st December 2025 were included. The number and maximum size of polyps removed, BAE-related complications, and rate of small bowel resection before and after BAE were examined. Published studies worldwide reporting these outcomes were examined.

Results ▶ **Table 1** highlights the outcomes of 18 published studies which included a total of 396 patients and 1100 BAE procedures for PJS polypectomy. Locally in Sheffield, 13 patients underwent 73 double-balloon enteroscopies (DBE) (59 antegrade, 14 retrograde) between 2010 and 2025. There was a mean of 5.6 procedures per patient during an observation time of 59 months (range 3–149 months). 69% (9/13) had a history of previous small bowel resection. A total of 179 polyps were removed with an average maximum polyp size of 20mm (range 10–60mm) and a mean of 2.5 polypectomies per procedure. The overall complication rate was 6.8% (5/73). Four complications were related to DBE (2 episodes of pancreatitis, 1 serositis and 1 aspiration pneumonitis). One complication occurred following polypectomy (bleeding from stalk requiring endoscopic therapy and transfusion). There were no perforations. One patient (7.7%) required elective small bowel resection due to failure to reach the polyp via DBE. During the period of follow-up, three patients died: one from metastatic adenocarcinoma of unknown primary, one after a Whipple's procedure for a pancreatic cyst and one of unknown cause (suspected to be related to a small bowel stricture and cancer) [1–3].

Conclusions Balloon-assisted enteroscopy is a safe and effective strategy for removing PJS small bowel hamartomas. Complications rates are around 6–7%. Small bowel surgery post BAE ranges between 0–28%. It is anticipated that BAE and polypectomy reduces small bowel surgery in patients with PJS, however outcomes of present studies are heterogeneous.

► Table 1

Year	Country	No. of patients	No. of procedures	Procedures per patient	Median observation time (months)	Prev GI surgery (no.)	Single balloon enteroscopy	Double balloon enteroscopy	Total no of SB polypectomies	Mean polypectomies per procedure	Max polyp size (mm)	No. of complications	SB surgery post BAE
2005	Japan	2	5	2.5		2		5	18	3.6	60	2	
2007	Germany	16	47	2.9				47	47	1	50	4	1
2010	Japan	18	80	4.4	54	14		80	387	4.8	50	6	
2010	Netherlands	13	29	2.2	19	11		29	79	2.7	50	0	1 (8%)
2010	Czech Republic	10	14	1.4				14	205	14.6	60	1	0 (0%)
2011	Japan	15	88	5.9		13		88	341	3.9	100	5	1 (6%)
2011	Taiwan	6	17	2.8		2	5	12	85	5.0	60	0	
2012	Turkey	7	30	4.3		7		30	110	3.7	100	1	
2013	USA	22	34	1.5		17		34	28	0.8	50	4	
2013	Portugal	25	46	1.8	56.5	14		46	214	4.7	50	3	7(28%)
2014	Italy	10	23	2.3		4	23		53	2.3	60	1	
2014	Italy	7	7	1		7	7		23	3.3	50	0	
2018	Mexico	4	12	3			7	5	35	2.9	40	1	
2019	China	97	320	3.3	46.7	57		320	1661	5.2		14	
2019	Russia	30	30	1			30		63	2.1	30	1	2 (6%)
2020	Italy	24	47	2	108	16	29	18	247	5.3	60	4	2 (8%)
2024	US	23	46	2		18		46	131	2.8	25	2	2 (9%)
2025	South Korea	22	115	5.2		9		115	362	3.1	70	5	
2025	Japan	45	110	2.4		14		110	792	7.2		9	11(24%)
	World	396	1100						4881			63 (6%)	

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Beggs AD, Latchford AR, Vasen HFA, Moslein G, Alonso A, Aretz S et al. Peutz – Jeghers syndrome: A systematic review and recommendations for management. Vol. 59, Gut.BMJ Publishing Group; 2010: p 975–86
- [2] Burt RW, Jaspersen KW. Polyposis Syndromes. In: Yamada' s Textbook of Gastroenterology.Wiley; 2015: p. 1583–607
- [3] Utsunomiya J, Gocho H, Miyanaga T, Hamaguchi E, Kashimura A. Peutz-Jeghers syndrome: its natural course and management. Johns Hopkins Med J. 1975; 136 (2): 71–82

PYP252 Real-World Performance of Double-Balloon Enteroscopy in Peutz–Jeghers Syndrome and correlation with cross-sectional imaging

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DOI 10.1055/s-0046-1821192

Aims Small-bowel surveillance and therapeutic polypectomy are key components in the management of Peutz–Jeghers syndrome (PJS). We aimed to evaluate the real-world performance of double balloon enteroscopy (DBE) in patients with PJS who had undergone prior small-bowel mapping with magnetic resonance enterography (MRE) and/or computed tomography enterography (CTE), but not capsule endoscopy due to contraindications.

Methods We retrospectively reviewed consecutive PJS patients who underwent their first enteroscopy at our center between January 2022 and December 2024. All included patients had prior small-bowel mapping with MRE or CTE but were not eligible for capsule endoscopy due to known strictures, multiple prior laparotomies or previous episodes of intussusception. Data on epidemiology, imaging characteristics, enteroscopic approach, therapeutic yield, complications, and the number of procedures required for complete polyp eradication were collected. Discrepancies between imaging and enteroscopy regarding polyp number, size, and dominant location were recorded [1, 2].

Results Sixteen patients were enrolled (11 males; mean age 39 ± 13 years). The mean age at PJS diagnosis was 17 ± 7 years. A de novo mutation was identified in 9/16 (56%) who were diagnosed following an episode of intussusception or bleeding. A history of laparotomy was present in 12/16 (75%). Prior mapping identified no polyps > 15 mm in 3/16 (18.8%), 1–5 polyps in 12/16 (75%), and > 5 polyps in 1/16 (6.2%). Enteroscopy was performed via an antegrade approach in 14/16 (87.5%) and retrograde in 2/16 (12.5%); laparoscopic-assisted DBE was required in 3/16 (18.8%). At least one polyp was removed in all patients. The median number of polyps removed during the initial procedure was 2 (range 1–7), with a median largest polyp size of 40 mm (15–70 mm). Standard endoscopic mucosal resection was performed in 14/16 (87.5%), while surgical resection was required in two cases. A single post-procedural bleeding event (6.25%) was recorded. Complete eradication of all identified polyps required a median of one enteroscopy (range 1–4). Among patients requiring multiple sessions, the median interval to complete eradication was 25 months (range 3–39). Imaging underestimated polyp burden in 9/16 patients (56.3%) and polyp size in 7/16 (43.7%), while discrepancies in dominant polyp location occurred in 3/16 (18.8%).

Conclusions Double balloon enteroscopy is a highly effective and safe therapeutic modality for small-bowel polyp management in PJS, achieving complete polyp eradication with minimal complications. When Cross-sectional imaging is the sole surveillance modality the polyp burden can occasionally be underestimated, highlighting the essential role of enteroscopy for accurate assessment and comprehensive treatment planning in PJS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] van Leerdam ME, Roos VH, van Hooft JE et al. Endoscopic management of polyposis syndromes: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2019; 51 (9): 877–895. doi:10.1055/a-0965-0605
[2] Pennazio M. et al. 2022; Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: a European Society of Gastrointestinal Endoscopy (ESGE) guideline update—2022. *Endoscopy* 54 (12): 1211–1226. Thieme Group

PYP253 Long term outcomes post balloon assisted enteroscopy and therapy of small bowel strictures in Crohn's disease

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DOI 10.1055/s-0046-1821193

Aims Balloon assisted enteroscopy and endoscopic balloon dilatation (EBD) is a safe and effective therapeutic option for management of small bowel strictures in Crohn's disease. However, evidence for long-term clinical outcomes remains limited. Our aim was to evaluate the technical success and long-term clinical efficacy of EBD in small bowel Crohn's disease.

Methods Retrospective cohort study of adult patients with small bowel Crohn's disease who underwent enteroscopy between January 2015 – January 2025 at a single tertiary hospital. Clinical and endoscopic data at index procedure and follow up data were collected from electronic medical records.

Results 68 patients underwent 168 procedures; 35 were females (51.5 %) and 33 males with a mean disease duration of 14.7 years. 92 (54.7 %) therapeutic procedures were performed for EBD. 28 (41.2 %) patients required a single EBD, and 40 (58.8 %) patients required multiple procedures with an average of 2 procedures. The mean dilation diameter achieved was 13 mm (9–16.5mm). EBD was successfully performed in 84.8 %. There were 4 cases of bleeding (4.3 %) and one anaesthetic complication (1.1 %). No bowel perforation occurred. Clinical success defined as absence of obstructive symptoms was achieved in 90.2 % of this cohort. Only 2 patients (2.2 %) patients required surgery during follow up. The mean follow up was 60 months.

Most patients (77.9 %) were receiving concurrent medical therapy for Crohn's disease. Endoscopic findings led to a change in medical therapy following a third of EBD procedures.

Conclusions Enteroscopy and endoscopic balloon dilatation is technically feasible and clinically effective for small bowel strictures in Crohn's Disease. Long term clinical outcomes, with mean follow up period of 60 months, suggest minimal surgical rates following a combination of medical therapy and EBD. Early endoscopic assessment also allows an opportunity to optimise medical therapy in a combined management approach, potentially delaying the need for surgical intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP254 The role of double-balloon enteroscopy in iron-deficiency anemia and small-bowel bleeding: a retrospective study at the largest tertiary referral centre in the UK

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DOI 10.1055/s-0046-1821194

Aims Small-bowel (SB) bleeding and iron-deficiency anemia (IDA) are the most frequent indications for double-balloon enteroscopy (DBE) [1]. Angioectasias are a leading cause of SB bleeding, yet factors influencing their detection remain unclear. This study assessed the diagnostic and therapeutic performance of DBE in SB bleeding/IDA and examined whether antiplatelet or anticoagulant therapy affects the likelihood of identifying angioectasias.

Methods All consecutive DBE procedures performed for SB bleeding/IDA between July 2023 and October 2025 were retrospectively reviewed from our prospectively maintained institutional database. Procedural characteristics, endoscopic findings, therapeutic interventions, route of insertion, need for opposite-route access, panenteroscopy rates, complications, and need for repeat DBE were extracted. Associations between antithrombotic therapy (antiplatelets, anticoagulants) and detection of angioectasias were evaluated using contingency analysis with odds ratios (OR) and 95 % confidence intervals (CI).

Results A total of 178 DBE procedures were performed in 107 patients (median age 67 years, IQR 57–74; 39.3 % female), of whom 88.8 % had prior evaluation with cross-sectional imaging or capsule endoscopy. Procedures were performed via the antegrade (84.3 %) or retrograde (15.7 %) route; 18.0 % of patients had surgically altered anatomy. Procedure completion rate was 97.2 %, and a definitive clinical impression was achieved in 97.8 %.

Angioectasias were the most common finding (49.4 %), followed by inflammation/ulceration (10.1 %), Dieulafoy lesions (8.4 %), mass/submucosal tumors (3.4 %) and SB varices (2.8 %); 18.5 % of examinations were normal. Opposite-route enteroscopy was required in 16.9 % of procedures, and panenteroscopy was achieved in 7.9 %, corresponding to 30.8 % of patients requiring both routes.

Therapeutic intervention was performed in 71.9 % of cases, with 100 % technical success and a 0.6 % complication rate. At the patient level, 27.1 % required at least one repeat DBE. Anticoagulant use was not associated with angioectasia detection (OR 0.92; 95 % CI 0.43–2.01), whereas antiplatelet therapy was significantly associated with higher odds of detecting angioectasias (OR 2.10; 95 % CI 1.10–4.01; $p = 0.036$).

Conclusions DBE demonstrated high diagnostic and therapeutic yields with an excellent safety profile in patients investigated for SB bleeding/IDA. Angioectasias were the predominant finding accounting for half of all cases, and were significantly more frequently detected in patients receiving antiplatelet therapy—suggesting that antiplatelets may unmask underlying vascular lesions. In contrast, anticoagulants showed no such association. Despite the complexity of this cohort—reflected by the need for opposite-route access and repeat procedures—DBE remained consistently feasible, effective, and safe. These findings reinforce DBE as a key modality for confirming and treating the causes of small-bowel bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sidhu R, Shiha MG, Carretero C, Koulaouzidis A, Dray X, Mussetto A et al. Performance measures for small-bowel endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative – Update 2025. *Endoscopy*. 2025; 57 (4): 366–89

PYP255V Navigating Blue Rubber Bleb Nevus Syndrome: Gastrointestinal Diagnosis and Endoscopic Treatment Outcomes in a Tertiary Mexican Institution

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DOI 10.1055/s-0046-1821195

Abstract Text

Background: Blue Rubber Bleb Nevus Syndrome (BRBNS) is a rare venous malformation. Endoscopic diagnosis and therapy have evolved significantly, yet evidence from Latin America remains scarce. Retrospective case series of adults

diagnosed with BRBNS and managed at a tertiary Mexican center between 2010–2025. Results: Four patients presented with multifocal gastrointestinal involvement. Small intestine was the most affected segment. All patients required endoscopic therapy: cold snare ($n = 57$), EMR ($n = 25$), detachable snare ($n = 22$), cyanoacrylate injection ($n = 10$), and APC ($n = 1$). There was no mortality or major adverse events. All patients met clinical response criteria during a median follow-up of 36 months. Conclusions: Multimodal approach constitutes a safe and effective strategy for the endoscopic management of BRBNS [1–12].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/06e95bb0-4e46-4b84-bc4d-f45701ef7e51/Uploads/19978_ESGE_Days%202026%20Final%20Video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang P, Wang Y, Dong Y et al. Outcomes and safety of double-balloon enteroscopy in small bowel diseases: a single-center experience of 1531 procedures. *Surg Endosc* 2021; 35 (2): 576–583. doi:10.1007/s00464-020-07418-6
- [2] May A, Nachbar L, Pohl J, Ell C. Endoscopic Interventions in the Small Bowel Using Double Balloon Enteroscopy: Feasibility and Limitations. *Am J Gastroenterol* 2007; 102 (3): 527–535. doi:10.1111/j.1572-0241.2007.01063.x
- [3] Matsuura R, Nakamura M, Goto H. Usefulness of cold polypectomy for small bowel polyps in Peutz-Jeghers syndrome. *Digestive Endoscopy* 2016; 28 (5): 618–618. doi:10.1111/den.12665
- [4] Horiuchi A, Hosoi K, Kajiyama M, Tanaka N, Sano K, Graham DY. Prospective, randomized comparison of 2 methods of cold snare polypectomy for small colorectal polyps. *Gastrointest Endosc* 2015; 82 (4): 686–692. doi:10.1016/j.gie.2015.02.012
- [5] Kumei T, Toya Y, Shiohata T et al. Gastrointestinal: Endoscopic injection sclerotherapy for duodenal vascular malformation in blue rubber bleb nevus syndrome. *Journal of Gastroenterology and Hepatology (Australia)*. Blackwell Publishing 2019; 34 (6): 963. doi:10.1111/jgh.14590
- [6] Puentes Manosalva FE, Londoño López RD, Sánchez Gil A, Arango Molano LA. Síndrome de blue rubber bleb nevus en el colon, lengua y región supraglótica: reporte de caso. *Rev Colomb Gastroenterol*. 2024; 39 (3): 337–343. doi:10.22516/25007440.1113
- [7] Campos-Murguía A, Zamora-Nava LE. An endoscopic multimodal approach in a patient with blue rubber bleb nevus syndrome and acute bleeding. *Endoscopy* 2021; 53 (9): E338–E339. doi:10.1055/a-1287-8987
- [8] Liu L, Wang L, Hu F. Case Report: Combination of sirolimus and endoscopic lauroacrogol sclerotherapy in the management of blue rubber bleb nevus syndrome with gastric tract bleeding. *Front Pediatr* 2025; 12. doi:10.3389/fped.2024.1488466
- [9] Rimondi A, Sorge A, Murino A et al. Treatment options for gastrointestinal bleeding blue rubber bleb nevus syndrome: Systematic review. *Digestive Endoscopy* 2024; 36 (2): 162–171. doi:10.1111/den.14564
- [10] Zhou J, Zhao Z, Sun T et al. Efficacy and Safety of Sirolimus for Blue Rubber Bleb Nevus Syndrome: A Prospective Study. *American Journal of Gastroenterology* 2021; 116 (5): 1044–1052. doi:10.14309/ajg.0000000000001117
- [11] Becq A, Bisdorff A, Riccioni ME et al. Blue rubber bleb nevus syndrome: A European multicenter cohort study. *Digestive and Liver Disease* 2025; 57 (2): 603–608. doi:10.1016/j.dld.2024.10.001
- [12] Kozai L, Nishimura Y. Clinical characteristics of blue rubber bleb nevus syndrome in adults: systematic scoping review. *Scand J Gastroenterol* 2023; 58 (10): 1108–1114. doi:10.1080/00365521.2023.2214263

PYP256V EFTR of a well differentiated neuroendocrine tumor of the terminal ileum

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DOI 10.1055/s-0046-1821196

Abstract Text

A 49-year-old woman with PSC and UC underwent screening colonoscopy which revealed an 8 mm ileal polyp confirmed as a well-differentiated NET (grade 1). Tektrotyd and CT scans showed no metastasis. The patient refused surgical resection. A gastroduodenal FTRD was introduced into the terminal ileum over a dilated balloon and full-thickness resection was successfully achieved. Histology confirmed R0 resection of grade 1 NET. Four-month follow-up colonoscopy showed no residual malignancy. The patient is now under oncological surveillance. This is to our knowledge the first report of a successful use of FTRD in terminal ileum.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/227f8df7-cf5a-463b-b17b-6b137f409d70/Uploads/19978_ESGE_-%20EFTR%20of%20a%20well%20differentiated%20neuroendocrin.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP257 EUS-guided Entero-Anastomosis (EUS-EA) with Lumen- Apposing Metal Stents (LAMS) for Palliation of Lower Intestinal Malignant Obstruction (LIMO) not Amenable to Enteral Stenting

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DOI 10.1055/s-0046-1821197

Aims Palliation of advanced LIMO not amenable to enteral stenting is clinically challenging. Feeding/decompressing tubes negatively impact QoL and limit oncological treatment, whereas surgery carries high morbidity. Preliminary data suggesting that EUS-EA with LAMS could potentially restore intestinal transit in this setting warrant confirmation. We aimed to assess the safety and efficacy of EUS-EA with LAMS in patients with advanced LIMO not amenable to standard endoscopic treatment with enteral stents.

Methods Retrospective multicenter study at eight tertiary hospitals in consecutive LIMO patients who failed or were not deemed candidates for enteral stenting and then underwent attempted EUS-guided EA from January 2018 to August 2025. Baseline clinical, procedural and follow-up variables were pooled. A descriptive analysis and comparison between groups was performed using χ^2 and Fisher's exact test. Odds ratios with 95 % CI were estimated to test associations.

Results Twenty-four patients were included (42 % women, age 66 [40–97] years). Colo-rectal cancer was the most common etiology (38 %); 63 % had metastatic disease and 54 % were receiving active oncological treatment. 71 % had carcinomatosis and 42 % had ascites. LIMO location was ileum (42 %), jejunum (25 %), and colon (24 %). 71 % had received previous treatment with decompressive tubes, 13 % had received stents, and 8 % had undergone surgery. 79 % of procedures were performed in a retrograde approach; 74 % with direct puncture and 95 % with a freehand technique. Prophylactic antibiotic therapy was administered in 70 % of cases, associated with a lower infection rate (6.2 % vs. 42 %; $\chi^2 p = 0.040$), with OR –2.351 (95 % CI –4.9873 to –0.170). Axios LAMS were used in 95 % of cases and Spaxus LAMS in 5 %. LAMS diameters were 20 mm in 77 % of cases and 15 mm in the remainder. Sedation was most commonly performed by an anesthesiologist with endotracheal intubation (50 %). Yet, in 29 % of cases,

endoscopist-led sedation was undertaken, with comparable safety outcomes. Location of LAMS anastomosis was entero-colonic (64%), entero-enteric (23%), and colo-colonic (14%). Technical success was 92%, with no differences between patients with/without ascites or carcinomatosis. Overall clinical success was 87% (73% complete, and 14% partial). Oral tolerance was restored at a median of 1 day (IQR 1–2) following EUS-EA. There were 3 perforations (14%), 4 infections (18%), and 1 death (5%), with no cases of aspiration, bleeding, or misdeployment. Median hospital stay was 10 days (IQR 6–26). Sixty-five percent of patients did not require additional procedures over a median 63-day follow-up (IQR 21–121). Three patients were readmitted for recurrent LIMO after a median of 64 days. Median survival was 32 days (IQR 14–80); five patients remain alive after a median of 868 days.

Conclusions EUS-EA with LAMS appears feasible and safe at expert centers in selected patients with advanced LIMO not amenable to enteral stenting, even in the presence of carcinomatosis or ascites. Early reintroduction of oral feeding and resumption of oncological treatment are possible in most cases. This novel procedure can be offered to patients with advanced LIMO when EUS-EA expertise is available.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP258 The role of double-balloon enteroscopy in patients with suspected or confirmed small-bowel neuroendocrine tumours: A retrospective study at a tertiary UK centre

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DOI 10.1055/s-0046-1821198

Aims Small-bowel neuroendocrine tumours (SB-NETs) are typically small and multifocal, often eluding detection on cross-sectional imaging, particularly when multiple and/or of diminutive size. Accurate localisation and assessment of disease extent are crucial for staging and optimal management, especially when surgery is being considered [1]. This study aimed to assess the contribution of double-balloon enteroscopy (DBE) to diagnosis, staging, lesion localisation and management-planning in patients evaluated for SB-NETs.

Methods All DBE procedures performed between July 2023 and October 2025 for suspected, or known SB-NETs were retrospectively reviewed. Data collected included: demographics, surgical anatomy, multidisciplinary team (MDT) discussion, lesion detection, multifocality, tattoo marking, alternative diagnoses and subsequent management decisions.

Results Twenty-four patients were included. Median age was 59-years; 54.1% were women, and 29.1% had surgically-altered gastrointestinal anatomy. Pre-procedural MDT discussion occurred in 79.1% of cases. The retrograde route was used in 14 patients (58.3%). DBE identified lesions suspicious for SB-NET in 18/24 patients (75%). Multifocal disease was detected in 6/18 patients (33%). Tattoo marking was performed in 16/18 lesions (88.9%). DBE findings led to surgical referral and definitive management in 12/24 patients (50%). In 3/24 patients (12.5%), DBE identified benign or alternative pathology (lipoma, leiomyoma, primary paraganglioma) rather than NET. In patients investigated for small-bowel bleeding, DBE distinguished NET-related bleeding from unrelated sources in those with a history of SB-NET.

Conclusions DBE added significant value in the assessment and diagnosis of SB-NETs by enabling direct lesion visualisation, targeted tissue sampling, confirmation and extent of multifocality and the detection of additional lesions

not identified on imaging. It further supported management by providing precise preoperative localization through tattoo marking and subsequent mapping disease extent. DBE refined diagnosis when imaging was inconclusive and avoided misclassification when benign alternative pathology was present. By informing MDT discussions and guiding surgical strategy in half of the cases, DBE served as an integral element of the SB-NET diagnostic and management pathway.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lamarca A, Bartsch DK, Caplin M, Kos-Kudla B, Kjaer A, Partelli S et al. European Neuroendocrine Tumor Society (ENETS) 2024 guidance paper for the management of well-differentiated small intestine neuroendocrine tumours. *J Neuroendocrinol* 2024; 36 (9): e13423

PYP259 Robotic Capsule Endoscopy: Simultaneous Gastric and Enteric Evaluation in Real-World Practice

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DOI 10.1055/s-0046-1821199

Aims Robotic capsule endoscopy (RCE) is an emerging technology that combines magnetically controlled gastric navigation with conventional capsule enteroscopy (CE), enabling a minimally invasive, comprehensive evaluation of the upper and mid-gastrointestinal tract. This study aimed to characterize the real-world implementation and diagnostic performance of RCE in a European tertiary referral center.

Methods A retrospective, single-center analysis was conducted on adult patients (≥ 18 years) who underwent RCE between June 2023 and June 2025. Eligible patients had a clinical indication for small bowel CE and a concurrent requirement for diagnostic gastroscopy or reassessment of known gastric lesions. The RCE protocol comprised an initial robotic-guided gastric examination followed by passive transit through the small bowel.

Results A total of 85 patients were included (52% female) with a median age 49 years (IQR 40–64). The most common indications were suspected or established inflammatory bowel disease (57%) and iron deficiency anemia (31%). Gastric preparation was rated at least fair in 98% of cases, with good preparation in 38%. Median gastric transit time was 74 minutes (IQR 35–106). Relevant gastric findings were identified in 39 cases (46%), namely polyps (18%) and angiectasias (8%, including one with active bleeding), in addition to signs of chronic gastritis. Thirteen patients underwent subsequent endoscopy, resulting in seven therapeutic procedures. Small bowel findings were present in 60 patients (71%), including P3 (active bleeding) in 3% and P2 lesions (angiectasias, ulcers, tumors, varices) in 39%. One clinically significant adverse event occurred: small-bowel capsule retention in a patient with multifocal neuroendocrine tumor and ileostomy.

Conclusions Robotic capsule endoscopy is a feasible and effective tool for dual-region gastrointestinal evaluation. It enables high-quality gastric visualization, facilitates early detection of clinically actionable lesions, and maintains the diagnostic yield expected from standard small bowel CE. These findings support the integration of RCE into diagnostic pathways for patients requiring simultaneous gastric and small bowel assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Achieving Good endoscopy – let's sleep on it!

15/05/2026, 16:00–17:00

Emerald 3

PYP260 Remimazolam for Colonoscopy in IBD: A Better Experience Starts Here

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DOI 10.1055/s-0046-1821200

Aims Colonoscopy is central to IBD care but acceptance may be limited by anxiety and discomfort. Remimazolam, a short-acting benzodiazepine, could offer advantages over midazolam. We compared efficacy, safety, and recovery between remimazolam and midazolam in IBD patients undergoing colonoscopy.

Methods Single-center, prospective, randomized trial of IBD patients scheduled for elective colonoscopy, allocated 1:1 to remimazolam or midazolam. Primary outcome: proportion of patients reporting at least “satisfied” immediately postprocedure (binary endpoint $\geq$ “satisfied” vs $<$ “satisfied”). Secondary outcomes: discharge readiness at 10 and 20 minutes (PADSS), adverse events (allergic reactions; hypotension; hypoxia defined as $\text{SpO}_2 < 90\%$ requiring $> 4\text{ L/min O}_2$; respiratory depression; bradycardia $< 60\text{ bpm}$; nausea; vomiting; dizziness; headache; intra- vs post-procedural timing), and endoscopic performance outcomes. We used a Bayesian framework. For the primary endpoint, non-inferiority of remimazolam versus midazolam was assessed with a prespecified margin of -10% . Posterior distributions and 95% credible intervals (CrI) were obtained via Monte Carlo sampling.

Results A total of 216 patients were initially assessed for eligibility and assigned with an approximate ratio of 1:1 to receive either midazolam or remimazolam. Of these, 16 patients were excluded from the final analysis due to the following reasons: inadequate bowel preparation ($n=6$), withdrawal of informed consent before the procedure ($n=5$), and technical issues preventing completion of the colonoscopy or data recording ($n=5$). The final study population consisted of 200 patients, equally distributed between the two treatment groups. Baseline demographic, clinical, and disease-related characteristics were well balanced between groups. Overall satisfaction was high and remimazolam was non-inferior to midazolam (96.4% vs 97.3%). “Very satisfied” responses were more frequent with remimazolam (62.2%, 95% CrI 55.4–72.5%) than midazolam (48.3%, 95% CrI 39.5–57.3%; posterior probability of superiority 99.3%). Discharge readiness favored remimazolam at 10 minutes (65.0%, 95% CrI 56.3–73.3% vs 27.5%, 95% CrI 19.9–35.8%) and 20 minutes (88.3%, 95% CrI 82.0–93.4% vs 64.2%, 95% CrI 55.4–72.5%). A personalized model suggested greater benefit from remimazolam among younger patients, females, and those with shorter disease duration. Adverse events were infrequent in both treatment groups and generally mild in severity. The most commonly reported event was transient hypotension, observed in 4% of patients receiving midazolam and 2% of those treated with remimazolam. Nausea occurred in 3% of midazolam-treated patients and 1% of those in the remimazolam group. No cases of hypoxemia were reported in either group. Only one patient (1%) in the midazolam group experienced a prolonged recovery time that delayed discharge beyond 60 minutes, whereas no such delays were observed with remimazolam.

Conclusions Remimazolam is a safe, effective alternative to midazolam for colonoscopy sedation in IBD, yielding higher patient satisfaction and marked-

ly faster recovery. Personalized sedation strategies may enhance its clinical value.

Conflicts of Interest C.B.: served as a consultant or received lecture fees from AbbVie, Alfasigma, Celltrion, Eli Lilly, Ferring, Fresenius Kabi, Galapagos, Lion-Health, Johnson & Johnson, MSD, Pfizer, and Takeda. C. H.: has provided services to Fujifilm and Medtronic Co. A. R.: has provided services to Fujifilm, Olympus Corp., Medtronic Co., and Boston Scientific; A.A.: has served as speaker, consultant, and/or advisory member or has received research funding from AbbVie, Abivax, AG Pharma, Alfa Sigma, Astra Zeneca, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Celltrion, Eli Lilly, Ferring, Galapagos, Gilead, Giuliani, Janssen, Lion Health, Merck, Nestlé, Novartis, Pfizer, Protagonist Therapeutics, Roche, Sanofi, Samsung Bioepis, Sandoz, Takeda, Teva Pharmaceuticals, Tillotts Pharma.

PYP261 Non-Anesthesiologist Administered Propofol Sedation for Gastrointestinal Endoscopy in ASA III Patients: Results from an 8-year Experience

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DOI 10.1055/s-0046-1821201

Aims Sedation is essential in gastrointestinal (GI) endoscopy to optimize patient comfort, procedural quality, and endoscopist satisfaction [1, 2]. While non-anesthesiologist-administered sedation (NAS) with propofol is well established for low-risk patients, i.e. American Society of Anesthesiologist (ASA) I–II [3], evidence regarding its use in higher-risk groups remains limited. ASA III patients present a greater likelihood of cardiopulmonary events, and current data are heterogeneous and underpowered [4, 5]. This study aimed to evaluate the safety profile of NAS with propofol in ASA III patients undergoing routine diagnostic GI endoscopy.

Methods This observational study included ASA III patients who underwent elective gastroscopy or colonoscopy under NAS with propofol, with or without adjunctive midazolam and/or fentanyl, between 2017 and 2024. Sedation was administered by a member of the endoscopy team (endoscopist or nurse) who had completed the ESGE/ESGENA curriculum for sedation in GI endoscopy and was exclusively dedicated to sedation. The protocol dosages were as follows: propofol 0.3–0.6 mg/kg (with an additional dose of 0.3–0.4 mg/kg after 2 minutes), preceded or not by midazolam 0.02–0.03 mg/kg and/or fentanyl 0.6–1.3 µg/kg. Anesthesia-related adverse events (ARAEs) were categorized as minor, moderate, or severe based on the World Society of Intravenous Anesthesia definitions. Secondary outcomes included the identification of potential risk factors for ARAEs.

Results Among 1219 patients, 1423 procedures were analyzed (43.4% gastroscopies; 56.6% colonoscopies). A total of 79.2% of patients (965/1219) were aged 65 years or older. Four sedation regimens were used: propofol alone (19.3%), propofol + midazolam (18.7%), propofol + fentanyl (32.1%), and propofol + fentanyl + midazolam (29.9%). ARAEs occurred in 5.2% of procedures: 3.9% minor, 0.9% moderate, and 0.4% severe. No cases of tracheal intubation or death were observed. Hypotension was the most frequent event (3.6% requiring no intervention; 0.8% requiring fluids). Desaturation was rare (0.2% minor; one case requiring transient bag-valve ventilation). Severe ARAEs consisted only of bradycardia treated successfully with atropine. The incidence of ARAEs differed among sedation regimens ($p=0.023$): the highest rate was observed with propofol + midazolam (8.6%), while propofol + fentanyl had the lowest (3.7%). Post-hoc analysis showed a significant difference between these

two regimens ($p = 0.04$, OR 2.46). Logistic regression analysis identified lower body mass index as the only independent predictor of ARAEs ($p < 0.001$). Exploratory analyses to investigate these findings revealed a statistically significant negative correlation between BMI and the administered per-kilogram propofol dose ($r = -0.196$, $p < 0.001$). An ANOVA test confirmed that patients in higher BMI classes (overweight and obese) received significantly lower mean per-kilogram propofol dosages compared to the normal-weight group ($p < 0.001$). No differences were observed in the mean per-kilogram fentanyl and midazolam dosages. Age, procedure type, and duration were not associated with adverse events. Finally, most patients were elderly, with no increase in ARAEs compared with younger patients.

Conclusions NAS with propofol appears safe in ASA III patients undergoing elective GI endoscopy when performed by trained personnel following standardized protocols. The overall incidence of ARAEs was low, and severe events were rare and manageable, even in elderly patients. Sedation regimen and BMI significantly influenced adverse event risk, suggesting the importance of tailored drug dosing. These findings support expanding NAS with propofol to higher-risk patients within structured, guideline-based pathways. This strategy may reduce the need for anesthesiologist involvement, improve resource utilization, and potentially lower procedural costs. The results further underline the need for prospective, multicenter studies to refine risk stratification and optimize sedation protocols.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Villanueva RI, Montero CB, Bulnes-Montánchez ME et al. Risk factors for adverse reactions to nurse-administered propofol during outpatient endoscopy: a cross-sectional study. *BMC Anesthesiol* 2025; 25: 228. doi:10.1186/s12871-025-03012-2
- [2] McKenzie P, Fang J, Davis J et al. Safety of endoscopist-directed nurse-administered balanced propofol sedation in patients with severe systemic disease (ASA class III). *Gastrointest Endosc* 2021; 94: 124–130. doi:10.1016/j.gie.2020.11.027
- [3] Manno M, Deiana S, Gabbani T et al. Implementation of the European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) sedation training course in a regular endoscopy unit. *Endoscopy* 2021; 53: 65–71. doi:10.1055/a-1197-6762
- [4] Harewood GC, Wiersema MJ, Melton JL. A Prospective, Controlled Assessment of Factors Influencing Acceptance of Screening Colonoscopy. *Am J Gastroenterol* 2002; 97: 3186–3194. doi:10.1111/j.1572-0241.2002.07129.x
- [5] Bannert C, Reinhart K, Dunkler D et al. Sedation in Screening Colonoscopy: Impact on Quality Indicators And Complications. *Am J Gastroenterol* 2012; 107: 1837–1848. doi:10.1038/ajg.2012.347

PYP262 Toward a new safe standard of deep sedation for diagnostic EUS across all ASA risk categories

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DOI 10.1055/s-0046-1821202

Aims Endoscopic ultrasound (EUS) is a second-level endoscopic procedure with substantially greater procedural complexity than standard diagnostic endoscopy, typically requiring deeper and longer sedation. However, an optimal sedation strategy in this setting has not yet been established. This study evaluated the safety of non-anesthesiologist-administered propofol sedation (NAPS) for diagnostic EUS across ASA risk classes, focusing on sedation-related adverse events (AEs).

Methods All consecutive diagnostic EUS procedures performed between January 2021 and May 2024 were included. Sedation involved balanced deep sedation using fentanyl, midazolam, and propofol administered by trained endoscopy nurses in accordance with ESGE/ESGENA guidelines. AEs were classified according to World Society of Intravenous Anesthesia definitions.

Results A total of 1134 diagnostic EUS procedures performed under NAPS were analyzed. The majority were biliopancreatic (73.0%), followed by esophagogastroduodenal (21.2%) and rectal EUS (5.8%). Tissue sampling via FNB/FNA was performed in 21.3% of cases, with a diagnostic accuracy of 93%. Median dosages were 260 mg propofol, 70 µg fentanyl, and 1.6 mg midazolam, with a median procedure time of 34 minutes (range 10–132). Sedation-related AEs occurred in 95 cases (8.4%): 31 (2.7%) mild, 58 (5.1%) moderate, and 6 (0.5%) severe. All AEs were managed by endoscopy staff without the need for anesthesiologist assistance. Moderate AEs included hypotension requiring fluids (1.5%), bradycardia < 60 bpm (3.4%), and desaturation > 30 seconds (0.3%). Severe AEs included bradycardia < 40 bpm treated with atropine (0.4%) and severe desaturation requiring assisted ventilation (0.2%). No AEs had clinically relevant consequences; only two procedures were discontinued, and no patient required hospitalization or extended care [1–3].

Multivariate analysis demonstrated that age (OR 1.14; $p < 0.001$) and ASA class (OR 7.17; $p < 0.001$) were the only independent predictors of AE risk. ASA III status was associated with a 1.47-fold higher relative risk compared with ASA I–II. BMI, number of comorbidities, Charlson Comorbidity Index (CCI), drug dosages, and procedure time were not associated with AEs risk. ASA III patients accounted for 359 procedures (31.8%) and, among them, adverse events comprised 41% (39/95) of all AEs, with the majority (24/39, 61.5%) occurring in patients older than 65 years. The distribution of AEs severity in ASA III patients, was as follows: mild in 2.5% (9/359), moderate in 7.5% (27/359), and severe in 0.8% (3/359).

Risk stratification based on the combination of age and ASA status identified three categories with progressively increasing AEs incidence: low (ASA I–II and < 65 years), intermediate (ASA I–II and > 65 years or ASA III and < 65 years), and high risk (ASA III and > 65 years). This model showed a significant correlation with AEs occurrence ($p = 0.029$), with a stepwise increase in AEs rates across groups—5.6%, 9.2%, and 12.3%, respectively.

Conclusions NAPS demonstrated a favorable safety profile across all ASA classes, with low rates of clinically relevant AEs. The highest AEs risk was observed in ASA III patients older than 65 years. Although these events were predominantly minor to moderate in severity, more caution could be taken in this subgroup of patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kato H, Kawasaki Y, Sumi K, Shibata Y, Nomura N, Ushio J, Eguchi J, Ito T, Inoue H. Propofol-alone sedative efficacy in observational biliopancreatic endoscopic ultrasound. *DEN Open*. 2024; 5 (1): e70025. doi:10.1002/deo2.70025 PMID: 39420874 PMID: PMC11483557
- [2] Manno M, Deiana S, Gabbani T, Gazzi M, Pignatti A, Becchi E, Ottaviani L, Vavassori S, Sacchi E, Hassan C, Soriani P. Implementation of the European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) sedation training course in a regular endoscopy unit. *Endoscopy*. 2021; 53 (1): 65–71. doi:10.1055/a-1197-6762 Epub 2020 Jun 25. Erratum in: *Endoscopy*. 2021 Jan;53(1):C1. doi: 10.1055/a-1221-6331 PMID: 32588416
- [3] Facciorusso A, Turco A, Barnabà C, Longo G, Dipasquale G, Muscatello N. Efficacy and Safety of Non-Anesthesiologist Administration of Propofol Sedation in Endoscopic Ultrasound: A Propensity Score Analysis. *Diagnostics (Basel)*. 2020; 10 (10): 791. doi:10.3390/diagnostics10100791 PMID: 33036219 PMID: PMC7601714

PYP263 Virtual Reality for Pain and Anxiety Relief During Unsedated Colonoscopy: A Randomized Controlled Trial

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DOI 10.1055/s-0046-1821203

Aims We conducted a randomized controlled trial including adults ≥ 18 years scheduled for outpatient, unsedated colonoscopy at the Endoscopy Unit of the Mohammed VI University Hospital, Marrakech. Patients with prior colorectal surgery, cognitive or sensory impairment, epilepsy, psychiatric disorders, or significant pre-procedural pain were excluded. Sixty patients were randomized (1:1) to receive either VR distraction plus routine care or routine care alone. Outcomes included procedural anxiety, pain, comfort, satisfaction, willingness to undergo future colonoscopies, and procedural characteristics. Validated scales were used for all patient-reported outcomes.

Methods We performed a randomized trial of 60 adults undergoing unsedated colonoscopy, assigned to VR or control. Eligible patients were ≥ 18 years; major sensory, cognitive, surgical, or psychiatric contraindications were excluded. Anxiety, pain, comfort, satisfaction, and willingness to return were assessed using validated scales. Procedural metrics, including caecal intubation time, were recorded and compared between groups.

Results VR significantly improved multiple procedural metrics. Time to caecal intubation was reduced by 4.29 minutes in the VR group. Anxiety decreased more markedly with VR compared with controls (17.4 $\rightarrow$ 15.8 vs. 17.3 $\rightarrow$ 16.2). Pain was significantly lower with VR (mean 4.53 vs. 5.83), accompanied by a shift toward higher comfort ratings. Patient satisfaction was substantially higher with VR (74 % vs. 54 %), and the Net Promoter Score improved (–0.33 vs. –16.66). Willingness to return for future colonoscopy was also greater in the VR arm. Endoscopists reported high acceptability (mean score 8.3/10) and noted reduced procedural stress with minimal implementation difficulty.

Conclusions VR significantly enhanced patient comfort, reduced pain and anxiety, and improved procedural efficiency and satisfaction during unsedated colonoscopy. Given its low cost, ease of implementation, and favorable user acceptance, VR represents a promising adjunct for routine use in endoscopy units as a non-pharmacological pain-relief and anxiolysis strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP264 Addition of capnography to standard monitoring significantly reduces the incidence of mild and severe oxygen desaturation during sedation of gastrointestinal endoscopic procedures: a systematic review and pooled results analysis

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DOI 10.1055/s-0046-1821204

Aims The additional safety effect of capnography monitoring during non-advanced endoscopic procedures has not been adequately examined. We aimed to evaluate the effectiveness of capnography monitoring, alongside standard monitoring, in reducing sedation-related hypoxemia.

Methods A systematic review across MEDLINE and Cochrane Central Register for all types of trials evaluating the efficacy of capnography monitoring in addition to standard monitoring in reducing the incidence of SRAE was conducted for studies published between 01.01.2019 and 31.07.2025. The primary outcome was the risk of sedation-related hypoxemia. The pooled results for the study outcomes were presented as Risk Ratios (RR) with the 95 % confidence intervals (CIs). We also performed sensitivity analyses by the severity of oxygen desaturation (mild and severe), low and high-risk procedures, and type of sedation (propofol vs. non-propofol vs. mixed regimens). We assessed the quality of evidence using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Two RCTs, four service evaluation studies, and one cohort study were included. Compared to standard monitoring, addition of capnography significantly reduced the risk of oxygen desaturation [RR 0.61, 95 % CI (0.46-0.82; $I^2 = 74\%$)], with this effect being significant both for RCTs [RR 0.57, 95 % CI (0.35-0.93); $I^2 = 70\%$] and non-RCT studies [RR 0.64, 95 % CI (0.43-0.96; $I^2 = 80\%$)], respectively; there was very low confidence in estimates. Capnography use led to a significantly lower incidence of both mild and severe hypoxemia [RR 0.74, 95 % CI (0.63-0.85); $I^2 = 61\%$ and RR 0.54, 95 % CI (0.40-0.73); $I^2 = 44\%$, respectively]. Notably, the positive impact of capnography was also significant for low and high-risk procedures in terms of mild [RR 0.75, 95 % CI (0.60-0.93); $I^2 = 69\%$ and RR 0.72, 95 % CI (0.57-0.89); $I^2 = 55\%$, respectively] and severe oxygen desaturation [RR 0.75, 95 % CI (0.60-0.93); $I^2 = 69\%$ and RR 0.72, 95 % CI (0.57-0.89); $I^2 = 54\%$, respectively]. In terms of sedation type, the use of capnography was associated with a reduced risk ratio of oxygen desaturation overall; however, statistical significance was only noted in studies analyzing propofol [RR 0.59, 95 % CI 0.46-0.76; $I^2 = 54\%$].

Conclusions Addition of capnography to standard monitoring decreased the incidence of both mild and severe hypoxemia during sedation for gastrointestinal procedures, regardless of procedural risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP265 Addition of bispectral index (bis) monitoring to standard monitoring significantly reduces total propofol dose: a systematic review and a pooled analysis

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DOI 10.1055/s-0046-1821205

Aims Bispectral Index Monitoring (BIS) is an objective measure of brain activity. It assists clinicians in the precise titration of anesthetic drugs, leading to reduced use of hypnotic medications and improved recovery times. We aimed to evaluate the effect of Bispectral Index (BIS) monitoring in addition to standard monitoring on the dose of propofol used.

Methods We performed a systematic review across MEDLINE and Cochrane Central Register for all types of trials from 01/01/2019 until 31/12/2024, evaluating the effect of Bispectral Index (BIS) monitoring in addition to standard monitoring on propofol dose. The primary outcome was the total propofol dose. We performed pairwise analyses and we present the effect size on study outcomes as Mean Difference (MD) with 95 % confidence interval (CI). The certainty of evidence was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Three RCTs and two cohort studies with 947 subjects were included. Compared to standard monitoring, the addition of BIS significantly reduced the total propofol used in each procedure [MD -0.25 95 % CI (-0.25, -0.47), $I^2 = 61\%$]. Contrariwise, use of BIS did not have a similar effect on mean propofol dose [MD -0.41 95 % CI (-0.41, -1.37), $I^2 = 61\%$]; the certainty of evidence was very low.

Conclusions Addition of BIS to standard monitoring during sedated GI endoscopy significantly reduces the total propofol dose.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP266 Impact of unsedated diagnostic endoscopy on endoscopy performance: a systematic review and pooled results analysis

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DOI 10.1055/s-0046-1821206

Aims Unsedated diagnostic endoscopy safety and ability for immediate patient discharge should be judged in light of the adequate performance of the examination and patients' preferences. The study aimed to evaluate the impact of unsedated diagnostic endoscopy on performance measures

Methods We performed a systematic review across MEDLINE and Cochrane Central Register for all types of trials assessing the effect of unsedated endoscopy on endoscopy performance from 2014 to 2025. Diagnostic colonoscopy quality measures (Adenoma Detection Rate – ADR, cecal Intubation Rate – CIR) and diagnostic ultrathin or transnasal gastroscopy completion rates, as well as patient-reported discomfort rates, comprised our outcomes. We conducted pairwise meta-analyses to present effect sizes for study outcomes, represented as either Odds Ratios (OR) or Mean Differences (MD), along with 95 % con-

fidence intervals (CI). The certainty of evidence was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Eight studies (six retrospective cohort, one RCT, and one cross-sectional) with 60383 patients (53633 sedated, 6750 unsedated) examining the efficacy of unsedated versus sedated diagnostic colonoscopy were included. Compared to colonoscopy under sedation, unsedated colonoscopy resulted in similar ADR [OR 0.97, 95 % CI (0.84-1.13), $I^2 = 71\%$] as well as CIR [OR 1.65, 95 % CI (0.45-6.01), $I^2 = 91\%$]; there was low confidence in estimates. Notably, colonoscopy without sedation was not associated with an increased level of patients' discomfort. [MD = 0.45; 95 % CI (0.11-1.83); $I^2 = 100\%$] compared to sedated procedures. The certainty of evidence was very low. Three RCTs with 703 patients (354 sedated, 349 unsedated) evaluated unsedated versus sedated diagnostic gastroscopy. Their pooled results showed a marginally higher procedure completion rate with the use of unsedated gastroscopy [OR 95 % CI 0.98, (0.96-1.00), $p = 0.70$; $I^2 = 100\%$] but significantly lower distress rates [MD -1.01, 95 % CI (-1.60 – -0.42), $I^2 = 0\%$]. The certainty of evidence was very low.

Conclusions Recent evidence indicates that unsedated diagnostic endoscopy is feasible and efficacious in willing patients compared to standard endoscopy under sedation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP267 Deep sedations and wrong indications: The burden of inappropriate EGDs

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DOI 10.1055/s-0046-1821207

Aims To analyze the burden associated with performing inappropriate esophagogastroduodenoscopies (EGDs) in a tertiary endoscopy unit. We also sought to determine whether the clinical appropriateness of EGDs is associated with the use of sedation, thus also testing the hypothesis that prescribers assign EGDs requests of low clinical value with deep sedation, since these have longer waiting periods.

Methods Retrospective observational study, conducted at a single center, including all consecutive requests for elective diagnostic EGD over a 3-month period (N = 314), excluding EGDs performed for therapeutic purposes or in an emergency setting. The appropriateness of the indication was assessed according to ASGE/ESGE criteria. Patient demographics, source of request (outpatients vs. inpatients) and type of sedation were recorded. The type of sedation was classified as no sedation, conscious sedation (benzodiazepines administered by the gastroenterologist), or deep sedation (performed by an anesthesiologist). Statistical analysis included descriptive statistics, chi-square tests and estimation of effect measures with 95 % confidence intervals (CI). Significance threshold was $p < 0.05$ [1, 2].

Results The average age of patients was 57.7 years, and 54.5 % were women. Most requests originated from outpatient clinics (90.8 %). Regarding sedation, 39.2 % of the EGDs were performed without sedation, 32.8 % with conscious sedation, and 29 % with deep sedation. In total, 63.7 % of requests were considered appropriate and 36.3 % inappropriate.

A decrease in the appropriateness rate was observed as the level of sedation increased. The appropriateness rate was highest in exams without sedation (71.7 %), decreased in exams with conscious sedation (68.0 %), and fell sharply in exams performed under deep sedation, where less than half (48.4 %) were in accordance with the indications ($p < 0.001$). Inappropriate requests were significantly more likely to be scheduled under deep sedation (RR = 1.87; 95 % CI 1.33–2.63), $p < 0.001$.

If triage were implemented, 34 additional slots would be gained in non-sedated EGD shifts, 33 in mild sedation shifts, and 47 in deep sedation shifts, repre-

senting a direct recovery of 114 EGD slots in one trimester (456 annualized), which could be reallocated to patients with appropriate indications.

Economic costs were calculated using the unit costs reported by Areia et al. (60€ per EGD without deep sedation and 137€ with deep sedation), and we estimate that at least 10,459€ was spent on unnecessary EGDs (~41,836€ per year, assuming a stable rate).

Environmental costs were considered using the values of Elli et al. (5.43 kg of CO₂ per EGD), and we concluded that our cohort emitted at least 619 kg of CO₂ in unnecessary EGDs (about 2,476 kg of CO₂ per year, equivalent to the consumption of 1,000 liters of gasoline).

Conclusions This 3-month cohort demonstrated that more than one-third of elective EGDs are inappropriate and confirmed that as the level of sedation increases, so do inappropriate requests. This burden translates into a substantial waste of resources with loss of procedural capacity (>450 slots/year), direct economic costs (>40,000€/year), and a major environmental impact (>2,400 kg CO₂/year). These results underscore the urgent need to implement effective triage strategies to optimize resource allocation, reduce costs, and mitigate the environmental impact associated with unnecessary procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Elli L., La Mura S., Rimondi A., Scaramella L., Tontini G.E., Monica F., Soncini M., Topa M., Bortoluzzi F., Sorge A., Cavallaro F., Nandi N., Novello D., Piagnani A., Maregatti M., Caldato M., Vecchi M. 2024; The carbon cost of inappropriate endoscopy. *Gastrointestinal endoscopy* 99 (2): 137–145.e3. doi:10.1016/j.gie.2023.08.018
- [2] Areia M., Spaander M.C., Kuipers E.J., Dinis-Ribeiro M. 2018; Endoscopic screening for gastric cancer: A cost-utility analysis for countries with an intermediate gastric cancer risk. *United European gastroenterology journal* 6 (2): 192–202. doi:10.1177/2050640617722902

PYP268 Use of an Abdominal Compression Device During Colonoscopy Significantly Shortens Cecal Intubation Time Compared With Conventional Technique

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DOI 10.1055/s-0046-1821208

Aims Loop formation remains one of the main factors prolonging colonoscopy, often necessitating manual abdominal pressure or patient repositioning. Abdominal compression devices (ACDs) such as elastic binders or adjustable belts provide continuous counter-pressure, potentially preventing loop formation and facilitating cecal intubation. This prospective study aimed to evaluate the impact of ACD use on cecal intubation time and procedural performance during colonoscopy in a Moroccan tertiary centre.

Methods A prospective comparative trial was conducted in our Hepato-Gastroenterology Department, from January 2023 to October 2025. A total of 220 consecutive adult patients undergoing diagnostic or screening colonoscopy were enrolled and randomly assigned to either:

ACD group (n = 110) – colonoscopy performed using an adjustable abdominal compression belt,

Control group (n = 110) – conventional colonoscopy without compression. Endpoints included:

1. Primary: mean cecal intubation time (CIT) in minutes.
2. Secondary: need for manual pressure, patient position change, and procedure-related discomfort or adverse events. All procedures were performed by experienced endoscopists under conscious sedation. Statistical analysis was carried out using SPSS 26.0; $p < 0.05$ was considered significant.

Results Mean age was 55 ± 12 years; 58 % were female. Cecal intubation was achieved in 98.2 % overall.

Mean CIT: significantly shorter with ACD (5.9 ± 1.8 min) compared with control (7.8 ± 2.3 min; $p < 0.001$).

Manual abdominal pressure: required in 13.6 % of ACD cases vs 47.2 % of controls ($p < 0.001$).

Position change: needed in 16.3 % with ACD vs 40.9 % without ($p = 0.002$).

Total procedure time: 11.2 ± 3.9 min (ACD) vs 13.7 ± 4.4 min (control; $p = 0.01$). No adverse events or device-related complications were recorded, and patient tolerance scores were higher in the ACD group ($p = 0.04^*$).

Conclusions In this single-centre prospective study, the use of an abdominal compression device during colonoscopy significantly reduced cecal intubation and total procedure times, while minimising the need for manual pressure and patient repositioning, without compromising safety or comfort. These findings support the routine use of ACDs as a simple, non-invasive, and cost-effective adjunct to improve procedural efficiency, particularly in patients with redundant or difficult colons.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP269 Improving pain and discomfort during colonoscopy using music and task distraction: results from a three-arm observational study

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DOI 10.1055/s-0046-1821209

Aims Fear of pain and discomfort remains one of the leading barriers to colonoscopy attendance, contributing to delayed diagnosis and reduced colorectal cancer detection rates. While sedation and advanced endoscopic systems can enhance patient comfort, these resources are not universally available—particularly in low- and middle-income settings. Low-cost, non-pharmacological interventions such as music and cognitive distraction may offer a practical alternative to improve patient experience.

Aim To assess the impact of music and smartphone-based task distraction on physiological markers of pain and patient-reported comfort during colonoscopy in a Moroccan tertiary centre.

Methods A prospective three-arm observational study was conducted at CHU Mohammed VI Marrakech between January and October 2024. Consecutive adult patients undergoing elective colonoscopy were enrolled and allocated to one of three groups:

Arm A: standard colonoscopy; Arm B: colonoscopy with music; Arm C: colonoscopy with smartphone task distraction

Real-time heart rate and respiratory rate were recorded using a wearable monitor. Patient satisfaction, perceived discomfort, sedation use, and procedural difficulty were documented. Data were analysed using ANOVA and generalized estimating equations.

Results A total of 96 patients were included in the interim analysis (32 per arm; 49 % female; mean age 49.2 years). Baseline demographic and clinical characteristics were comparable across all three groups.

1. Heart rate (mean HR) Real-time mean heart rate differed between groups; Arm A – Standard colonoscopy: 85.7 bpm (SD 22.9), Arm B – Music: 79.4 bpm (SD 20.1), Arm C – Smartphone task distraction: 76.1 bpm (SD 19.4) ANOVA showed a significant difference between groups ($p = 0.03$), with the lowest HR observed in Arm C.
2. Respiratory rate (mean RR) Mean respiratory rate followed a similar pattern: Arm A: 13.9/min (SD 6.0); Arm B: 13.1/min (SD 5.4); Arm C: 12.8/min (SD 5.7) Group comparison reached significance ($p = 0.04$).
3. Patient comfort Patient-reported pain and discomfort scores (0–10 scale) were lower in the intervention arms: Pain: Arm A 5.6 vs Arm B 4.1 vs Arm C 3.7, Discomfort: Arm A 6.2 vs Arm B 4.5 vs Arm C 3.9, Overall $p < 0.01$.
4. Satisfaction A large majority of patients in intervention groups reported high satisfaction: Arm A: 63 %, Arm B: 91 %, Arm C: 94 % Almost all patients in Arms B and C stated they would choose the same method again.

5. Sedation and procedural difficulty Sedation rates were similar across groups (25–30%, $p = \text{NS}$). Endoscopist-rated procedural difficulty did not differ significantly between arms.

6. Safety

No intervention-related adverse events were recorded. Completion rates (cecal intubation) were high across all groups (>95%).

Conclusions In this Moroccan monocentric cohort, music and smartphone task distraction significantly improved objective and subjective measures of comfort during colonoscopy. These simple, low-cost interventions offer a practical strategy to enhance patient experience, increase acceptance of colonoscopy, and potentially improve adherence to colorectal cancer screening programmes. Final results from the ongoing larger cohort will help refine implementation strategies in routine endoscopy practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

The Expanding Frontier of Bariatric Endoscopy

15/05/2026, 17:30–18:30

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PYP270 Lumen-apposing metal stents versus fully covered SEMS and endoscopic dilation for post-sleeve gastrectomy gastric twist: a large single-center comparative study

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DOI 10.1055/s-0046-1821210

Aims Gastric twist after sleeve gastrectomy is an increasingly recognized cause of obstructive symptoms and dysphagia. Endoscopic dilation (ED) has been traditionally used, while lumen-apposing metal stents (LAMS) and fully covered self-expandable metal stents (FC-SEMS) have emerged as alternative options. This study compared the efficacy and safety of LAMS, FC-SEMS, and ED for the treatment of post-sleeve gastric twist.

Methods Single-center retrospective cohort including all consecutive patients with symptomatic gastric twist after sleeve gastrectomy treated with LAMS (16 × 30 mm), FC-SEMS (22 mm × 110 mm), or pneumatic dilation between January 2012 and August 2025. Technical success (TS) was defined as completion of the planned procedure. Clinical success (CS) was defined as improvement of ≥ 1 level in the Mellow–Pinkas Dysphagia Score. Recurrence was defined

as dysphagia score 3–4 and/or inability to maintain a satisfactory luminal caliber within 4 weeks after CS. Adverse events (AEs) were classified according to AGREE, and recurrence-free survival (RFS) was assessed by Kaplan–Meier analysis. Group comparisons were performed using Kruskal–Wallis and χ^2 /Fisher's exact tests.

Results Overall, 151 patients were included (LAMS 97; ED 31; FC-SEMS 23). Baseline characteristics showed some differences in age, BMI, smoking, prior complications, and dysphagia severity across groups. TS was achieved in all patients (LAMS 96.9% with three immediate FC-SEMS crossovers, ED 100%, FC-SEMS 100%). CS was comparable (79.8% LAMS, 90.3% ED, 82.6% FC-SEMS; $P = 0.4091$). Among patients with CS, recurrence occurred in 16.0% after LAMS, 39.3% after ED, and 31.6% after FC-SEMS ($P = 0.0324$). RFS did not differ significantly by treatment at Kaplan–Meier analysis (log-rank $P = 0.1490$). LAMS required fewer procedures (median 1 vs 2 with ED; $P < 0.000001$) and shorter hospital stay (0 vs 2 days; $P < 0.000001$). AEs were numerically lower with LAMS (13.4% vs 25.8% ED vs 30.4% FC-SEMS; $P = 0.0849$), predominantly late migrations.

Conclusions In post-sleeve gastric twist, LAMS achieved comparable clinical success with fewer procedures, shorter hospitalization, and a lower crude recurrence and AE rate compared with ED and FC-SEMS, supporting its role as an attractive first-line endoscopic option.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP271 Economic evaluation of proximal intestinal mucosal ablation in insulin-requiring type 2 diabetes: cost-effectiveness and price threshold analysis from a UK NHS perspective with comparison to semaglutide

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DOI 10.1055/s-0046-1821211

Aims Proximal Intestinal Mucosal Ablation (PIMA) is an emerging endoscopic therapy for type 2 diabetes that may improve glycaemia and enable discontinuation of exogenous insulin use. Given the burden and adverse effects of long-term insulin therapy, reducing or eliminating its use could yield meaningful economic benefits. We aimed to develop a cost-effectiveness model, from a UK National Health Service (NHS) perspective, to evaluate PIMA compared with standard-of-care (SoC; continued insulin therapy), as well as its cost impact relative to escalation to the glucagon-like peptide-1 receptor agonist (GLP-1RA) Semaglutide.

Methods A Markov model compared PIMA to SoC and GLP-1RA escalation over 2- and 5-year horizons. Three health states (OFF-insulin, ON-insulin, death) were modelled using 6-month cycles and 3% annual discounting. PIMA was assumed to achieve complete insulin discontinuation, followed by time-varying relapse back to insulin based on current data. Relapse was estimated as a gradual increment from 0–45% (sensitivity analysis up to 68%) over 5-years with increases in oral medication by 50%. GLP-1RA therapy was modelled using UK acquisition costs (£294/month) and real-world discontinuation and insulin-reduction effects. Outcomes included costs, QALYs, incremental costs, incremental QALYs, and incremental cost-effectiveness ratios (ICERs). Uncertainty was evaluated using one-way, scenario, and probabilistic sensitivity analyses (PSA), varying PIMA price, relapse probability, escalation rates, and utilities, with a £30,000/QALY willingness-to-pay (WTP) threshold.

Results Over 2 years, PIMA yielded QALY gains of 0.16–0.19 at incremental costs of £3,500–3,700, producing ICERs of £18,000–23,500/QALY at the base-case device cost (£8,000), within the National Institute for Health and Care

Excellence (NICE) £20,000–30,000/QALY threshold. Over 5 years, QALY gains were smaller (0.10–0.12) and incremental costs remained substantial (£4,700–5,100), resulting in ICERs of £41,700–49,000/QALY. PSA generated a mean ICER of £31,018/QALY, with 60–65% probability of cost-effectiveness at £30,000/QALY. Under favourable assumptions, ICERs ranged from £18,700–32,800/QALY and under unfavourable assumptions, £23,400–50,300/QALY. At base cost, ICER was most sensitive to device cost, followed by relapse reduction and escalation to oral medication. PIMA was consistently dominant relative to Semaglutide, which incurred higher costs and generated lower QALYs across all scenarios. Across all device price modelled (£5,000–15,000), PIMA remained cost-saving compared with Semaglutide, which remained consistent when modelling drug cost variation ($\pm 30\%$).

Conclusions PIMA is likely cost-effective over a 2-year horizon as an endoscopic treatment for insulin-requiring type 2 diabetes and demonstrates marginal cost-effectiveness over 5 years at current pricing. PIMA is consistently cost-saving compared with Semaglutide, supporting its potential as a lower-cost alternative treatment.

Conflicts of Interest RH, LARG, PM, PBH, PV, BCN, and NS disclose receipt of research funding from Aqua Medical Inc. to support research infrastructure

PYP272 Comparison Between Gastric Fundus Endoscopic Ablation and BioEnterics Intragastic Balloon in Obesity Management: preliminary results from a pilot study

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DOI 10.1055/s-0046-1821212

Aims Minimally invasive endoscopic therapies have emerged as alternatives to bariatric surgery for patients with obesity. Among these, gastric fundus endoscopic ablation (GFEA) — a technique aimed at reducing gastric accommodation and decreasing ghrelin secretion — and the BioEnterics Intragastic Balloon (BIB) — which induces early satiety through intragastric volume displacement — represent two distinct approaches. Comparative evidence, however, are not available.

Methods After reviewing the available literature on mechanisms, efficacy, and safety of GFEA and BIB in obesity treatment, including pilot trials, observational series, and meta-analyses of intragastric balloon (IGB) therapy, we designed a prospective randomized study on comparison between the two techniques. Primary outcomes was total body weight loss (TBWL); secondary outcomes were tolerability and rates of complications [1, 2].

Results 10 obese patients (mean BMI ~ 40 kg/m²) were included and equally randomized in GFEA using hybrid argon-plasma ablation of the fundus and placement of air-inflated BIB. At 6 months, mean TBWL ranged from 8 to 10% in GFEA group and from 10 to 12% TBWL in balloon group ($p > 0.1$).

No serious adverse events occurred in both groups. In GFEA group, intense postprocedural abdominal pain was experienced in one patient while in BIB group one patient needed early removal due to intolerance at day one.

No gastric ulceration or perforation were reported in both group.

Conclusions Gastric fundus endoscopic ablation and the BioEnterics Intragastic Balloon are both effective and with low rate of adverse events. While BIB offers more established short-term outcomes, GFEA appears promising for more durable physiological modulation through reduction of ghrelin secretion and fundic capacity; however, evidence remains preliminary.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] ASGE Bariatric Endoscopy Committee Systematic review of endoscopic therapies in obesity management. *Gastrointest Endosc.* 2023;

[2] McGowan C. et al. Endoscopic fundus mucosal ablation reduces ghrelin, stomach capacity, and hunger — first-in-human pilot study. *DDW. 2024; Abstract / MDedge report*

PYP273 The Hidden Burden of International Gastric Balloon Tourism: A Five-Year Analysis of Removal Procedures Performed at Homerton University Hospital an NHS Bariatric Centre in London, UK

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DOI 10.1055/s-0046-1821213

Aims Gastric balloons are used as a minimally invasive treatment for obesity in patients who have not achieved adequate weight loss through lifestyle modification and who may not be suitable for bariatric surgery. Randomised controlled trials and meta-analyses show that fluid-filled intragastric balloons achieve mean total body weight loss of 10–15% at 6–8 months, compared to 3–4% with lifestyle intervention alone [1, 2]. The aim of this study was to evaluate outcomes, technical success, complications, and healthcare utilisation (including financial impact) associated with gastric balloon removal in a UK NHS bariatric centre, with a particular focus on devices inserted overseas through medical tourism.

Methods A five-year retrospective review was undertaken of all gastric balloon removal procedures between October 2020 and October 2025. Data were collected from endoscopy reporting software for all patients undergoing oesophagogastroduodenoscopy (OGD) for balloon removal using a dedicated endoscopic gastric balloon removal kit. Electronic patient records provided additional information including presenting symptoms, number of OGD attempts, procedural challenges, complications, cross-sectional imaging, length of hospital stay, balloon insertion origin, and weight-loss reporting.

To estimate the financial burden to the NHS, we used publicly available NHS reference-cost benchmarks to approximate the mean healthcare cost per emergency admission for gastric balloon removal, incorporating inpatient stay, cross-sectional imaging, anaesthetic support, and therapeutic endoscopy.

Results A total of 51 OGD balloon removal attempts were performed for 48 patients. Presenting symptoms included abdominal pain, nausea, vomiting, and reflux. One patient presented with acute pancreatitis, believed to be secondary to the gastric balloon.

Most patients ($n = 46$) required a single procedure, while two required two attempts: one due to intolerance of sedation (later removed under general anaesthesia), and another in whom balloon deflation was achieved initially but retrieval required a second OGD. Successful removal was achieved in 98% of cases, with one patient awaiting removal under GA.

Technical challenges included one overinflated balloon that ruptured during extraction and one case requiring an overtube to facilitate removal of friable debris. Cross-sectional imaging was performed in 23 patients (48%), including four at external centres. Median length of hospital stay was 2 days (range 1–10). Weight-loss data were inconsistently documented: 10 patients reported weight loss, 17 reported none, and information was unavailable for 21.

Balloon insertion occurred predominantly outside the UK: 31 from Turkey, 2 from Brazil, 1 from Albania, 1 from the Czech Republic; 9 were inserted in the UK (mostly private providers), and 4 had undocumented origin. Documentation regarding planned removal was poor: 8 patients had confirmed dates, 3 had general timeframes, 3 had no documented plan, and 31 had no recorded information.

Cost analysis: Using current NHS reference-cost benchmarks [5], the estimated mean cost per emergency admission for gastric balloon removal was £3,040, with a plausible range of £1,800–£5,500 depending on duration of admission, imaging requirements, anaesthetic input, and procedural complexity. The largest contributors were inpatient stay, cross-sectional imaging, and thera-

peutic endoscopy. The total projected cost to the hospital over the 5-year period was approximately £158,100.

Conclusions This five-year review demonstrates that endoscopic gastric balloon removal can be performed safely and with high technical success. However, most balloons were inserted privately and internationally, with no follow-up and removal planning. The frequent need for admission, imaging, and specialist endoscopy creates a significant unplanned financial burden on NHS services.

With the increasing availability of effective pharmacological weight-loss therapies such as GLP-1 agonists [2, 3] and newer endoscopic bariatric techniques such as endoscopic sleeve gastropasty [4], gastric balloons may become less favoured. Establishing clearer follow-up pathways, improving patient education, and addressing risks associated with international health tourism may help reduce unnecessary NHS resource utilisation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] NHS England. National Cost Collection for the NHS [Internet]. Available from: <https://www.england.nhs.uk/costing-in-the-nhs/national-cost-collection/>
- [2] Mrad R, Al Annan K, Sayegh L, Abboud DM, Razzak FA, Kerbage A, Murad MH, Abu Dayyeh B, Brunaldi VO. Comparative effectiveness of balloons, adjustable balloons, and endoscopic sleeve gastropasty: a network meta-analysis of randomized trials. *Gastrointest Endosc* 2025; 101 (3): 527.e1–527.e19. doi:10.1016/j.gie.2024.10.039
- [3] McGowan B, Ciudin A, Baker JL et al. Framework for the pharmacological treatment of obesity and its complications from the European Association for the Study of Obesity (EASO). *Nat Med* 2025; 31: 3229–3232. doi:10.1038/s41591-025-03765-w
- [4] Lingvay I, Cohen RV, le Roux CW, Sumithran P. Obesity in adults. *Lancet*. 2024; 404 (10456): 972–987. doi:10.1016/S0140-6736(24)01210-8
- [5] Elmaleh-Sachs A, Schwartz JL, Bramante CT, Nicklas JM, Gudzone KA, Jay M. Obesity Management in Adults: A Review. *JAMA* 2023; 330 (20): 2000–2015. doi:10.1001/jama.2023.19897

PYP274 Long-term outcomes of transoral outlet reduction (TORe) for dumping syndrome and weight regain after Roux-en-Y gastric bypass

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DOI 10.1055/s-0046-1821214

Aims Weight regain and dumping syndrome are known to be associated with widening of the gastro-jejunal anastomosis after Roux-en-Y gastric bypass. In this study, we aim to evaluate the efficacy of endoscopic outlet reduction in achieving weight loss and in alleviating symptoms of dumping syndrome

Methods We conducted a retrospective analysis of a total of 45 cases of TORe after prior Roux-en-Y gastric bypass surgery.

Between May 2018 and July 2025, we performed TORe in 45 patients (8 male, 37 female; average age 48 years) at the endoscopy unit of the University Hospital in Augsburg.

All patients had previously undergone laparoscopic Roux-en-Y gastric bypass surgery before the TORe procedure. In 17 cases, a laparoscopic sleeve gastrectomy had been performed prior to the gastric bypass.

Endoscopic outlet reduction was performed using the Boston Scientific OverStitch NXT in 37 cases and the ovesco BARS system in 8 cases.

The primary endpoint of the study was the degree of weight loss after TORe, quantified as percentage total body weight loss (%TBWL). The secondary endpoint was the improvement in dumping symptoms, quantified by the reduction in the Sigstad score.

Results In 21 patients, TORe was performed for weight regain after bariatric surgery. In 12 cases, endoscopic outlet reduction was carried out due to post-operative dumping syndrome and in 17 cases, both weight regain and dumping syndrome were present.

Prior to TORe the average BMI was 37,7 kg/m² and the average Sigstad's score was 13,5.

Two patients were lost to follow-up and were therefore excluded from the statistical analysis.

A statistically significant reduction in BMI was demonstrated at the first follow-up at 3–6 months (mean BMI 37,69 kg/m²; 35,29 kg/m², $p < 0,005$). A significant reduction in BMI was also observed at the second follow-up at 12-months (mean BMI 37,69 kg/m²; 33,97 kg/m², $p < 0,005$). The %TBWL was 6,8% within 6 months and 6,7% at 12 months.

In addition, a significant decrease in the Sigstad's score was observed at the initial follow-up within the first six months (mean 13,2; 7,8, $p < 0,05$) as well as at the 12-month follow-up (mean 13,2; 6,1; $p < 0,005$).

In 38% (18 cases), re-interventions were performed due to recurrent symptom exacerbation or weight regain. In 6 cases, argon plasma coagulation (APC) was used to reduce the outlet. In 10 cases, the anastomosis was re-tightened using the OverStitch NXT. In 2 cases, the anastomosis was reduced using the ovesco BARS system.

In cases where APC therapy was used, multiple treatment sessions (min. 2, max. 6 sessions) were performed at intervals of 6–8 weeks to achieve outlet reduction.

Conclusions Endoscopic outlet reduction is an effective intervention for achieving both a reduction of dumping syndrome and clinically relevant weight loss in patients after Roux-en-Y gastric bypass surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP275 Endoscopic septotomy with argon plasma coagulation (ES-APC) for the management of refractory late and chronic post-bariatric surgery fistulas and leaks: results from a prospective series

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DOI 10.1055/s-0046-1821215

Aims Refractory late and chronic leaks or fistulas after sleeve gastrectomy (SG) and Roux-en-Y gastric bypass (RYGB) represent one of the most challenging post-bariatric complications. Endoscopic septotomy with argon plasma coagulation (ES-APC) facilitates internal drainage by incising the septum separating the perigastric cavity or fistulous tract from the gastric lumen. This study eval-

uated its efficacy and safety in a prospective cohort from a tertiary referral center.

Methods Consecutive adults with refractory late or chronic post-bariatric leaks or fistulas treated with ES-APC between September 2019 and August 2025 were included. ES-APC consisted of stepwise ablation of the septum until complete luminal communication was achieved, followed by placement of a through-the-scope metallic clip at the base to promote localized ischemia and reduce bleeding or perforation risk.

Results A total of 64 patients were treated (76.6 % female; mean age 40.8 ± 11.2 years; BMI 32.2 ± 7.7 kg/m²). Most complications occurred after SG (95.3 %). At presentation, 48.4 % had leaks, 48.4 % fistulas, and 46.9 % had an associated gastrocutaneous fistula (GCF). According to Rosenthal, 25 % were late and 75 % chronic. Patients had undergone a median of 4 prior treatments (IQR 3–5), with a median pretreatment duration of 106 days (IQR 79–138). Median number of ES-APC sessions was 1 (IQR 1–2), with a median procedural time of 15 min (IQR 12–22). Technical success was 100 %. Clinical success (CS) was achieved in 93.7 % (60/64), with only one recurrence (1.7 %) during a median follow-up of 44 months (IQR 29–67). CS was significantly lower in patients with GCF (86.7 % vs 100 %, $p = 0.04$). No major adverse events occurred.

Conclusions ES-APC is a safe, standardized, and highly effective minimally invasive therapy for refractory late and chronic post-bariatric leaks and fistulas, providing durable closure while significantly reducing the need for surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP276 Endoscopic Closure of Sleeve Gastrectomy Leaks Using the X-Tack System: A Single-Center Experience

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DOI 10.1055/s-0046-1821216

Aims Leaks following sleeve gastrectomy represent a potentially life-threatening complication associated with significant morbidity. Endoscopic management is continuously evolving, with the X-Tack system (Endoscopic Helix Tacking System, Boston Scientific) emerging as a novel through-the-scope suturing approach for defect closure. The aim of this study is to present the first Greek case series of endoscopic management of post-sleeve gastrectomy leaks using X-Tack as the sole therapeutic modality, and to evaluate its effectiveness, recovery time, and success rate [1, 2].

Methods This study included patients from a single center who underwent sleeve gastrectomy for morbid obesity and developed a postoperative leak between April 2024 and the present. The complication was managed exclusively using the X-Tack system, which deploys helical tacks connected by non-absorbable suture around the defect, allowing stable and targeted closure.

Results Five patients (3 males/2 females) with a mean age of 39.8 years (range: 19–60) were included. The mean postoperative day of endoscopic intervention was day 7 (range: 4–10). Complete (100 %) technical closure of the leak was achieved in all cases. Mean endoscopic procedure time was 31.6 minutes (20–40). Clinical improvement was observed in all patients, with gradual reintroduction of oral intake after 2 weeks, no need for re-operation, and a mean hospital stay of 18 days (15–20). Three-month follow-up, including repeat gastroscopy, confirmed sustained closure without recurrence or complications

(► Table 1).

► Table 1

Variable	Value
Number of patients	n = 5
Mean age (range), years	39.8 (19–60)
Sex (male)	n = 3
Mean postoperative day of intervention	Day 7 (4–10)
Mean endoscopy time, minutes	31.6 (20–40)
Technical success	100 %
Clinical success	100 %
Mean hospital stay, days	18 (15–20)
Complications / Recurrence	0 %

Conclusions The X-Tack system appears to be a safe, effective, and minimally invasive option for the endoscopic management of leaks after sleeve gastrectomy. The encouraging outcomes of this case series support its integration into routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] McCarty & Jirapinyo Endoscopic Closure, Tools and Techniques, Gastrointest Endoscopy Clin N Am. 2022;
- [2] Canakis A et al. Efficacy, Feasibility, and Safety of the X-Tack Endoscopic Helix Tacking System A multicenter Experience. J Clin Gastroenterol. 2024;

PYP277 Endoscopic Sleeve Gastroplasty in Turkey: Early Experience and Clinical Outcomes

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DOI 10.1055/s-0046-1821217

Aims Endoscopic sleeve gastroplasty (ESG) is a minimally invasive bariatric procedure that utilizes full-thickness endoscopic suturing to achieve tubular reconfiguration and substantial volume reduction of the gastric body. ESG has been established as a safe, durable, and effective management option for obesity. This study aims to present our single-center experience from Türkiye, focusing on changes in anthropometric measurements and clinical outcomes following ESG in a real-world clinical setting [1].

Methods We performed a retrospective analysis of prospectively collected medical records of consecutive patients who underwent ESG between October 2022 and August 2025. Detailed procedure-related data, including suture counts and technique, were recorded. Patient data—comprising demographics, anthropometrics, and comorbidity status—were systematically collected at baseline and during every follow-up visit. The follow-up protocol involved intensive, structured monitoring via online or face-to-face appointments: weekly for the first two months, followed by bi-weekly visits for a total one-year program. Crucially, interviews were complemented by personalized nutritional training designed to ensure sustained behavioral modification. Instead of a restrictive standard diet plan, completely individualized nutritional programs were implemented.

Results A total of 29 patients were included in the analysis [Females: 82.8 %; Age: 39.1 ± 8 years; Baseline Weight: 101 ± 16.8 kg; Baseline Body Mass Index (BMI): 36.6 ± 5.4 kg/m²]. All patients reported at least one transient post-procedural symptom, such as minimal abdominal pain, abdominal discomfort, nausea, or vomiting. Only one patient required an overnight hospital stay due to persistent vomiting and pain; the remaining twenty-eight patients were discharged six hours post-ESG. No hospital readmissions or re-hospitalizations

occurred after initial discharge. Furthermore, no instances of fluid, electrolyte, or nutritional insufficiency were observed throughout the follow-up period, underscoring the procedure's high safety profile. Follow-up data completeness was 100% at 1 month, 89.7% (n = 26) at 3 months, 75.9% (n = 22) at 6 months, and 31.0% (n = 9) at 12 months. Procedure-related details showed that the median number of sutures utilized was 5 (range: 3–6), with 22 patients specifically receiving 5 sutures. Regarding the suture pattern, U-pattern was employed in 17 cases, while the interlocking ESG technique was used in 12 cases. Body Mass Index (BMI) demonstrated a significant and continuous decrease post-procedure, starting from a baseline of 36.6 ± 5.4 kg/m² and dropping to 32.9 ± 4.9 kg/m² at 1 month, 30.6 ± 4.4 kg/m² at 3 months, 29.4 ± 3.9 kg/m² at 6 months, and finally reaching 28.6 ± 5.3 kg/m² at 12 months. Correspondingly, the percentage of Total Body Weight Loss (%TBWL) progressed steadily, averaging 9.8 ± 2.5 % at 1 month, 16.0 ± 3.8 % at 3 months, 16.6 ± 6.4 % at 6 months, and stabilizing at 16.8 ± 6.6 % by the 12-month mark. Furthermore, the percentage of Excess Weight Loss (%EWL) showed excellent outcomes, advancing from 29.9 ± 9.0 % at 1 month to 48.9 ± 14.9 % at 3 months, 53.3 ± 23.7 % at 6 months, and culminating in 60.3 ± 31.7 % at 12 months. The percentage of patients achieving key weight loss thresholds remained high across follow-up: At the end of the first month, 100 % of patients achieved the ≥ 5 % TBWL target, with 45 % reaching ≥ 10 % TBWL and 6.9 % reaching ≥ 15 % TBWL. By the third month, 100 % maintained the ≥ 5 % TBWL achievement, while the rates for ≥ 10 % and ≥ 15 % TBWL increased significantly to 96 % and 62 %, respectively. At six months, 96 % of patients maintained ≥ 5 % TBWL, with 82 % and 68 % achieving ≥ 10 % and ≥ 15 % weight loss, respectively. Finally, at the twelve-month follow-up, 100 % of the available patients had sustained ≥ 5 % TBWL, with 78 % reaching ≥ 10 % and 67 % achieving ≥ 15 % weight loss.

Conclusions Our early experience from Türkiye demonstrates that ESG is a procedure with a high safety profile and results in significant and clinically meaningful improvements in body composition and weight loss up to 12 months post-procedure. The integration of a highly individualized nutritional support program may contribute to these favorable outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Jirapinyo P, Hadeji A, Thompson CC, Patai ÁV, Pannala R, Goelder SK, Kushnir V, Barthet M, Apovian CM, Boskoski I, Chapman CG, Davidson P, Donatelli G, Kumbhari V, Hayee B, Esker J, Hucl T, Pryor AD, Maselli R, Schulman AR, Pattou F, Zeller-Sagi S, Bain PA, Durieux V, Triantafyllou K, Thosani N, Huberty V, Sullivan S. American Society for Gastrointestinal Endoscopy-European Society of Gastrointestinal Endoscopy guideline on primary endoscopic bariatric and metabolic therapies for adults with obesity. *Endoscopy*. 2024; 56 (6): 437–456. doi:10.1055/a-2292-2494 Epub 2024 Apr 19 PMID: 38641332

PYP278V Gastric Mucosal Ablation of the fundus using a new advanced hybrid device combined with Endoscopic Sleeve Gastroplasty for obesity

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DOI 10.1055/s-0046-1821218

Abstract Text

Endoscopic bariatric therapies offer minimally invasive options for patients with obesity who are not candidates for surgery. We report a novel combined approach integrating Endoscopic Sleeve Gastroplasty (ESG) with Gastric Mucosal Ablation (GMA) of the fundus using the MOVIVA probe. The device allows sub-

mucosal injection to protect deeper layers and controlled mucosal ablation via Argon Plasma Coagulation, aiming to reduce ghrelin-producing cells. A 54-year-old man (BMI 44 kg/m²) underwent MOVIVA-assisted fundic ablation followed by ESG with the OverStitch NXT system. The procedure was uneventful, and oral intake resumed the next day. At one month, the patient reported early satiety and achieved 16.5 % total body weight loss. This combined strategy may enhance metabolic outcomes by coupling gastric restriction with hormonal modulation.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ce54bf88-34e5-42ee-976a-b44e7222bf5b/Uploads/19978_IL_mio%20filmato%2019.mp4

Conflicts of Interest V. Bove is a consultant for Boston Scientific and Endo Tools Therapeutics S.A. C. Spada is a consultant for Medtronic and AnX Robotics, and has received speaker's fees from Olympus and Pentax. I. Boskoski is a consultant for Boston Scientific, Nitinotes, Pentax, Cook Medical, Microtech, ERBE, Siemens, Myka labs, and Endo Tools Therapeutics S.A., gives sponsored lectures for Boston Scientific, Cook Medical, and Microtech, is the recipient of research grants from Apollo Endosurgery, Endo Tool Therapeutics, and ERBE, and is on the scientific advisory boards of Nitinotes and Myka labs.

PYP279 Automatic endoscopic gastroplasty for the treatment of obesity and associated comorbidities: an analysis from the Italian site of a prospective clinical trial

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DOI 10.1055/s-0046-1821219

Aims EndoZip is a fully automated endoscopic suturing device designed to reduce gastric volume for obesity treatment, decreasing operator dependence during endoscopic gastroplasty. A recent multicenter clinical trial demonstrated that the device is easy to use, safe, and effective for treating class I and II obesity. This analysis focuses on outcomes from the Italian site, evaluating the efficacy and safety of EndoZip system in improving obesity-related comorbidities.

Methods This prospective, single-arm, open-label clinical trial enrolled patients with BMI 30–42g/m² and hypertension and/or type 2 diabetes mellitus (T2DM) who failed non-invasive weight-loss therapies and were suitable candidates for bariatric endoscopy. Endpoints include percentage total body weight loss (%TBWL), changes in T2DM (HbA1c and/or HOMA-IR index), and changes in hypertension (blood pressure reduction by 24-hours ambulatory blood pressure monitor (ABPM) and/or reduction of antihypertensive medication/dosage) at 12 months post-procedure. The incidence of adverse events, changes in Fibroscan parameters (CAP score and fibrosis) and Weight-related Quality of Life (IWQOL) Questionnaire scores.

Results Twenty patients (80 % female, mean age 51.9 ± 9.8 years, mean BMI 34.8 ± 3.2 kg/m²) were enrolled at a single tertiary center. Comorbidity distribution included five patients (25 %) with both hypertension and T2DM, eleven (55 %) with hypertension alone, and four (20 %) with T2DM alone. The mean adjusted %TBWL at 12 months was 11.4 % (95 % CI: 9.1 %–13.6 %). Among patients with hypertension, 53.8 % showed improvement, 30.8 % showed no

change, and 15.4% worsened. In all worsening cases, the antihypertensive medication has been discontinued. Among patients with T2DM, 62.5% showed improvement, 25.1% showed no change, and 12.5% worsened. Fibroscan demonstrated a significant improvement in steatosis (CAP score: 314 ± 47.9 at baseline vs. 263 ± 54.6 at 12 months, $p = 0.0048$), while fibrosis changes from baseline were not statistically significant (5.5 ± 1.7 kPa vs. 5 ± 1 kPa, $p = 0.1510$). The mean IWQOL score at 12 months increased by more than 12 points from baseline (14.2 points ± 11.6), indicating a meaningful improvement in patients' quality of life. One severe adverse event occurred—bleeding that was effectively managed by endoscopic hemostasis.

Conclusions EndoZip demonstrates effective weight-loss outcomes and meaningful improvement in obesity-related comorbidities at 12 months. The procedure also leads to significant improvement in patient quality of life. The safety profile is consistent with expectations for endoscopic gastroplasty, supporting EndoZip as a safe and effective minimally invasive option for patients with class I–II obesity.

Conflicts of Interest Ivo Boskoski is consultant for Nitinotes.

Biliary strictures and cholangiocarcinoma: From diagnosis to drainage

15/05/2026, 17:30–18:30

Emerald 5

PYP280 Diagnostic Yield of ERCP Brush Cytology and Endo-biliary Biopsy in Malignant Biliary Strictures: Time to Standardise Practice

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DOI 10.1055/s-0046-1821220

Aims The presence of a biliary stricture is a medical challenge. ERCP brush cytology (BR) and endo-biliary forceps biopsies (BX) are commonly used tissue sampling techniques. BR is favoured for its simplicity; however, its diagnostic sensitivity has historically been low. Its utility is limited by poor specimen quality and equivocal results are common [1]. BX, while technically more demanding, offers superior histological detail and higher diagnostic yield [2]. Given the implications of missed or delayed diagnoses, it is crucial to establish a standardised, evidence-based approach to tissue sampling during ERCP.

We aimed to compare the diagnostic utility of ERCP brushings versus endo-biliary biopsies in patients with confirmed malignant biliary obstruction.

Methods We retrospectively reviewed all patients who underwent ERCP for investigation of biliary strictures during a three-year period (08/2021–07/2024) in our department (a referral centre). We acquired all relevant data (demographics, histological diagnosis, method of diagnosis, dates) through patient records.

Diagnostic yield was defined as a positive cytology or histology confirming malignancy. Results were analysed in three categories (Negative, Positive, Suspicious). Agreement analysis (kappa values) was performed in all patients who underwent both BR and BX.

Results Total number of patients investigated for biliary stricture was 208. A confirmed diagnosis of malignancy was established in 110 patients (53.4%) through ERCP brushings (BR), ERCP biopsies (BX), or further investigations. BR was performed in 110 patients, with the addition of BX in 55/110. BR was positive in 33/110 (30%) and negative in 77/110 (70%) (including suspicious 28/110; 25.9%), which required another modality to confirm diagnosis.

BX were positive in 34/55 (61.8%) and negative in 21/55 (38.2%) (including suspicious 8/55; 14.5%). All suspicious cases for BX and BR were ultimately proven malignant. There were no cases where BR was positive but BX was negative. Among the 55 patients who had both tests, BR was positive in 13/55 (23.7%) compared with 34/55 (61.8%) for BX. No complications were noted as a direct result of BX in addition to BR.

Concordance analysis: Overall agreement between BR and BX was low (43.6%), with only fair concordance (Cohen's kappa 0.20–0.21). Even when results were merged, agreement improved only modestly (58.2%). A key finding was that BR frequently missed malignancy: 29% of patients with negative brushings had positive biopsies, and 36.4% had positive or suspicious biopsy results, demonstrating the limited reliability of brushings as a standalone test.

Conclusions The data suggests BR cytology has limited sensitivity as a standalone diagnostic tool in malignant biliary strictures, and biliary biopsies have almost 3 times the diagnostic yield. This is significant as delayed diagnosis often leads to delay in definitive treatment and delays referral for subsequent diagnostic modalities pending results. The low kappa values (0.20–0.21) indicate only fair agreement between BR and BX, reinforcing that the two methods do not perform similarly and that BR frequently under-detects malignancy compared with BX.

In this cohort of patients, brushings provided low diagnostic yield whether performed alone or with BX (30% and 23.7% in respective cohorts). Endo-biliary BX have a higher diagnostic yield (61.8%). The data also suggests that brushings add little incremental value and could be omitted unless biopsies are technically challenging. The poor concordance between the two modalities (Cohen's kappa 0.20–0.21) further demonstrates that brushings frequently miss malignancy captured by biopsies. Biopsy should be considered the standard of practice, with brushings reserved as an adjunctive option rather than a primary diagnostic tool.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A, Crinò SF, Gkolfakis P, Spadaccini M, Arvanitakis M, Beyna T, Bronswijk M, Dhar J, Ellrichmann M, Gincul R, Hritz I, Kylänpää L, Martinez-Moreno B, Pezzullo M, Rimbaş M, Samanta J, van Wanrooij RLJ, Webster G, Triantafyllou K. Diagnostic work-up of bile duct strictures: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2025; 57 (2): 166–185. doi:10.1055/a-2481-7048 Epub 2024 Dec 17. Erratum in: *Endoscopy*. 2025 Oct;57(10):C17
- [2] Avadhani V, Hacihasanoglu E, Memis B, Pehlivanoglu B, Hanley KZ, Krishnamurti U, Krasinskas AM, Osunkoya AO, Daniels LM, Freedman AA, Goodman M, Adsay V, Reid MD. Cytologic predictors of malignancy in bile duct brushings: a multi-reviewer analysis of 60 cases. *Mod Pathol* 2017; 30 (9): 1273–1286

PYP281 Diagnostic yield of cholangioscopy for indeterminate biliary strictures: a retrospective analysis

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DOI 10.1055/s-0046-1821221

Aims Indeterminate biliary strictures (IBS) remain diagnostically challenging, as imaging, ERCP-based tissue sampling, and EUS-guided tissue acquisition (TA) often fail to differentiate malignant from benign lesions. Digital single-operator cholangioscopy (D-SOC) improves accuracy through direct visualization and targeted biopsies, although false-negative histology persists. This study evaluated whether biopsy orientation and cholangioscopic visual assessment using the Monaco classification improve diagnostic performance.

Methods This retrospective single-center study included all consecutive patients undergoing D-SOC with direct biopsies for IBS at Infermi Hospital (Rimini, Italy) from 2017 to 2025. Two cohorts were analyzed: non-oriented biopsies (2017–2021) and oriented biopsies (2022–2025). Malignancy was defined

according to a clinico-pathological standard (surgical histology or long-term follow-up). Primary outcomes were diagnostic yield, sensitivity, and specificity for malignancy. The Monaco classification was considered positive when ≥ 3 criteria were present. Diagnostic accuracy was further assessed using combined parallel (Monaco-positive or malignant histology) and serial (Monaco-positive and malignant histology) strategies.

Results A total of 103 patients were included (non-oriented 64.1%; oriented 35.9%). Overall biopsy diagnostic yield for malignancy was 62.1% (95% CI: 52.0–71.5), with sensitivity 57.1% (95% CI: 44.0–69.5) and specificity 100% (95% CI: 91.0–100). Diagnostic yield was comparable between groups: 61.5% (95% CI: 48.6–73.3) for non-oriented and 63.2% (95% CI: 46.0–78.2) for oriented biopsies. Sensitivity was 61.9% (95% CI: 45.6–76.4) and 47.6% (95% CI: 25.7–70.2), respectively; specificity remained 100% in both. Cholangioscopic visual assessment alone showed higher sensitivity (84.4%, 95% CI: 72.6–92.7) but lower specificity (65.9%, 95% CI: 50.1–79.5). Combined analysis improved diagnostic performance: the parallel model significantly increased sensitivity to 82.5% (95% CI: 70.9–90.9; $p < 0.05$ vs biopsy alone), while the serial model maintained specificity at 100% (95% CI: 91.2–100), equivalent to histology.

Conclusions D-SOC remains a valuable tool in evaluating indeterminate biliary strictures. Orientation of biopsy samples does not appear to provide an incremental diagnostic yield and sensitivity. Integrating visual cholangioscopic assessment through the Monaco classification substantially enhances the ability to identify malignant lesions, by reducing false negative results, while maintaining high specificity when used in a serial combination with biopsy.

Further evidence is needed to better assess biopsy-handling techniques, optimize tissue acquisition strategies, and integrate artificial intelligence in the diagnostic pathway to increase the diagnostic performance for indeterminate biliary strictures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP282 EUS-Guided Tissue Acquisition Does Not Increase Peritoneal Carcinomatosis in Hilar Cholangiocarcinoma: A Retrospective Cohort Study

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Aims To evaluate whether endoscopic ultrasound-guided tissue acquisition (EUS-TA) is associated with an increased risk of peritoneal carcinomatosis in patients with hilar cholangiocarcinoma, and to assess its impact on time-to-peritoneal dissemination and overall survival. A secondary aim was to analyse whether outcomes differed between operated and non-operated patients, and to compare results according to the type of needle used (FNA vs FNB).

Methods This retrospective cohort study included 100 patients with hilar cholangiocarcinoma. Eight patients with peritoneal carcinomatosis at baseline were excluded from the analysis of dissemination risk. Clinical, radiological, and procedural variables were collected, including use of EUS-TA, surgical management, and needle type. Primary endpoints were: [1] development of peritoneal carcinomatosis, [2] time to peritoneal dissemination, and [3] overall survival. Analyses were performed using Fisher's exact test for categorical variables and Kaplan–Meier curves with log-rank testing for time-to-event outcomes. Subgroup analyses were conducted for operated vs non-operated patients and for FNA vs FNB.

Results Among the 92 patients without baseline peritoneal disease, peritoneal carcinomatosis occurred in 6/32 EUS-TA patients (11.7%) and 7/60 without EUS-TA (11.7%), with no significant difference ($p = 0.36$). Median time to peritoneal dissemination was similar between groups: 13.5 months (IQR 6.75–18.5) for EUS-TA vs 17 months (IQR 14–26) for non-EUS (log-rank $p = 0.165$). Median overall survival was 301 days (IQR 95–566) with EUS-TA and 151 days (IQR 51.5–474) without EUS-TA (log-rank $p = 0.60$). In the operated subgroup, dissemination occurred in 2/11 (18.2%) with EUS-TA vs 5/30 (16.7%) without EUS-TA ($p = 0.20$). In non-operated patients, dissemination rates were 19.0% (4/21) with EUS-TA and 6.7% (2/30)

without EUS-TA ($p = 1.00$). Time-to-dissemination and overall survival curves showed no significant differences within either subgroup. In the needle-type analysis, dissemination rates were similar between FNA (4/22, 18.2%) and FNB (2/10, 20.0%) ($p = 1.00$), with no differences in survival outcomes (all log-rank $p > 0.4$).

Conclusions EUS-guided tissue acquisition does not increase the risk of peritoneal carcinomatosis in patients with hilar cholangiocarcinoma, nor does it affect time-to-dissemination or overall survival. These findings remained consistent across operated and non-operated subgroups, suggesting that surgical status does not modify the oncological impact of EUS-TA. Additionally, the needle type (FNA vs FNB) did not influence dissemination or survival, supporting the safety of both sampling techniques [4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A et al. Endoscopic ultrasound-guided tissue sampling: ESGE Technical and Technology Review. *Endoscopy*. 2025;
- [2] Iglesias-García J, Larghi A, Petrone MC et al. EUS-guided tissue acquisition: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2021; 53: 989–1006
- [3] El Chafic AH, DeWitt J, LeBlanc J et al. Impact of preoperative endoscopic ultrasound-guided fine needle aspiration on postoperative recurrence and survival in cholangiocarcinoma patients. *Endoscopy*. 2013; 45: 883–889
- [4] Heimbach JK, Sanchez W, Rosen CB, Gores GJ. Trans-peritoneal fine needle aspiration biopsy of hilar cholangiocarcinoma is associated with disease dissemination. *HPB (Oxford)* 2011; 13: 356–360

PYP283 Post-TARE Biliary Strictures in Hepatocellular Carcinoma: Endoscopic Characterization and Histological Proof of Direct Radiation-Induced Injury

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DOI 10.1055/s-0046-1821223

Aims Transarterial radioembolization (TARE) with Yttrium-90 microspheres is an established locoregional treatment for hepatocellular carcinoma, but radiation-induced biliary complications remain underreported. This study aimed to determine the prevalence, temporal patterns, and predictors of TARE-related cholestasis, and to provide histological proof of our hypothesis that TARE can cause cholestasis through direct radiation injury to the bile ducts.

Methods We retrospectively analyzed all patients who underwent TARE at a tertiary care center between January 2020 and December 2024. Demographics, tumor type, procedural details (unilobar, bilobar, segmental administration), applied radiation dose, follow-up imaging, and endoscopic findings were reviewed. TARE-related cholestasis was defined as new-onset cholestasis without preexisting or post-transplant occurrence. Risk factors were evaluated using logistic regression and Cox proportional hazards models. Patients who developed biliary strictures underwent ERCP with stent placement and/or balloon dilatation as indicated. In patients with unclear strictures post-TARE, cholangioscopy with targeted biopsies was performed during ERCP to histologically characterize radiation-associated tissue changes.

Results Among 258 patients (29.8% female; median age 67 $\pm$ 12.0 years) undergoing 331 TARE procedures, 19 underwent subsequent ERCP. After excluding alternative causes ($n = 7$) and parenchymal liver damage ($n = 1$), 11 patients had confirmed clinically significant TARE-related biliary strictures. The median interval from TARE to stricture was 19.4 months (applied median activity 2.28 GBq, median dose 121.5 Gy). On cross-sectional imaging, stricture patterns included lobar (52.7%), central (27.3%), and segmental (20.0%) distributions, all localized to irradiated liver segments. Overall, radiologic cholestasis developed in 55 of 295 evaluable procedures (18.6%). Independent predictors of imaging-detected

cholestasis included increasing age (HR 1.04/year, $p=0.003$), cholangiocarcinoma versus HCC (HR 5.66, $p<0.001$), and bilobar treatment (HR 2.36, $p=0.036$). Median imaging-based cholestasis-free survival was 829 days. All 11 patients with clinically significant strictures underwent endoscopic stent placement; 6 received additional balloon dilatation. Notably, 10 of 11 patients showed stable disease or tumor response at ERCP, indicating stricture development independent of progression. Critically, cholangioscopy-guided biopsies demonstrated glass microspheres within the stricture tissue, providing direct histological proof that TARE causes cholestasis through radiation-induced bile duct injury.

Conclusions Radiologically detectable cholestasis occurs in 18.6% of TARE procedures as a delayed complication. The histological demonstration of glass microspheres within biliary strictures confirms our hypothesis of direct radiation-induced bile duct injury. ERCP with stenting remains the primary therapeutic approach for clinically significant strictures. Cholangioscopy with targeted biopsy should be considered for definitive diagnosis when distinguishing radiation-induced strictures from malignant obstruction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP284 Diagnostic Performance and Safety of EUS-Guided Sampling and Cholangioscopy-Directed Biopsies in Malignant Hilar Biliary Strictures: A Retrospective Single-Center Analysis

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DOI 10.1055/s-0046-1821224

Aims The diagnosis of perihilar cholangiocarcinoma (CCA) remains challenging, with conventional cytology, brushing, transpapillary biopsies and imaging providing limited sensitivity. [1] Endoscopic ultrasound (EUS)-guided fine-needle biopsy (FNB) is typically performed in the presence of a mass or suspicious portal lymph nodes. [2] In contrast, cholangioscopy-directed biopsies are increasingly used for evaluating indeterminate biliary strictures. [3] Comparative real-world data on their diagnostic yield are scarce. We aimed to assess the diagnostic performance, safety, and clinical impact of these modalities.

Methods We retrospectively analyzed 117 consecutive patients with hilar strictures evaluated for suspected biliary malignancy between 01.2020-09.2025. The final diagnosis was based on surgical histology when available, or on a multidisciplinary consensus with radiological and clinical follow-up. Sensitivity analysis was restricted to the 96 patients with confirmed malignancy. A test was considered positive when histology confirmed malignancy (EUS-FNB or cholangioscopy guided biopsy) or when visual features were interpreted as malignant. True positives (TP) were malignant cases with diagnostic confirmation, and false negatives (FN) were malignant cases with negative or non-diagnostic results. Combined sensitivity was defined as positivity in at least one modality in patients who underwent both procedures.

Results Of 117 patients, 96 (82%) had malignancy. Median age was 66 years (IQR 58–73), 53% were male, ECOG 0–1 in 94%, and the comorbidity burden was moderate. Malignant lesions were hilar in 78% and Bismuth I in 20%, with Bismuth–Corlette III–IV predominating. EUS-FNB was performed in 40 of these cases, yielding a sensitivity of 65% (26/40; 95% CI: 46.3–76.3). Cholangioscopy-directed biopsies were performed in 72 malignant cases, with a sensitivity of 72.2% (52/72; 95% CI: 60.5–82.9). Visual impression during cholangioscopy suggested malignancy in 61 of 72 cases, corresponding to a sensitivity of 84.7% (95% CI: 74.3–92.3). In the subgroup of 26 malignant patients who underwent both procedures, the combined sensitivity increased to 96.2% (25/26; 95% CI: 81.1–99.9). Adverse events were more frequent after cholangioscopy (cholangitis 13.5%, pancreatitis 3.4%, bleeding 2.2%) than EUS (pancreatitis 4.5%); all were mild and managed conservatively.

Conclusions EUS-FNB and cholangioscopy each demonstrated moderate sensitivity, with visual cholangioscopy yielding the highest single-modality performance. Although cholangioscopy carried more complications, the combination of EUS and cholangioscopy achieved near-complete sensitivity and remained safe, underscoring their complementary role in the diagnostic algorithm of suspected CCA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ayoub F, Othman MO. Guidelines on cholangioscopy for indeterminate biliary strictures: one step closer to consensus. *Hepatobiliary Surg Nutr.* 2023; 12 (5): 776–779. doi:10.21037/hbsn-23-369 Epub 2023 Sep 18 PMID: 37886201 PMID: PMC10598307
- [2] Orzan RI, Pojoga C, Agoston R, Seicean R, Seicean A. Endoscopic Ultrasound in the Diagnosis of Extrahepatic Cholangiocarcinoma: What Do We Know in 2023? *Diagnostics (Basel).* 2023; 13 (6): 1023. doi:10.3390/diagnostics13061023 PMID: 36980331 PMID: PMC10047764
- [3] Milluzzo SM, Landi R, Perri V, Familiari P, Boškoski I, Pafundi PC, Farina A, Ricci R, Spada C, Costamagna G, Tringali A. Diagnostic accuracy and interobserver agreement of cholangioscopy for indeterminate biliary strictures: A single-center experience. *Dig Liver Dis.* 2024; 56 (5): 847–852. doi:10.1016/j.dld.2023.11.017 Epub 2023 Nov 27 PMID: 38016895

PYP285 Bilateral versus tri-segmental endoscopic biliary drainage with plastic stents in the management of unresectable high-grade malignant hilar obstruction: A propensity-cohort matched analysis

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Aims Although bilateral endoscopic drainage is regarded as essential for achieving adequate liver volume drainage in unresectable high-grade malignant hilar biliary obstruction (MHO), limited evidence exists regarding the comparative outcomes of bilateral versus tri-segmental drainage. We aimed to evaluate and compare the clinical outcomes of bilateral and tri-segmental biliary drainage in patients with unresectable MHO.

Methods After propensity score matching, 52 patients with unresectable MHO of Bismuth type IIIa or IV were included. Patients underwent plastic stent placement for drainage of either two hepatic sectors (bilateral group; left plus right anterior or right posterior, $n=26$) or all three hepatic sectors (tri-segmental group, $n=26$). The primary outcome was clinical success, and secondary outcomes were procedure time, adverse events (AEs), and time to recurrent biliary obstruction (RBO).

Results The clinical success rate was 76.9% (20/26) in the bilateral group and 84.6% (22/26) in the tri-segmental group ($P=0.727$). The tri-segmental group demonstrated a significantly longer median time to RBO (44 days vs. 67 days, $P=0.003$), whereas the procedure time was significantly shorter in the bilateral group (28.2 ± 8.3 minutes vs. 35.6 ± 11.3 minutes, $P=0.017$). Overall AE rates were comparable between the two groups, and no severe AEs were observed (3.8% vs. 7.7%, $P=1.000$).

Conclusions Our findings suggest that, without undue concern for procedure-related AEs from prolonged duration, attempting to drain all technically feasible hepatic sectors could confer clinical benefit in the management of unresectable high-grade MHO.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP286 Accuracy of endoscopic ultrasound with tissue acquisition (EUS-TA) in the differential diagnosis of biliary strictures: results from a tertiary center with classic- and AI-model application

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DOI 10.1055/s-0046-1821226

Aims Biliary strictures present a major diagnostic challenge as benign and malignant conditions often exhibit similar clinical and imaging findings. In cases of indeterminate strictures, obtaining a tissue sample is crucial. Notably, up to 25 % of patients undergoing surgery for suspected cholangiocarcinoma (CCA) are ultimately diagnosed with benign disease, underscoring the difficulty of preoperative diagnosis. The low cellularity and desmoplastic nature of CCA further complicate cytological and histological assessments. Current ESGE guidelines recommend ERCP with tissue acquisition (TA) as the preferred diagnostic approach for perihilar strictures requiring drainage. This study aims to evaluate the diagnostic accuracy of EUS-TA for both distal and perihilar biliary strictures in a high-volume bilio-pancreatic endoscopy referral center.

Methods A retrospective analysis was conducted on a prospectively maintained database of patients who underwent EUS-TA at San Raffaele Hospital between April 2021 and June 2024 due to obstructive jaundice or biliary strictures identified via CT or MRI. Patients with preexisting pancreatic lesions, extrinsic biliary compression, or choledocholithiasis without biliary abnormalities were excluded. EUS-guided tissue sampling was performed using 25–22-gauge FNA or FNB needles with Rapid On-Site Evaluation (ROSE) by cytotechnicians. The final diagnosis was established based on surgical pathology, imaging, or a minimum follow-up of six months. Sensitivity, specificity, and likelihood ratios (LLR + and LLR –) were calculated using 2 × 2 contingency tables, with 95 % confidence intervals estimated via the Clopper-Pearson method. Additionally, a Random Forest model was developed using an 80:20 stratified split of the dataset, preserving class distribution. The model achieved an accuracy of 83.33 % on the test set (► **Table 1**).

Results Of the 249 patients screened, 86 met the inclusion criteria. Among them, 47 (54.7 %) had perihilar strictures, and 39 (45.3 %) distal ones. Strictures presented as lesions in 65 % of cases and as wall thickening in 35 %. Malignancy was diagnosed in 76.7 % of cases, while 23.2 % were benign. Adequate tissue sampling was achieved in 94 % of cases, with five false-negative results. EUS-TA demonstrated an overall sensitivity, specificity, and accuracy of 86.4 %, 95 %, and 88.4 %, respectively. In perihilar strictures, sensitivity was 85.7 %, specificity 100 %, and accuracy 87.2 %, with an NPV of 45.4 % and negative LR of 0.14. Combining EUS-TA with ERCP-TA improved sensitivity to 89 % and accuracy to 92 %. The Random Forest model showed high diagnostic performance, with a precision of 0.88, recall of 0.94, and an F1-score of 0.91 for malignant lesions. Multivariate analysis identified male sex, jaundice, mass-like presentation, and vascular invasion as independent predictors of malignancy. No clinical or EUS factors were significantly associated with diagnostic accuracy prediction.

Conclusions This study confirms the strong diagnostic performance of EUS-TA for biliary strictures, including perihilar cases. The combination of EUS-TA and ERCP-TA significantly improves diagnostic yield, particularly for perihilar strictures. These findings support the use of EUS-TA as a first-line diagnostic approach in high-expertise centers, with a same-session EUS-ERCP strategy optimizing procedural efficiency and reducing risks.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP287 Diagnostic Performance Of Endoscopic Ultrasound-Guided Fine Needle Biopsy In Malignant Lesions Of The Hepatic Hilum: A Multicentre, Retrospective Cohort Analysis

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DOI 10.1055/s-0046-1821227

Aims Hilar malignant strictures are challenging to diagnose. Current guidelines recommend ERCP-based tissue acquisition as the first-line modality for perihilar strictures requiring biliary drainage, yet its sensitivity remains suboptimal and often necessitates multiple procedures. Endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) can provide direct access to perihilar lesions and regional lymph nodes. It can obtain high-quality histological cores, but its use has historically been limited by concerns about tumour seeding, based on small, outdated studies. With modern FNB needle technology, diagnostic performance has substantially improved, yet contemporary evidence specifically addressing hilar lesions remains limited. To address this gap, we conducted a multicentre study to assess the diagnostic performance and safety profile of EUS-FNB as a first-line tool in the diagnostic approach to suspected hepatic hilum malignancies [1–3].

Methods A retrospective analysis was performed on all consecutive patients undergoing EUS-FNB as a first-line tool for perihilar strictures and lymph nodes from October 2014 to April 2025 at four tertiary centres. All patients were monitored after EUS-FNB through clinical and radiological follow-up for ≥ 6 months or until death. Final diagnosis was based on surgical pathology or a composite reference standard (cytology/histology and clinical–radiological follow-up). Histological adequacy was documented for each biopsy, and descriptive statistical analyses of baseline characteristics, procedural variables, and lesion features were conducted. Diagnostic performance was assessed using intention-to-diagnose (ITD), per-protocol (PP), and full-pathway analyses, including second-look EUS-FNB when performed. Sensitivity, specificity, positive and negative predictive values (PPV, NPV), and accuracy were calculated

► **Table 1**

	Se (95 %CI)	Sp (95 %CI)	PPV (95 %CI)	NPV (95 %CI)	LR +	LR-	Accuracy
Any Location (n = 86)	86.4 % (76.1-92.7)	95 % (76.4-99.1)	98.3 % (90.9-99.7)	67.9 % (49.3-82.1)	17.2	0.14	88.4 %
Perihilar strictures (n = 47)	85.7 % (72.2-93.3)	100 % (56.6-100)	100 % (90.4-100)	45.5 % (21.3-72)	NA	0.14	87.2 %
Distal strictures (n = 39)	87.5 % (69.0-95.7)	93.3 % (70.2-98.8)	95.5 % (78.2-99.2)	82.4 % (59.0-93.8)	13.1	0.13	89.7 %

with 95 % confidence intervals. Diagnostic yield, incremental yield after repeat biopsy, and number-needed-to-repeat (NNT-repeat) were also determined. Adverse events were recorded according to ASGE lexicon criteria (► Table 1).

► Table 1

Variable	Patients (n = 144)
Biopsy needle 22G	126 (87.5 %)
Passes ≥ 3	95 (66.0 %)
Repeated EUS-FNB	27 (18.8 %)
Cholangitis	4 (2.8 %)
Pancreatitis	2 (1.4 %)
Bleeding	2 (1.4 %)
Malignant lesions	121 (84.0 %)

Results A total of 144 patients were included (mean age 69.1 ± 10.8 years; 62.3 % males). Mean lesion size was 29.1 ± 13.6 mm. A biliary stent was present at the time of the first EUS in 35 patients (24.3 %). Histological adequacy at first EUS-FNB was achieved in 136/144 patients (94.4 %), while 8 samples (5.6 %) were inadequate. The final diagnosis was malignant in 121 (84.0 %) patients, with cholangiocarcinoma being the most common cause. In the ITD analysis, first-attempt EUS-FNB showed a sensitivity of 81.8 % (95 % CI 74.0–87.6), specificity of 100 % (95 % CI 82.2–100.0), and overall accuracy of 84.7 % (95 % CI 77.8–89.6). Excluding inadequate samples, the per-protocol sensitivity rose to 86.0 % (95 % CI 78.5–91.1), with an accuracy of 88.2 % (95 % CI 82.1–92.6). A second EUS-FNB was performed in 27 patients following an initial non-diagnostic or negative result, achieving 100 % histological adequacy. Four additional true positives were identified, resulting in an incremental yield of 14.8 % and a NNT-repeat of 6.75. When repeat sampling was included, the complete diagnostic pathway showed a sensitivity of 85.1 % (95 % CI 77.7–90.4) and an accuracy of 87.5 % (95 % CI 81.4–91.8). Adverse events occurred in 7 patients (4.9 %), none of which were severe or procedure-related, and there was no procedure-related mortality. The presence of a biliary stent significantly reduced diagnostic yield ($p = 0.03$), whereas lesion size, needle type and number of passes had no impact.

Conclusions EUS-FNB provides high diagnostic accuracy and a favourable safety profile for suspected hilar biliary malignancies. These findings support its integration into the diagnostic pathway for hilar lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A, Crinò SF, Gkolfakis P et al. Diagnostic work-up of bile duct strictures: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2025; 57: 166–185
- [2] Cotton PB, Eisen GM, Aabakken L et al. A lexicon for endoscopic adverse events: report of an ASGE workshop. *Gastrointest Endosc* 2010; 71: 446–454
- [3] Navaneethan U, Njei B, Venkatesh PG et al. Endoscopic ultrasound in the diagnosis of cholangiocarcinoma as the etiology of biliary strictures: a systematic review and meta-analysis. *Gastroenterol Rep (Oxf)* 2015; 3 (3): 209–15

PYP288 Comparative Effectiveness and Safety of EUS-Guided Gallbladder Drainage vs EUS-Guided Choledochoduodenostomy in Patients with Malignant Biliary Obstruction after Failed ERCP: A Propensity-Score Matched Multicenter Series

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DOI 10.1055/s-0046-1821228

Aims It is unclear which is the best approach for the drainage of malignant distal biliary obstruction (MDBO) after failed endoscopic retrograde cholangiopancreatography (ERCP). We compared endoscopic ultrasound (EUS)-guided gallbladder drainage (GBD) and EUS-guided choledochoduodenostomy (CDS) with lumen-apposing metal stents (LAMS) as rescue treatment in the case of ERCP failure.

Methods This was an international multicenter retrospective observational study at 28 tertiary care centers through August 2024. Outcomes were compared using propensity score matching. The primary outcome was the comparison of the clinical success rates between EUS-GBD vs. EUS-CDS. Clinical success was defined by a > 15 % decrease in total bilirubin levels within 24 h and a > 50 % decrease within 14 days after the procedure; secondary outcomes were technical success, defined as adequate LAMS placement with visualization of bile flow, AE and severe AE (SAE), defined as > grade II AE according to the AGREE classification, and overall survival [1–6].

Results Five hundred twenty-nine patients underwent EUS-guided drainage, of which 136 underwent EUS-GBD, and 393 underwent EUS-CDS. After 1-to-1 propensity score matching, 224 patients were selected (112 per group). The mean age was 76 ± 4 years in both groups (p = 0.9), and 49 (43.7 %) and 48 (42.8 %) male patients were treated with EUS-GBD and EUS-CDS, respectively (p = 0.9). EUS-GBD and EUS-CDS had similar technical success (97.3 % and 91 %; p = 0.08) and clinical success rates (83 % and 85.7 %; p = 0.17). Mean bilirubin levels decreased from 17.5 mg/dL (SD 6) at baseline to 8.1 mg/dL (SD 6.54) at 24 hours to 2.8 mg/dL (SD: 2.15) at 14 days in the EUS-GBD group and from 18.1 mg/dL (SD 8) at baseline to 7.9 mg/dL (SD 8.25) at 24 hours to 3.2 mg/dL (SD 1.35) at 14 days in the EUS-CDS group. AE rate was 19.6 % in the EUS-GBD group and 12.5 % in the EUS CDS group (p = 0.20), of which 10 (8.9 %) and 7 (6.2 %) severe AEs respectively (p = 0.61). Bleeding occurred in seven patients (6.1 %) after EUS-GBD and 3 patients (2.5 %) after EUS-CDS. Two cases of perforation (1.7 %) were observed after EUS-CDS and both were successfully managed endoscopically. Stent occlusion occurred in 6 patients (5 %, of which 4 cases within 48 hours) after EUS-GBD and 4 patients (3.5 %, all of them beyond one week from the procedure) following EUS-CDS (p = 0.74); in all cases these

events were treated with double pigtail placement into the LAMS. Stent migration was observed in 2 (1.7 %) and 1 (0.8 %) patients in the two groups, respectively (p = 0.98). Two of these cases were intraprocedural and were treated with removal and replacement of the LAMS, while one case occurred 90 hours after EUS-GBD and required surgery. Two cases of mild acute pancreatitis were observed after EUS-GBD (1.7 %), probably due to the previous ERCP attempt. Five infectious events were registered after EUS-GBD (4.4 %), of which 1 was severe and 3 within 48 hours; on the other hand, 4 cases (3.5 %), of which 2 were severe and 3 within 48 hours occurred after EUS-CDS (p = 0.29). All these infectious events were treated successfully with antibiotics, whereas 5 infectious events were registered after EUS-GBD (4.4 %) and 4 cases (3.5 %) after EUS-CDS (p = 0.29). No treatment-related deaths were observed. Median overall survival was 5 months (4–7) in the EUS-GBD group and 5.5 months (5–7) in the EUS-CDS group (p = 0.55).

Conclusions Our study showed that in patients with MDBO after failed ERCP, EUS-GBD or EUS-CDS were comparable with similar rates of efficacy and safety. EUS-GBD could represent an easy and safe option in MDBO patients without previous cholecystectomy and with a clear patency of the cystic duct.

Conflicts of Interest Author B. M. is consultant for Taewoong, Author A. F.: Consulting fees for Boston Scientific, Author G.V. reports lecture fees from Boston Scientific and travel grants from Euromedical, Author M. B. received grant support from Boston Scientific, Author S. M. has consultancy agreements with Cook Medical, Pentax, and Olympus and chairs the Boston Scientific board in Therapeutic Biliopancreatic Endoscopy and the Cook Medical board in Interventional endoscopy, Author A. L. is consultant for Boston Scientific, Author C.H. has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co., Author A.R. has received fees for serving as a consultant from Fujifilm Co., Medtronic Co., and Olympus Corp.

References

- [1] Debourdeau A, Daniel J, Caillo L et al. Effectiveness of endoscopic ultrasound (EUS)-guided choledochoduodenostomy vs. EUS-guided gallbladder drainage for jaundice in patients with malignant distal biliary obstruction after failed endoscopic retrograde cholangiopancreatography: Retrospective, multicenter study (GALLBLADEUS Study). *Dig Endosc* 2025; 37 (1): 103–114. doi:10.1111/den.14750
- [2] Mangiavillano B, Moon JH, Facciorusso A et al. Endoscopic ultrasound-guided gallbladder drainage as a first approach for jaundice palliation in unresectable malignant distal biliary obstruction: Prospective study. *Dig Endosc* 2024; 36 (3): 351–358. doi:10.1111/den.1460
- [3] Fugazza A, Khalaf K, Spadaccini M, Facciorusso A, Colombo M, Andreozzi M, Carrara S, Binda C, Fabbri C, Anderloni A, Hassan C, Baron T, Repici A. Outcomes predictors in endoscopic ultrasound-guided choledochoduodenostomy with lumen-apposing metal stent: Systematic review and meta-analysis. *Endosc Int Open* 2024; 12 (3): E456–E462
- [4] Teoh AYB, Napoleon B, Kunda R et al. EUS-Guided Choledochoduodenostomy Using Lumen Apposing Stent Versus ERCP With Covered Metallic Stents in Patients With Unresectable Malignant Distal Biliary Obstruction: A Multicenter Randomized Controlled Trial (DRA-MBO Trial). *Gastroenterology* 2023; 165 (2): 473–82. doi:10.1053/j.gastro.2023.04.016
- [5] van der Merwe SW, van Wanrooij RJ, Bronswijk M et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* 2022; 54: 185–205. doi:10.1055/a-1717-1391
- [6] Dumonceau JM, Tringali A, Papanikolaou IS, Blero D, Mangiavillano B, Schmidt A, Vanbiervliet G, Costamagna G, Devière J, García-Cano J, Gyökeres T, Hassan C, Prat F, Siersema PD, van Hooft JE. Endoscopic biliary stenting: indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated October 2017. *Endoscopy* 2018; 50 (9): 910–930. doi:10.1055/a-0659-9864

PYP289 The transformative role of endoscopic ultrasound in diagnosing and managing biliary strictures: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1821229

Aims Endoscopic ultrasound (EUS) is one of the major innovations that has played a transformative role in gastroenterology and related disciplines. With its evolution, its use has expanded from simple diagnosis to management of various gastroenterological conditions, such as biliary strictures [1, 2].

Methods In light of these advancements, in the present review, we summarize the current evidence on the transformative role of EUS in the diagnosis and management of biliary strictures. Two independent reviewers conducted a literature search using five electronic databases, PubMed, CENTRAL, Science Direct, Google Scholar, and EMBASE for all available literature published up to January 2025. Articles that met our inclusion criteria were included in the review, and statistical software was used to analyze the reported outcomes.

Results Our literature search yielded 935 articles, of which 19 met our inclusion criteria and were included in the review. Ten articles focused on EUS as a diagnostic method, and nine focused on EUS-guided therapeutic interventions. Our meta-analysis results showed that EUS fine-needle aspiration (EUS-FNA) is superior to conventional techniques for diagnosing malignant biliary strictures. The sensitivity of EUS-FNA ranged from (0.43; 95% CI [0.24, 0.63]) to (1.00; 95% CI [0.79, 1.00]) compared to that of conventional diagnostic methods, which ranged from (0.36; 95% CI [0.19, 0.56]) to (0.96; 95% CI [0.90, 0.99]). Both EUS-FNA and conventional diagnostic methods exhibit a high specificity for diagnosing biliary strictures, with most having a specificity of 100%. In managing biliary strictures, we found that EUS-guided intervention exhibited a significantly higher clinical success rate than control interventions (OR: 2.89; 95% CI [1.22, 6.84] $p=0.02$). However, no significant difference was observed when the technical success rates were pooled (odds ratio [OR], 0.97; 95% CI [0.30, 3.16] $p=0.96$).

Conclusions EUS has been shown to be a promising tool for the diagnosis and management of biliary strictures. Furthermore, as empirical evidence indicates, through a combination of EUS-guided and conventional interventions, diagnostic performance improves significantly. Therefore, we recommend that the feasibility and use of EUS-guided interventions in the diagnosis and management of biliary strictures should be investigated in greater depth.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gadour E, Awad A, Hassan Z, Shrwani KJ, Miutescu B, Okasha HH. Diagnostic and therapeutic role of endoscopic ultrasound in liver diseases: A systematic review and meta-analysis. *World J Gastroenterol*. 2024; 30 (7): 742–758. doi:10.3748/wjg.v30.i7.742 PMID: 38515947 PMID: PMC10950627
- [2] Mekky MA, Abbas WA. Endoscopic ultrasound in gastroenterology: From diagnosis to therapeutic implications. *World J Gastroenterol*. 2014; 20 (24): 7801–7807. doi:10.3748/wjg.v20.i24.7801

The Endoscopic Therapeutic Toolbox: New techniques and devices

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PYP290 Development of an Automated ESD Training Simulator: Validation and Effects on the Clinical Learning Curve

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DOI 10.1055/s-0046-1821230

Aims ESD training in Western settings remains difficult due to low case volume and the absence of a standardized curriculum. Existing approaches rely mainly on an apprentice model, despite recommendations from ASGE/ESGE. Task analyses show that marking, incision, and submucosal dissection are core skills, underscoring the need for training environments that closely replicate real ESD conditions. Animal models offer high fidelity but are limited by cost and logistics. We developed a CT-based, anatomically realistic ESD simulator to address these gaps.

Methods Gastric CT gastrography data were used to create 3D anatomical reconstructions and region-specific coordinates, which were then converted into modular synthetic stomach models representing the antrum, lower and mid body along the lesser and greater curvature, the angulus, and the cardia. An automated positioning system was developed to move each module into the appropriate anatomical location. Six expert endoscopists performed ESD five times in each region (sets A/B/C) and provided structured evaluations of anatomical fidelity and concordance with ASGE/ESGE skill requirements. Novice endoscopists ($n=10$) conducted repeated training sessions in beginner-level regions (antrum-LC, mid-body LC), and learning curves were assessed by comparing dissection speeds from the initial five attempts to the final five attempts.

Results Experts reported high anatomical fidelity across locations and confirmed that the simulator enabled practice of essential ESD skills. Novices demonstrated clear improvement, with significantly faster dissection speeds in later sessions.

Conclusions This CT-derived, region-specific ESD simulator provides realistic anatomical conditions, supports expert-validated skill training, and enables measurable early improvement among novices. It represents a practical alternative to animal models and may help standardize early ESD training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP291 SPEED-EMR Score: a simple predictive model for estimating colorectal endoscopic mucosal resection duration

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DOI 10.1055/s-0046-1821231

Aims Endoscopic mucosal resection (EMR) is an effective, minimally invasive technique for removing complex colorectal polyps, particularly those with sessile or flat morphology. However, procedure duration can vary widely depending on lesion complexity, impacting unit efficiency and patient scheduling. This study aimed to develop a simple, objective, and clinically applicable predictive model—the SPEED-EMR Score (Simple PrEdictive Estimator of Duration for Endoscopic Mucosal Resection)—to estimate EMR duration based on lesion characteristics.

Methods We retrospectively analyzed 1,077 colorectal EMRs performed between 2020 and 2025 at a tertiary endoscopy center.

EMR duration (minutes), measured from the first image of the lesion to the image of the post-resection mucosal defect, was the primary outcome. Collected variables included clinicodemographic patient characteristics, lesion characterization data, and technical features of the endoscopic procedure. Variables significantly associated with the outcome in univariate analysis were entered into a multiple linear regression model. Coefficients were converted into points (1 point ≈ 4 minutes of added duration) to create the SPEED-EMR Score.

Results Median patient age was 65 years (IQR 58–72); 57.9% were male. The median Charlson Comorbidity Index was 2 (IQR 1–4), and the median EMR duration was 13 minutes (IQR 7–24).

Longer procedures were independently associated with larger lesion size ($p < 0.001$), flat or depressed morphology (Paris classification 0-IIb/0-IIc) ($p < 0.001$), NICE type 2 pattern ($p < 0.001$), difficult locations (ileocecal valve, peri-diverticular, peri-appendiceal, hepatic/splenic flexures, rectosigmoid junction, anal margin) ($p < 0.001$), and recurrence on a scarred area ($p = 0.003$). These variables were used to create the SPEED-EMR Score (range 0–16 points): lesion sizes of 21–30 mm (+3 points), 31–40 mm (+6 points), >40 mm (+10

points); flat or depressed morphology (+2 points); NICE type 2 (+1 point); difficult location (+1 point); recurrence on a scarred area (+2 points).

The final SPEED-EMR Score calibration model showed good linearity and predictive accuracy ($R = 0.680$, $R^2 = 0.463$, $p < 0.001$; standard error of the estimate = 12.2 min). Predicted time was calculated as: Predicted time (min) = $3.1 + 4.0 \times \text{Score value}$.

Rounded estimates were stratified into four complexity classes: Class I (0–4 pts): ≤ 20 min; Class II (5–8 pts): 25–35 min; Class III (9–12 pts): 40–50 min; Class IV (≥ 13 pts): ≥ 55 min.

Conclusions The SPEED-EMR Score provides a practical tool for predicting EMR duration using readily available lesion characteristics. Its clinical application may improve scheduling efficiency, case allocation, and patient counseling in therapeutic colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP292V Application of a novel endoscopic device in the treatment of gastric bezoars: a pilot study

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DOI 10.1055/s-0046-1821232

Problem to solve Gastric bezoars, especially giant phytobezoars, are challenging to manage endoscopically due to their large size and dense composition. Conventional endoscopic tools often fail to fragment them effectively, leading to prolonged procedures, incomplete removal, or the need for invasive surgical intervention, which carries higher risks and longer recovery.

Innovation We developed a novel, low-cost endoscopic device comprising two outer sheaths attached to the endoscope and a yellow zebra guidewire forming an adjustable snare. This simple, mechanically-driven design allows real-time snare size adjustment for precise and efficient bezoar fragmentation, without requiring specialized or expensive equipment. The device is easy to assemble and deploy, making it particularly suitable for resource-limited settings.

Results The device was used in 9 patients with giant gastric bezoars (mean size ~4.3 × 7.8 cm). All bezoars were successfully fragmented and removed in a single session, with a mean procedure time of 66 minutes. No complications occurred, and follow-up gastroscopy confirmed complete clearance. All patients showed symptom resolution and were discharged after an average hospital stay of 2.5 days (► **Table 1**).

► **Table 1** Clinical characteristics and surgical information of included patients with gastric bezoars.

No.	Sex	Age (year)	Symptoms	Bezoar diameter (cm)	Operation time (min)	Adverse events	Postoperative length of hospital stay (day)
1	Female	71	Abdominal pain	5 × 15	113	No	2
2	Female	33	Abdominal pain	4 × 10	85	No	2
3	Male	78	Abdominal pain	5 × 9	81	No	6
4	Male	50	Abdominal pain	4 × 5	53	No	1
5	Female	51	Abdominal pain	4 × 5	38	No	1
6	Male	15	Abdominal pain	4 × 4	33	No	3
7	Male	71	Abdominal pain	4 × 8	52	No	2
8	Male	53	Abdominal pain	3 × 4	34	No	3
9	Female	77	Abdominal pain	6 × 10	105	No	3

Conclusions This novel endoscopic device offers a safe, effective, and economical solution for the fragmentation and removal of giant gastric bezoars, avoiding the need for surgery. Its simplicity, high success rate, and minimal complication profile support its potential for widespread clinical adoption, particularly in regions with limited access to advanced endoscopic tools.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/c53028c7-8f6f-4083-929e-e27b706b8fdc/Uploads/19990_%E6%97%A0%E5%AD%97%E5%B9%951.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP293 A novel “third arm” to provide counter-traction during endoscopic submucosal dissection

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DOI 10.1055/s-0046-1821233

Problem to solve Countertraction during endoscopic submucosal dissection (ESD) is indispensable, as it improves submucosal exposure, reduces procedure time and risk of bleeding or perforation, and improves en bloc resection rates. Common methods include patient repositioning, underwater ESD, and the off-label clip-and-line or rubber band technique. However, these techniques provide a limited traction direction and clips may slip off. A so called official “third-arm” has been lacking in flexible gastrointestinal (GI) endoscopy.

Innovation Tracmotion (FujiFilm, Tokyo, Japan) is a single-use, through-the-scope (TTS) traction device consisting of two interconnected parts: a scope-mounted hand controller and a distal end with 360° rotatable grasping forceps. A dual-channel endoscope is needed with a 3.7 mm or larger instrument inner channel diameter when using this traction device.

Results Five trial ESDs using this novel traction device were performed to allow the endoscopist to become familiar with its use. To investigate the additional value of the traction device, mean procedure time and dissection speed with the device were compared to the averages without the device from 2022 to 2024 at the Erasmus Medical Center (EMC) in Rotterdam, the Netherlands. After the trial ESDs, a total of 13 ESDs with the device were performed (5 upper GI, 8 lower GI). Among the upper GI cases, 4 patients were male, with a median age of 58 years (IQR 12); the mean lesion size was 13.0 mm (95 % CI: 7.2–18.8). For the lower GI cases, 7 patients were male, with a median age of 60 years (IQR 13); the mean lesion size was 24.4 mm (95 % CI: 19.2–29.6). Lesion locations at the upper GI included the body (n = 1) and antrum of the stomach (n = 3), and one in a gastric tube reconstruction after esophagectomy. Lower GI lesions were located in the rectum (n = 6) and sigmoid colon (n = 2). The stiffness of the dual-channel endoscope with limited angulation and space to maneuver precluded the use of the traction device for lesions near the rectal verge and in the esophagus.

Procedure time was shorter with the device for both upper and lower GI cases (–16.7 % and –19.1 %, respectively), as shown in ► **Table 1**. Dissection speed was also faster with versus without the device (1.5 mm²/minute faster for upper GI cases and 2.9 mm²/minute faster for lower GI cases). All resections were performed en bloc, with all but two lower GI ESDs achieving R0 resection. Post-ESD bleeding occurred after one upper GI ESD; the patient underwent an additional endoscopy with successful clip placement. In addition, one patient was hospitalized for post-polypectomy fever that resolved without intervention.

► **Table 1** Procedural characteristics

Characteristic	With traction device (n = 13)	Without traction device (average EMC 2022–2024)
Procedure time (minutes), mean (95 % CI)		
Upper GI	73.4 (48.7–98.7)	88.1 (79.5–96.7)
Lower GI	102.6 (76.0–129.2)	126.7 (101.1–152.3)
Dissection speed (mm ² /minute), mean (95 % CI)		
Upper GI	15.8 (7.6–24.1)	14.3 (11.3–17.3)
Lower GI	16.6 (9.9–23.6)	13.7 (8.7–18.7)

CI: confidence interval; GI: gastrointestinal; EMC: Erasmus University Medical Center

Conclusions Both procedure time and dissection speed improved with the implementation of the novel traction device compared to the averages at the EMC without the device. In addition, there were no higher rates of complications compared to previous literature. These preliminary findings might suggest that the traction device could be of additional value during ESD. Further research, including more patients and additional questionnaires on the endoscopist's personal experience with the device, is needed to better explore this topic.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP294 Dissection using PreciseSect is faster, with less need for hemostatic grasper compared to Swift Coag during ESD

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DOI 10.1055/s-0046-1821234

Aims This study aimed to compare the SwiftCoag and PreciseSECT modes used during the submucosal dissection step of ESD. Primary outcomes included dissection speed, procedure duration, and use of hemostatic forceps. Secondary outcomes focused on safety through analysis of intra- and post-procedural complications, and pathological specimen quality based on clean margin status

Methods We conducted a retrospective, single-center study at a tertiary University Referral Center. Patients were identified from a prospectively collected registry of ESD procedures performed between 2017 and 2024 using either the SwiftCoag or PreciseSECT electrosurgical modes for the submucosal dissection step of ESD. To ensure maximal standardization, only procedures performed with a Dual Knife-J and glycerol submucosal injection were included. Clinical, procedural, and histopathological data were extracted from electronic records and operative reports. Quantitative variables were analyzed using the Mann-Whitney U test, and qualitative variables with Fisher's exact test. Statistical analyses were performed using Jamovi.

Results Based on the selection criteria, a total of 219 patients were included in the analysis. The study population was composed of 63 % men and 37 % women, with a median age of 68 (IQR 60.5–74) years. As for the electrosurgical mode used, 146 patients underwent ESD with SwiftCoag and 73 with PreciseSECT. Regarding the anatomical distribution of ESD procedures, 78 were performed in the esophagus (35.6 %), 46 in the stomach (21.0 %), 20 in the colon

(9.1 %), and 75 in the rectum (34.2 %). No duodenal procedures were included in the study. There was no significant difference in the anatomical distribution of ESD procedures between the SwiftCoag and PreciseSECT groups.

Median procedure duration per ESD was significantly shorter with PreciseSECT (70 min [IQR: 50–90]) compared to SwiftCoag (90 min [IQR: 60–136]; $p = 0.009$). Dissection speed was significantly higher with PreciseSECT (21.2 mm²/min [IQR: 16.17–28.9]) than with SwiftCoag (13.5 mm²/min [IQR: 8.03–20.8]; $p < 0.001$). Use of hemostatic forceps was more frequent with SwiftCoag (69.9 %) than with PreciseSECT (54.8 %; $p = 0.035$), suggesting improved intraprocedural hemostasis with PreciseSECT.

No difference in muscular layer injuries or full-thickness perforations was observed between the SwiftCoag and PreciseSECT groups ($p = 0.098$), the rate of uneventful procedures tended to be higher with PreciseSECT (80.8 %) than with SwiftCoag (69.9 %), though not statistically significant.

Symptomatic esophageal strictures requiring balloon dilation occurring within 90 days after ESD, were observed in 11.5 % of patients treated with PreciseSECT and 5.8 % with SwiftCoag ($p = 0.394$), suggesting no significant difference in clinical stricture rates. This trend may be partly explained by a higher proportion of extensive resections exceeding 90 % of the esophageal circumference in the PreciseSECT group (34.6 % vs 9.6 %).

Thirty days delayed post-procedural bleeding, was observed in colorectal procedures only. It affected 8.4 % of patients overall, with a rate of 15.2 % in the PreciseSECT group and 4.8 % in the SwiftCoag group ($p = 0.121$).

Quality of the specimen was comparable between groups, as reflected by similar en bloc resection rate (93.2 % with PreciseSECT; 95.2 % with SwiftCoag, $p = 0.540$), clear vertical margin (VM0) rate (97.3 % with PreciseSECT vs 93.8 % with SwiftCoag), $p = 0.079$, clear horizontal margin (HM0) rate (91.8 % with PreciseSECT vs 88.4 % with SwiftCoag, $p = 0.626$).

Oncologically, low-risk resections, based on ESGE recommendations, were similar in both groups (PreciseSECT (82.2 %) ; SwiftCoag (78.1 %) ; $p = 0.222$).

Conclusions PreciseSECT was associated with faster dissection and less use of hemostatic forceps, with similar en-bloc and margin-free rates compared to SwiftCoag. Our data support PreciseSECT as a facilitating and economical technical improvement of ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP295 Clinical Outcomes of Endoscopic Vacuum Therapy for Gastrointestinal Leakage, Perforation, and Fistula: A Single-Center Experience

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DOI 10.1055/s-0046-1821235

Aims Endoscopic vacuum therapy (EVT) has emerged as an effective, minimally invasive treatment for gastrointestinal (GI) leaks, perforations, and fistulas. However, clinical outcomes across various GI locations remain underreported in Asian populations. This study aimed to evaluate the therapeutic efficacy and safety of EVT for upper and lower GI defects in a single tertiary center.

Methods Patients who underwent EVT for GI leakage, perforation, or fistula at Pusan National University Hospital between February 2020 and October 2025 were retrospectively analyzed. Thirty-three patients (36 procedures) were included; one patient had two defects, and another had three. Treatment success was defined as complete closure without endoscopic or surgical re-intervention (► **Table 1**).

► **Table 1**

Characteristic	Value
Median age (years, range)	68 (18–81)
Sex, n (%)	
Male	27 (81.8)
Female	6 (18.2)
Number of surgeries before EVT	29 (87.9)
Method of surgery	
Ivor-Lewis	8 (24.2)
Total gastrectomy	3 (8.9)
Subtotal gastrectomy	8 (23.5)
Colectomy	2 (5.9)
Others	8 (23.5)
Indication of surgery before EVT	
Esophageal cancer	9 (27.3)
Gastric cancer	11 (33.3)
Colon cancer	3 (8.9)
Benign disease	6 (18.2)
Etiology of EVT	
Anastomosis site leak	30 (83.3)
Perforation	3 (8.3)
Fistula	3 (8.3)
Location of perforation, leak, fistula	
Upper GI tract	32 (88.9)
Lower GI tract	4 (11.1)
Nature of EVT application	
Primary	35 (97.2)
Rescue	1 (2.8)
Median interval from leakage diagnosis to EVT, days (range)	2.5 (0–9163)
Type of EVAC	
Intraluminal	22 (61.1)
Intracavity	14 (38.9)

Results Among 36 procedures, 30 (83.3 %) were leaks, 3 (8.3 %) perforations, and 3 (8.3 %) fistulas. The upper GI tract accounted for 88.9 % of cases. EVT was primarily applied as first-line therapy in 97.2 %. The median interval from diagnosis to EVT initiation was 2 days (range, 0–9,163). Treatment success was achieved in 25 cases (69.4 %), with a mean of 4.94 sessions per lesion. Of these, 22 (61.1 %) were treated with the intraluminal approach and 14 (38.9 %) with the intracavity approach. Complications occurred in three patients (9.1 %), including two cases of GI bleeding and one of stricture.

Conclusions EVT demonstrated favorable outcomes and acceptable safety for managing GI leaks, perforations, and fistulas across both upper and lower GI tracts. These findings support EVT as an effective minimally invasive treatment in selected patients, potentially reducing the need for surgical intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP296 Comparative Efficacy of Endoscopic and Surgical Interventions for Gastroparesis: A Network Meta-Analysis

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DOI 10.1055/s-0046-1821236

Aims Gastroparesis is a chronic disorder affecting gastrointestinal motility with a limited response to medication. Recently, endoscopic and surgical procedures have become effective treatment alternatives; however, comparative evidence between different treatment approaches is limited. This study aimed to systematically evaluate and compare the effectiveness of gastric emptying using endoscopic and surgical interventions for the treatment of gastroparesis through a network meta-analysis. The primary objective was to determine which treatment procedure achieves the greatest improvement in symptoms and gastric motility, thereby guiding the selection of the optimal treatment for patients with treatment-resistant gastroparesis.

Methods We searched the PubMed, Embase, and CENTRAL databases for studies published between January 2000 and the present. Eligible studies included randomized controlled trials and observational analyses involving adult patients diagnosed with gastroparesis who underwent procedural interventions. Treatments included gastric peroral endoscopic myotomy (GPOEM), gastric neuronal stimulation, pyloroplasty (GNS), botulinum toxin injection (BTI), and combination therapies such as G-POEM + GES or pyloroplasty + GES. The primary outcomes were clinical success, defined as an improvement in patient symptoms based on established assessment systems, and improvement in gastric emptying studies (GES). A Bayesian network meta-analysis was performed using a combined effects model to integrate direct and indirect comparisons, based on the surface under the cumulative order curve (SUCRA), to determine the relative ranking of each treatment's efficacy.

Results 49 studies comprising 2722 patients were included in the study. For clinical success, 12 studies (k = 12) across 6 treatments (n = 6) and 6 unique study designs (d = 6) contributed 12 pairwise comparisons (m = 12). Compared

to placebo, GPOEM showed the highest odds of clinical success (OR 5.72, 95 % CI 2.02–16.18, $p = 0.0010$; SUCRA = 0.85), followed closely by GPOEM + GES (OR 5.42, 95 % CI 1.47–19.99, $p = 0.0111$; SUCRA = 0.79) and pyloroplasty (OR 4.64, 95 % CI 1.46–14.75, $p = 0.0093$; SUCRA = 0.71). BTI and GNS did not demonstrate a statistically significant benefit. For GES improvement, 8 studies (k = 8) evaluated 7 treatments (n = 7) with 6 designs (d = 6), contributing 8 pairwise comparisons (m = 8). In comparisons against sham procedures for gastric emptying improvement, pyloroplasty + GES ranked the highest (OR 100.0, 95 % CI, 5.79–1728.15; $p = 0.0015$; SUCRA = 0.97), followed by GPOEM (OR 13.33, 95 % CI 2.82–63.11, $p = 0.0011$; SUCRA = 0.69), and GPOEM + GES (OR 11.93, 95 % CI 1.47–96.76, $p = 0.0203$; SUCRA = 0.63). BTI and GES remained the lowest-performing interventions across both primary outcomes.

Conclusions Among procedural options for refractory gastroparesis, G-POEM—either alone or in combination with GES—demonstrates the strongest overall efficacy for symptomatic relief and gastric emptying improvement. Pyloroplasty-based therapies also exhibit effective outcomes, especially when paired with GES. This demonstrates its effectiveness in enhancing infectious movement. In contrast, BTI and standalone GES provide limited clinical value. These findings support the prioritization of G-POEM and pyloroplasty as first-line procedural strategies for patients unresponsive to medical management. Future research should aim to standardize outcome measures and explore patient-specific predictors of procedural response, thereby increasing the chances of improving individualized treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP297 Is Endoscopic Retrograde Appendiceal Irrigation a Practical Alternative to ERAT for Uncomplicated Appendicitis? A Multicenter Retrospective Study

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DOI 10.1055/s-0046-1821237

Aims This study compared the outcomes of endoscopic retrograde appendiceal irrigation (ERAI) and endoscopic retrograde appendicitis therapy (ERAT) in patients with acute uncomplicated appendicitis.

Methods We conducted a multicenter retrospective study of patients who received ERAI or ERAT for acute uncomplicated appendicitis between May 2020 and May 2023. After applying 1 to 1 propensity score matching, we evaluated technical and clinical success as the main outcomes. We also compared procedure time, hospital stay, treatment costs, postoperative recovery, adverse events, and long-term recurrence (► **Table 1**).

► Table 1

Outcomes and adverse events	ERAI (n = 168)	ERAT (n = 174)	P
Procedure time, mean (SD), min	15.0 (2.5)	27.2 (9.1)	<0.001
Fecalith expulsion during procedure, n (%)	80 (47.6)	106 (60.9)	0.179
Appendiceal stent placement, n (%)	17 (10.1)	67 (38.5)	<0.001
VAS for pain ≤ 3 at 6 h after treatment, n (%)	153 (91.1)	160 (92.0)	0.950
Normal laboratory test results ¹ , n (%)	150 (89.3)	115 (79.3)	0.067
Postoperative length of hospital stay, mean (SD), days	1.5 (0.8)	2.0 (1.8)	0.004
Hospital cost, mean (SD), RMB	6,468.7 (3087.5)	11,510.4 (5906.8)	<0.001
Clinical success rate ² , n (%)	157 (93.5)	168 (96.6)	0.833
Overall adverse event rate, n (%)	35 (20.8)	22 (12.6)	0.086
Follow-up duration, median (IQR), months	48 (38–57)	49 (38–53)	0.702
Recurrence of appendicitis, n (%)	26 (15.5)	15 (8.6)	0.084
Time to recurrence, median (IQR), months	13 (3–35)	16 (7–29)	0.694
Overall short-term adverse event rate ³ , n (%)	10 (6.0)	7 (4.0)	0.435
Fever ⁴	6 (3.6)	4 (2.2)	0.498
Appendiceal perforation	4 (2.0)	3 (1.7)	0.674
Overall long-term adverse event rate ⁵ , n (%)	25 (14.9)	15 (8.6)	0.109
Abdominal pain	5 (3.0)	2 (1.1)	0.243
Diarrhea ⁶	1 (0.6)	2 (1.1)	0.586
Constipation	0 (0.0)	1 (0.6)	0.327

Results A total of 725 patients were included, and 179 matched pairs were analyzed. Baseline characteristics were comparable between groups. Technical and clinical success rates were similar for ERAI and ERAT (93.9% vs 97.2%; 93.5% vs 96.6%; $p = 0.907$ and 0.833 , respectively). ERAI resulted in shorter procedure time and postoperative hospitalization, and lower total cost. Postoperative pain relief, normalization of inflammatory markers, and short- and long-term adverse event rates did not differ between groups. Cumulative recurrence rates at 1, 3, and 5 years were higher in the ERAI group (8.3%, 12.0%, 17.6%) than in the ERAT group (4.0%, 6.9%, 11.8%).

Conclusions ERAI achieved similar technical and clinical results as ERAT while offering shorter procedures, faster recovery, and lower costs. Although recurrence was somewhat higher after ERAI, most patients were successfully treated with repeat endoscopic therapy or conservative care. ERAI may be a practical and affordable option for patients with uncomplicated appendicitis, especially in settings where ERAT is less accessible

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP298 Electrode Diameter and Thermal Spread in Saline-Immersion Third-Space Endoscopy

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DOI 10.1055/s-0046-1821238

Aims Filling the lumen with saline during third-space endoscopy improves visualization and hemostasis, but profoundly alters electrosurgical behavior by collapsing tissue impedance. How these changes translate into collateral tissue damage according to electrode diameter remains insufficiently quantified.

Methods In an ex-vivo porcine gastric model, three commonly used knives with different tip diameters (1.5 mm HybridKnife T-type, 0.5 mm HybridKnife flex I-type, 0.4 mm DualKnife J) were tested in air and under 0.9% saline using seven endoscopic waveforms (two cutting, three coagulation, two dissection modes). A total of 252 standardized 10-mm cuts were performed. Impedance, peak voltage, effective power, cutting success, and lateral thermal spread were recorded. Linear regression was used to identify independent predictors of lateral spread.

Results Transition from air to saline reduced impedance by 55% with thin knives versus 92% with the thick knife, while effective power increased by 4.9-fold and 19-fold, respectively. Peak voltage rose slightly with thin knives (+1.7%), but fell by about one-third (−30.2%) with the thick knife. In air, lateral spread remained <1.0 mm across all knife-mode combinations (0.31–0.91 mm). Under saline, spread increased by 70.8% with thin electrodes and by 255.5% with the thick electrode. Mean spread with the thick knife expanded from 0.56 to 1.35 mm, frequently exceeding 1.0 mm, whereas both thin knives remained ≤ 0.8 mm across cutting and dissection modes. In multivariable analysis (adjusted $R^2 = 0.546$), electrode diameter was the strongest predictor of lateral spread (standardized $\beta = 0.469$), increasing it by approximately 0.36 mm per additional millimeter. This was followed by saline immersion ($\beta = 0.353$), effective power, and impedance, while higher peak voltage independently reduced spread ($\beta = -0.387$).

Conclusions In saline-immersion third-space electrosurgery, electrode diameter is the primary determinant of lateral thermal spread, and strongly modulates the impact of the conductive medium on voltage and power delivery. Thin electrodes, particularly when combined with appropriately selected modes, maintain lateral spread below 1.0 mm while preserving cutting performance, whereas thick electrodes in saline are prone to excessive collateral heating.

Conflicts of Interest AC is a consultant for ERBE, Boston Scientific RM is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific CH is a consultant for Alpha-Sigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax AR is a consultant for Medtronic, ERBE, Fujifilm and Olympus Others authors nothing to declares

PYP299V Endoscopic Electroporation for Local Tumor Control in Colon Cancer: A Case Report of an Elderly, Non-Surgical Candidate

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DOI 10.1055/s-0046-1821239

Abstract Text

An 87-year-old man underwent colonoscopy for anemia. A large 50mm JNET 2B granular mixed nodular type laterally spreading tumor was found at recto-sigmoid junction, covering > 50 % of the lumen. Histology on biopsies revealed a moderate differentiation adenocarcinoma with indication of tumor invasion of the muscularis propria. Patient was unfit for surgery due to many comorbidities (severe cardiovascular disease). Endoscopic electroporation was decided. Overall, this video shows a novel treatment option for colon malignancy when surgery is not feasible, with promising symptomatic and local effects. Despite encouraging results, further clinical evidence is needed to confirm the safety, feasibility and long – term outcomes of endoscopic electroporation as an oncologic treatment [1–4].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/63a119a3-0553-439c-b4d3-e674617275ac/Uploads/19978_Endoscopic_Electroporation.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Frandsen S.K., Vissing M., Gehl J. A Comprehensive Review of Calcium Electroporation -A Novel Cancer Treatment Modality. *Cancers* (Basel). 12: 2020;
- [2] Gibot L. et al. Calcium delivery by electroporation induces in vitro cell death through mitochondrial dysfunction without DNA damages. *Cancers* (Basel). 12: 2020;
- [3] Shiwani T., Singh Dhesi S., Wah T.M. Reversible electroporation for cancer therapy. *British Journal of Radiology*. doi:10.1093/bjr/tqae231 2024
- [4] Aycok K.N., Davalos R.V. Irreversible Electroporation: Background, Theory, and Review of Recent Developments in Clinical Oncology. *Bioelectricity* 1: 214–234 2019

Don't Miss Dysplasia: Detection and Surveillance in GI Practice

16/05/2026, 09:00–10:00

Emerald 4

PYP300 Comparison of Upper Gastrointestinal Endoscopy Procedure times: a Multicenter, Randomised, International, Double-blinded, Clinical Trial – a preliminary analysis

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DOI 10.1055/s-0046-1821240

Aims The European Society of Gastrointestinal Endoscopy (ESGE) recommends recording Upper Gastrointestinal Endoscopy (UGE) examination time with a minimum of seven minutes, since longer procedures allow the detection of more lesions; however, the definition of the time metric varies across studies. This study aims to compare total inspection time versus withdrawal time during diagnostic, surveillance or screening UGE for lesion identification. To our knowledge, it will be the first randomised clinical trial in this area, providing enhanced scientific evidence to optimize UGE quality indicators.

Methods We are performing a randomised controlled trial in 10 international gastroenterology centres, started in 2025, including patients referred for screening, diagnostic and/or surveillance UGE. Patients were randomly assigned, by a computer generated software, and adequate allocation concealment, in a double-blinded, parallel 1:1 ratio, to one of two measurement groups: total inspection time (from intubation to extubation) or withdrawal time (from second portion of duodenum to extubation). The primary outcome was the detection rate of premalignant and malignant lesions (extensive intestinal metaplasia, dysplasia, carcinoma, neuroendocrine tumour, lymphoma or subepithelial lesion), defined as the total number of esophageal, gastric or duodenal lesions identified per randomisation group and confirmed histologically when required, while the secondary outcome was the rate of procedure-related complications. The trial was registered at ClinicalTrials.gov (NCT06696209).

Results For the planned 1290 patients to include, 851 UGE procedures were included so far (53 % female; mean age 59.3 ± 15.4 years). A total of 414 and 437 patients were evaluated in the total inspection time and withdrawal time groups, respectively. The mean total inspection time was 06:34 ± 04:04 minutes, and the mean withdrawal time was 04:52 ± 03:27 minutes.

The primary outcome revealed a significantly higher lesion detection rate in the total inspection time group compared with the withdrawal time group (26.6 % vs. 20.1 %; p = 0.026). Main detected lesions were extensive gastric intestinal metaplasia (17.9 % vs. 12.6 %; p = 0.03), gastric dysplasia (3.1 % vs. 3.0 %; p = 0.89) and esophageal dysplasia (1.9 % vs. 2.5 %; p = 0.56). There was only one complication in all procedures (bleeding event).

In the univariate analysis of factors that may influence the lesion detection rate, the following were statistically significant: total inspection time ≥ 7 minutes (37.3 % vs. 14.1 %; p < 0.001), surveillance (vs. screening vs. diagnosis) as the indication for UGE (45.4 % vs. 23.8 % vs. 12.2 %; p < 0.001), endoscopist experience ≥ 5 years (28.7 % vs. 10.8 %; p < 0.001), the use of an antifoaming agent (38.4 % vs. 12.3 %; p < 0.001) and the application of virtual chromoendoscopy (35.5 % vs. 2.8 %; p < 0.001). However, the use of any sedation type (with vs. without sedation; 23.2 % vs. 23.8 %, p = 0.932), patient tolerance (good vs. intolerance; 23.3 % vs. 22.7 %, p = 0.952) and an excellent GRACE visibility score (≥ 9 vs. < 9; 26.0 % vs. 20.5 %, p = 0.059) or adequate GRACE visibility score (≥ 2

per segment vs. <2 in any segment; 23.8% vs. 9.4%, $p = 0.058$) showed no significant association with lesion detection [1–6].

Logistic regression revealed that surveillance as the indication for UGE (OR 3.3, 95% CI 2.2–4.9; $p < 0.001$), endoscopist experience ≥ 5 years (OR 2.3, 95% CI 1.4–3.8; $p < 0.001$) and the use of virtual chromoendoscopy (OR 8.8, 95% CI 4.1–18.7; $p < 0.001$) were independently associated with higher lesion detection.

Conclusions Our preliminary results indicate that a total inspection time ≥ 7 minutes provides a higher diagnostic yield than a withdrawal time ≥ 5 minutes in UGE, eventually related to the bidirectional evaluation performed during an UGE (both on insertion and during withdrawal), supporting its preferential use in clinical practice. By validating a total inspection time ≥ 7 minutes as the optimal time metric, our study already highlights easy clinical factors that can improve lesion detection, mainly in the stomach, such as the application of virtual chromoendoscopy, and eventually the use of an antifoaming agent to achieve at least an adequate GRACE score visibility ≥ 2 per segment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yoshimizu S et al. Differences in upper gastrointestinal neoplasm detection rates based on inspection time and esophagogastroduodenoscopy training. *Endoscopy international open* vol. 6 (10): 2018; E1190–E1197. doi:10.1055/a-0655-7382
- [2] Kawamura T et al. Examination time as a quality indicator of screening upper gastrointestinal endoscopy for asymptomatic examinees. *Digestive endoscopy: official journal of the Japan Gastroenterological Endoscopy Society* vol. 29 (5): 2017; 569–575. doi:10.1111/den.12804
- [3] Januszewicz W, Kaminski MF. Quality indicators in diagnostic upper gastrointestinal endoscopy. *Therap Adv Gastroenterol*. 2020; 13:1756284820916693 Published 2020 May 15. doi:10.1177/1756284820916693
- [4] Park JM, Huo SM, Lee HH, Lee BI, Song HJ, Choi MG. Longer Observation Time Increases Proportion of Neoplasms Detected by Esophagogastroduodenoscopy. *Gastroenterology* 2017; 153 (2): 460–469.e1. doi:10.1053/j.gastro.2017.05.009
- [5] Teh JL, Tan JR, Lau LJ et al. Longer examination time improves detection of gastric cancer during diagnostic upper gastrointestinal endoscopy. *Clin Gastroenterol Hepatol* 2015; 13 (3): 480–487.e2. doi:10.1016/j.cgh.2014.07.059
- [6] Bisschops R, Areia M, Coron E et al. Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2016; 48 (9): 843–864. doi:10.1055/s-0042-113128

PYP301 Real-World Implementation and Diagnostic Yield of Capsule Sponge Testing for Barrett's Surveillance and Reflux Case Finding in a UK Hospital

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DOI 10.1055/s-0046-1821241

Aims Oesophageal adenocarcinoma incidence is rising in the UK [1, 2], yet no national screening programme exists. Current Barrett's surveillance and reflux investigations rely on endoscopy, an invasive, carbon-heavy and resource-intensive procedure [3]. Capsule sponge testing offers a minimally invasive, nurse-led, and environmentally sustainable alternative that detects biomarkers such as TFF3 and p53 with high accuracy and better patient tolerance [4]. Despite ESGE guidance supporting these approaches, uptake remains limited. This review evaluated the implementation, diagnostic yield, and safety of capsule sponge testing at Milton Keynes University Hospital (MKUH). This review also considered the sustainability impact of capsule sponge testing in line with ESGE and BSG Green Endoscopy guidance promoting low-carbon diagnostic pathways [3, 5].

Methods A retrospective service review was conducted at MKUH between January 2024 and July 2025. Patients meeting inclusion criteria underwent capsule sponge testing and were stratified into Barrett's surveillance ($n = 45$)

and reflux case-finding ($n = 232$) cohorts. Data collected included demographics, biomarker positivity (TFF3 for intestinal metaplasia [IM], squamous/columnar atypia, p53), and subsequent gastroscopy conversion. All procedures were nurse-led and delivered in a community diagnostic centre. Primary measures were the detection of dysplasia in the Barrett's cohort and the detection of IM and/or dysplasia in the reflux cohort. Patients with abnormal biomarker or cytology results were referred for confirmatory gastroscopy.

Results In the Barrett's surveillance cohort ($n = 45$), mean age was 64.6 years (71.1% male). Dysplasia was detected in 3 patients (6.7%). 6 (13.3%) had no IM on capsule testing despite prior diagnoses, prompting re-evaluation of previous endoscopies and removal from surveillance. 13 (28.9%) were referred for gastroscopy: 2 (4.4%) due to capsule intolerance and 11 (24.4%) for abnormal biomarkers, confirming dysplasia in 3 cases. Overall, 71.1% of Barrett's patients avoided gastroscopy after capsule testing.

In the reflux cohort ($n = 232$), mean age was 68.9 years (37.2% males). IM was identified in 54 patients (23.3%), leading to 14 new Barrett's diagnoses and 1 dysplasia. 2 had IM with gastric atrophy without Barrett's. Overall, 86 patients (37.1%) were recommended for gastroscopy. 83/232 (35.8%) underwent the procedure: 62 (26.7%) for abnormal biomarkers and 21 (9.1%) for capsule intolerance or non-diagnostic procedures. Three patients (1.3%) declined despite clinical recommendation. Consequently, 62.9% of patients avoided immediate gastroscopy following capsule testing. Adverse events were minimal and self-limiting: hypotension ($n = 1$), transient hypertension ($n = 2$), and tachycardia ($n = 1$). No serious complications occurred.

Conclusions Capsule sponge testing proved feasible, safe and effective in both cohorts. In the Barrett's cohort, dysplasia was detected in 3 patients. 6 prior Barrett's diagnoses were reclassified as non-Barrett's, avoiding any further unnecessary gastroscopies. In the reflux cohort, IM was identified in 54 patients, resulting in 14 new diagnoses of Barrett's and 1 dysplasia, demonstrating its value for early detection. The procedure showed excellent patient tolerability with only minor transient adverse effects. These findings support ESGE guidance, advocating minimally invasive, nurse-led diagnostic approaches, establishing capsule sponge testing as a safe, scalable, and sustainable tool for risk stratification and early detection of oesophageal disease [4]. By reducing procedure demand, resource use and carbon output, capsule sponge testing represents a practical application of ESGE and BSG Green Endoscopy principles within routine diagnostic pathways [3, 5].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sebastian S, Dhar A, Baddeley R, Donnelly L, Haddock R, Arasaradnam R et al. Green endoscopy: British Society of Gastroenterology (BSG), Joint Accreditation Group (JAG) and Centre for Sustainable Health (CSH) joint consensus on practical measures for environmental sustainability in endoscopy. *Gut* 2023; 72 (1): 12–26. doi:10.1136/gutjnl-2022-328460
- [2] Weusten B, Bisschops R, Dinis-Ribeiro M, di Pietro M, Pech O, Spaander MCW et al. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2023; 55 (12): 1124–46. doi:10.1055/a-2176-2440
- [3] Rodríguez de Santiago E, Dinis-Ribeiro M, Pohl H, Agrawal D, Arvanitakis M, Baddeley R et al. Reducing the environmental footprint of gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement. *Endoscopy* 2022; 54 (8): 797–826. doi:10.1055/a-1859-3726
- [4] Chimba C, Bannister P, Memon A. Changing Epidemiology and Trends in Incidence of Oesophageal Cancer in England, 1985–2017. *European Journal of Public Health* 2021; 31 (3): . doi:10.1093/eurpub/ckab165.230
- [5] Lin Y, Wang H, Fang K, Zheng Y, Wu J. International trends in esophageal cancer incidence rates by histological subtype (1990–2012) and prediction of the rates to 2030. *Esophagus* 2022; 19 (4): 560–8. doi:10.1007/s10388-022-00927-4

PYP302 Post-Endoscopy Upper GI Cancer (PEUGIC) in Wales: A National Multicenter Review of Diagnostic Quality and Contributory Factors

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DOI 10.1055/s-0046-1821242

Aims Determine the burden of post-endoscopy upper gastrointestinal cancer (PEUGIC) across all Welsh Health Boards

1. Identify modifiable endoscopic and system-related factors contributing to diagnostic delay.

Methods A retrospective multicenter review was conducted across six Health Boards in Wales (Complete data available for 5 at the time of writing), including all patients diagnosed with upper GI cancer between August 2021 and July 2024. PEUGIC cases were identified using cancer-tracking systems, MDT records and endoscopy databases. Patient demographics (age, sex); tumour characteristics (site, stage) and endoscopy quality indicators (quality of inspection, mucosal visibility and image quality and record [1]) were recorded using a standardised proforma. For each identified PEUGIC case, root-cause analysis (RCA) was undertaken across four domains: endoscopist, lesion, system and patient factors. These characterised avoidable factors, considering known associations with PEUGIC described previously, e.g. young age, co-morbidity, known Barrett's oesophagus (BO) or oesophageal stricture (OS), gastric ulceration or Unit accreditation status [2]. A panel categorised PEUGIC cases into five types. Overall and individual Health Board PEUGIC rates were calculated. Rates of identified contributory factors and PEUGIC type were compared across Health Boards.

Results Across Wales, 1350 upper GI cancers were diagnosed, of which 82 fulfilled PEUGIC criteria (6.1 %). Rates varied between Health Boards from 3.5 % to 6.3 %. The 82 patients had a mean age of 73 ± 13.8 years, with a gender distribution of 62.2 % male and 37.8 % female. Tumour sites were distributed as follows: oesophagus 51.2 %, GOJ 22.0 %, stomach 23.2 %, and duodenum 3.7 %. Staging showed predominantly advanced disease (T3/T4 = 62 %), frequent nodal involvement (N + = 40 %), and metastasis in 15 %. Most patients received palliative treatment (62 %), with 38 % managed with curative intent. Only 14 % underwent endoscopic resection

Low-quality endoscopic examinations were associated with higher institutional PEUGIC rates, 7 % evidence of mucosal cleaning, and 13 % of documented blue light imaging. In over 60 % of PEUGIC cases, no recorded images were available, and even in cases where images were recorded, BSG Standards on the image record were rarely met.

In 73/82 (89 %) cases, avoidable factors were identified. Inadequate lesion assessment accounted for 81.3 % of all potentially avoidable cases (► Table 1).

► Table 1

Group	Descriptor	Number of cases (%)
A	Focal cancer-associated or pre-malignant lesion with <i>adequate</i> assessment & decision-making	7 (8.8 %)
B	Focal cancer-associated or pre-malignant lesion with <i>inadequate</i> assessment and/or decision-making	65 (81.3 %)
C	Possible missed lesion; endoscopy & decision-making <i>adequate</i>	2 (2.5 %)
D	Possible missed lesion; endoscopy & decision-making <i>inadequate</i>	6 (7.5 %)
E	System-level contributory factors (delays, booking, triage, pathway failures)	2 (2.4 %)

Conclusions PEUGIC rates in Wales are 6.1 %, consistent with reported rates in other UK series. In most cases, avoidable factors have been identified. Mucosal cleaning and inspection, digital enhancement and photo-documentation represent modifiable targets. These findings have informed an all-Wales PEUGIC quality-improvement bundle including mandatory image-capture sets, mucosal-inspection checklists and focused training in subtle-lesion recognition. This model offers a transferable framework for enhancing diagnostic safety and reducing post-endoscopy cancer rates across European endoscopy services.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP303 Total examination time in upper gastrointestinal endoscopy and lesion detection in a large North American cohort

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DOI 10.1055/s-0046-1821243

Aims Longer withdrawal time is a validated quality indicator in colonoscopy and is strongly associated with improved adenoma detection. In contrast, no standardized benchmark exists for upper gastrointestinal endoscopy (EGD) despite increasing evidence, primarily from Asian cohorts, that prolonged inspection may improve detection of early neoplastic lesions. North American data on this topic are scarce, and practice patterns vary widely, with no consensus regarding optimal examination duration. We aimed to evaluate the association between total EGD examination time and the detection of clinically significant lesions in a large, prospectively documented North American population. We hypothesized that longer total examination time would be independently associated with higher detection yield across multiple lesion categories.

Methods We performed a secondary analysis of an ongoing prospective observational study conducted at the Centre hospitalier de l'Université de Montréal (CHUM), a tertiary academic center, between November 2023 and August 2025. Diagnostic, surveillance, and screening EGDs were included. Procedures

with pre-planned therapeutic interventions such as endoscopic mucosal resection, known pre-existing pathology requiring targeted examination (e.g., Barrett's esophagus), or incomplete time documentation were excluded.

Total EGD examination time was defined as the interval from endoscope insertion to complete withdrawal. Recorded times included inspection and routine biopsy sampling. For each procedure, detection of abnormalities was classified into six prespecified categories, the first being the primary outcome: (1) significant visual abnormality, (2) significant biopsy/polyp abnormality, (3) any significant abnormality, (4) any visual abnormality, (5) any biopsy/polyp abnormality, and (6) any abnormality of any type. Clinically significant abnormalities were defined based on consensus criteria established prior to data extraction [1–5].

Associations between total examination time and detection outcomes were modeled using logistic regression with generalized estimating equations (GEE) to account for clustering by individual endoscopist. Time was analyzed as a continuous predictor.

Results A total of 1,169 EGDs met inclusion criteria. The mean patient age was 55.9 years, and 57.5% were female. The mean total examination time was 5.6 ± 3.7 minutes. Detection rates for all abnormality categories increased with longer examination time. For the primary outcome, each additional minute was associated with a 10.9% increase in the odds of identifying at least one significant visual abnormality (OR 1.109; $p < 0.001$). Similar associations were observed across secondary outcomes, with odds ratios ranging from 1.13 to 1.25 per additional minute (all $p < 0.001$).

Modeled detection curves demonstrated a steady increase in probability of abnormality detection as inspection time lengthened, with the most pronounced gains occurring between 4 and 12 minutes. Detection appeared to plateau at approximately 13–15 minutes, suggesting diminishing marginal benefit beyond this duration.

Conclusions In this large North American cohort, longer total EGD examination time was strongly and consistently associated with higher detection of significant mucosal abnormalities. The relationship persisted across multiple lesion categories and demonstrated a reproducible plateau at approximately 13–15 minutes. These findings support the concept that total EGD examination time represents a meaningful, measurable quality metric analogous to withdrawal time in colonoscopy. Future studies should validate these results in multicenter settings, refine optimal time thresholds, and investigate the role of automated quality-monitoring tools capable of providing real-time feedback on inspection duration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dong L. et al. Relationship between observation time and detection rate of focal lesions in Esophagogastroduodenoscopy: a single-center, retrospective study. *BMC Gastroenterol* 24: 75 2024
- [2] Gao Y. et al. Setting 6-Minute Minimal Examination Time Improves the Detection of Focal Upper Gastrointestinal Tract Lesions During Endoscopy: A Multicenter Prospective Study. *Clinical and Translational Gastroenterology* 14: e00612 2023
- [3] Park J.M. et al. Longer Observation Time Increases Proportion of Neoplasms Detected by Esophagogastroduodenoscopy. *Gastroenterology* 153: 460–469.e461 2017
- [4] Teh J.L. et al. Longer examination time improves detection of gastric cancer during diagnostic upper gastrointestinal endoscopy. *Clin Gastroenterol Hepatol* 13: 480–487.e482 2015
- [5] Desai M. et al. Impact of withdrawal time on adenoma detection rate: results from a prospective multicenter trial. *Gastrointest Endosc* 97: 537–543.e532 2023

PYP304 Beyond age thresholds: Limited discriminative value of age for clinically significant findings in dyspepsia and GERD

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DOI 10.1055/s-0046-1821244

Aims Age thresholds have long guided endoscopic evaluation for dyspepsia, yet their clinical validity in contemporary low-risk populations—and their applicability to gastroesophageal reflux disease (GERD)—remain uncertain. With declining gastric cancer incidence and growing emphasis on risk-based decision models, re-examining the diagnostic value of age is timely. This study aimed to assess whether age effectively predicts clinically significant findings (CSFs) in patients with treatment-refractory dyspepsia or GERD and to define optimal age cutoffs for endoscopic triage.

Methods We retrospectively analyzed a large consecutive cohort of adults undergoing diagnostic upper endoscopy for dyspepsia or GERD following inadequate response to proton pump inhibitor (PPI) therapy. Individuals with alarm features, prior upper gastrointestinal malignancy, or recent endoscopy were excluded. Endoscopic findings were classified as CSFs if they carried diagnostic or therapeutic relevance, including Barrett's esophagus, severe esophagitis, peptic ulcer disease, or neoplasia. Logistic regression was used to identify independent predictors of CSFs, and receiver operating characteristic (ROC) analysis was applied to evaluate the discriminative capacity of age and determine optimal cutoffs.

Results Among 20,248 procedures (13,842 for dyspepsia and 6,406 for GERD), endoscopic yield differed markedly by indication. CSFs were detected in 12.8% of GERD and 5.6% of dyspepsia cases. Esophageal pathology—particularly erosive esophagitis, Barrett's esophagus, and hiatal hernia—dominated among reflux patients, whereas gastric and duodenal lesions were more frequent in dyspepsia. Multivariate analysis revealed that age ≥ 60 years independently predicted CSFs in GERD (adjusted OR 1.66, 95% CI 1.38–2.00) but not in dyspepsia (OR 0.97, 95% CI 0.82–1.15). Male sex was a consistent predictor across both indications, and in GERD, Arab ethnicity and hiatal hernia also conferred increased risk. Malignancy was exceedingly rare ($< 0.15\%$). ROC analysis demonstrated minimal discriminative power for age (AUC 0.574 in GERD; 0.512 in dyspepsia), with Youden-derived optimal thresholds of 59 and 52 years, respectively—offering limited clinical utility.

Conclusions In this large real-world cohort of non-alarm, PPI-refractory patients, age alone was a weak discriminator of clinically significant endoscopic pathology. Although older age modestly increased diagnostic yield in GERD, its overall predictive performance was poor, particularly in dyspepsia. These findings challenge the continued reliance on uniform age thresholds for endoscopy referral and support the adoption of context-specific, multifactorial risk models that integrate demographic and structural predictors to optimize diagnostic efficiency and resource utilization.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP305 Improving Cellular Yield During Endoscopic Brush Sampling By Not Resheathing – A Simple Modification

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DOI 10.1055/s-0046-1821245

Aims Brush cytology allows sampling of broad mucosal areas. It has various gastrointestinal indications such as malignancy, Barrett's esophagus and *Helicobacter pylori* infection. During endoscopy, the brush bristles exit a protective sheath. After sampling, the bristles retract back into the sheath. While few studies have explored the role of the plastic sheath on cellularity, sheath-influenced loss of cellularity is observed in the literature. [1,2] As diagnostic accuracy depends on cellularity yield, this study investigated whether not retracting the bristles into the sheath is feasible and results in better cellular yield (► **Table 1**).

► Table 1

	Brush Cellularity	
	insufficient-to-low (n)	moderate-to-high (n)
open brush	0	13
closed sheath	9	10

The Fisher exact test statistic value is 0.0042. The result is significant at $p < .05$.

Methods Patients with Barrett esophagus undergoing standard-of-care endoscopy were included at the Antwerp University Hospital. Endoscopy was performed by two experienced gastroenterologists. Brush samples were taken with either 'standard-of-care' brush retraction (= control) or 'unsheathed' (= intervention). Samples were stored in Cytolyt cell medium and directly transported to the department of Pathology for cytological evaluation and formalin-fixation for cellblock. Cellularity results were defined as 'insufficient', 'low', 'moderate' and 'high'. [3] Cellularity results were bundled in two groups 'insufficient-to-low' and 'moderate-to-high' in order to facilitate statistical analysis using Fisher's exact test at 95 % confidence interval. Diagnostic accuracy was evaluated whether the brush cytology could confirm diagnosis of Barrett esophagus, irrespective of dysplasia grade (► Table 2).

► Table 2

	Diagnostic accuracy	
	not diagnostic (n)	diagnostic (n)
open brush	5	8
closed sheath	9	10

The Fisher exact test statistic value is 0.7249. The result is not significant at $p < .05$.

Results Seventeen patients with Barrett esophagus were included during a one-year period for a total of 32 brush samples. When brush retraction was performed, cellularity was insufficient-to-low in 47.4 % (9 brushes) and moderate-to-high in 52.6 % (10 brushes). When the unsheathed technique was used, cellularity was moderate-to-high in 100 % (13 brushes). There were no brushes that yielded insufficient-to-low cellularity. When comparing the two techniques, there is more cellular yield when not retracting ($p = 0.0042$). Diagnostic accuracy was 52.6 % (10/19) when brush retraction was performed, while diagnostic accuracy increased to 61.5 % (8/13) with the unsheathed technique. This result was not statistically significant (p -value 0.72).

Conclusions This study points towards better cellular yield by not retracting the brush into the sheath during endoscopic brush sampling. A larger sample size is needed to evaluate diagnostic benefit and extrapolation for other indications. As part of the Horizon Europe Project ENDEAVOR, endoscopic brush samples will be taken from multiple international sites between abstract submission and presentation to evaluate result replicability and performance in a population with Barrett esophagus high-grade dysplasia and T1 adenocarcinoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Silverman W.B., Jensen C.S., Crook T.W. et al. Bile duct brushings in a pig model. *Int J Gastrointest Canc* 32: 31–34 2002. doi:10.1385/IJGC:32:1:31
- [2] *Acta Cytologica* 2014; 58 (4): 398–405. doi:10.1159/000364852
- [3] *Clinical Endoscopy* 2017; 50 (6): 614–616. doi:10.5946/ce.2017.113

PYP306 Adenoma detection rates in IBD surveillance colonoscopy: a prospective study

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DOI 10.1055/s-0046-1821246

Aims In average-risk colorectal cancer (CRC) screening, colonoscopy quality is commonly assessed by the detection of sporadic adenomas and withdrawal time (WT). In inflammatory bowel disease (IBD) surveillance, however, withdrawal is more complex: even in the absence of endoscopic inflammation, endoscopists are required to perform detailed segmental IBD assessment, and obtain biopsies. Our hypothesis was that in a screening-age cohort of IBD patients without active inflammation, the yield of sporadic adenomas should be similar to that observed in non-IBD patients. We aimed to test this hypothesis in a real-world cohort, recognizing that current quality benchmarks are extrapolated from average-risk screening despite IBD patients having approximately twice the CRC risk.

Methods We conducted a prospective observational study using a video library of colonoscopies performed at the University of Montreal Hospital Center (CHUM). All consecutive patients aged ≥ 45 years who underwent complete colonoscopy between 2023 and 2025 were included. Patients with endoscopic activity (Mayo score > 0 or total Simple Endoscopic Score for Crohn's Disease [SES-CD] > 0), incomplete procedures, endoscopic mucosal resection, missing histopathology, or incomplete clinical data were excluded. The primary outcome was the detection of sporadic adenomas (adenoma detection rate, ADR) in IBD compared with non-IBD patients, adjusted for WT. Secondary outcomes were mean WT, polyp detection rate, adenomas per colonoscopy, polyps per colonoscopy, advanced adenoma detection rate, and sessile serrated lesion detection rate.

Results A total of 1421 colonoscopies were analyzed, including 155 in IBD patients and 1266 in non-IBD patients. When WT was fixed at 11.8 minutes, the proportion of colonoscopies with at least one sporadic adenoma was significantly lower in IBD than in non-IBD patients (18.5 % vs. 43.4 %). The gain in adenoma detection with each additional minute of WT was markedly attenuated in IBD: the odds of detecting an adenoma increased by 16.7 % per additional minute in non-IBD patients compared with 2.7 % per minute in IBD patients. To achieve an adenoma detection of 26 %, an estimated WT of 6.8 minutes was required in non-IBD colonoscopies versus 28.3 minutes in IBD colonoscopies. In routine practice, IBD colonoscopies had a shorter mean WT than non-IBD colonoscopies (10.4 vs. 12.0 minutes).

Conclusions In a screening-age cohort without endoscopic IBD activity, the detection of sporadic adenomas was substantially lower in IBD than in non-IBD patients and increased far more slowly with longer withdrawal times. These findings suggest that IBD-specific procedural demands during withdrawal, including detailed inflammatory assessment and biopsy protocols, limit the effective time available for adenoma detection. Quality thresholds derived from non-IBD screening colonoscopy may therefore not be applicable to IBD surveillance, and dedicated IBD-specific quality metrics should be developed.

Conflicts of Interest Daniel von Renteln has received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. The remaining authors declare that they have no conflict of interest

PYP307 Four Years at a Newly-Commenced Colon Capsule Endoscopy Centre

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DOI 10.1055/s-0046-1821247

Aims Colon Capsule Endoscopy (CCE) is a minimally invasive alternative to standard colonoscopy. It was introduced in 2021 as part of an NHS pilot scheme with fifty other hospitals. In this pilot, 70% of patients did not require a subsequent colonoscopy, and a substantial proportion of the remaining 30% were downgraded to non-urgent [1]. CCE is now established as a routine service nationally.

CCE presents significant advantages when compared to traditional colonoscopy. When bowel preparation is adequate and the study is completed, it demonstrates a high sensitivity for polyps and malignancy that is comparable to colonoscopy [2]. It is generally well-tolerated, with low complication and discomfort rates [3]. Finally, CCE may contribute to addressing long waiting lists and capacity pressures with colonoscopy.

Our Trust is one of the highest-volume sites nationally for delivering CCE. This analysis reviews all CCE reports since the commencement of the service at our Trust to assess its impact and how it can be used to benefit different patient groups.

Methods We reviewed all CCE reports between January 2021 and September 2025. Eligible patients included those referred via the 2-week-wait (2WW) colorectal cancer pathway who were considered lower risk (faecal immunochemical testing (FIT) of <100). The reasons for referral, specifically the presence of NG12 symptoms such as rectal bleeding or a change in bowel habit, were recorded. A CCE was also offered if a colonoscopy was contraindicated or had previously failed, or on the basis of patient preference. Biochemistry and demographic data were recorded. Bowel preparation was scored using the Boston Bowel Preparation Scale, with the CCE marked as complete if a satisfactory view of all sections of the colon was achieved. If the study was marked as incomplete, the subsequent investigation was reviewed. CCE findings, normal study rates and whether the patient was stepped down from the 2WW pathway were also documented.

Results 473 CCE cases were analysed in total. The male to female ratio was 214:259. The median age was 57 (IQR = 20). 385 patients (81%) were White British. 76 (16%) belonged to an ethnic minority, and 12 (3%) did not have an ethnicity recorded.

The most common reason for referral was a change in bowel habit (n = 285). Other indications were weight loss (n = 75), rectal bleeding (n = 175), abdominal pain (n = 176) and anaemia (n = 93). In the latter case, only 89 patients had biochemical evidence of anaemia on referral. Patients could have more than one referral symptom.

FIT was positive in 256 patients. The mean FIT with 22.5, with a similar average of 22.9 in over 70s. The median bowel preparation score was 8 (IQR = 3).

402 CCEs (84.9%) were marked as completed, with 349 patients (73.8%) stepped down from the 2WW pathway. 102 patients (21.6%) had a subsequent colonoscopy, including 60 for polypectomy. 32 patients had a flexible sigmoidoscopy following CCE for completion of imaging.

No abnormality was identified in 98 (20.6%) patients. In the remaining patients, diagnoses identified included polyps (n = 141), diverticulae (n = 159), haemorrhoids (n = 42), colitis (n = 19), ulcer (n = 17), telangiectasia (n = 11) and malignancy (n = 1).

74 CCEs (15.6%) were marked as incomplete. The most common reason for this was inadequate bowel preparation (n = 52). Other causes were the battery running out (n = 17), rapid transit (n = 2), a camera error (n = 2) and gastric retention (n = 1).

Conclusions CCE has been successfully introduced at our site, demonstrating a similar stepdown rate to published studies and a completion rate that exceeded the rate reported in the national pilot. Further investigations were not required in more than 70% of patients. These findings reaffirm the role of CCE in

reducing pressure on colonoscopy services, in this case by identifying and investigating lower risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rondonotti E, Spada C, Adler S, May A, Despott EJ, Koulaouzidis A, Panter S, Domagk D, Fernández-Urien I, Rahmi G, Riccioni ME, van Hooft JE, Hassan C, Pennazio M. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy* 2018; 50 (4): 423–446. doi:10.1055/a-0576-0566
- [2] Turvill J, Haritakis M, Pygall S, Bryant E, Cox H, Forshaw G, Musicha C, Allgar V, Logan R, Alindon M. Multicentre Study of 10,369 Symptomatic Patients Comparing the Diagnostic Accuracy of Colon Capsule Endoscopy, Colonoscopy and CT Colonography. *Alimentary Pharmacology & Therapeutics* 2025; 61 (9): 1532–1544. doi:10.1111/apt.70046
- [3] NHS England. Harnessing innovation in cancer care. London: NHS England; 2023 Available from <https://www.england.nhs.uk/cancer/harnessing-innovation-in-cancer-care/>

PYP308 Diagnostic yield of Endoscopic Ultrasound (EUS) in Indeterminate Biliary Strictures: A Retrospective Monocentric Study

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DOI 10.1055/s-0046-1821248

Aims Biliary strictures represent a major diagnostic challenge due to the difficulty in distinguishing benign from malignant etiologies. Endoscopic ultrasound (EUS) allows detailed exploration of the biliary and pancreatic ducts and enables targeted tissue sampling for diagnostic purposes. The aim of this study was to assess the diagnostic performance and clinical impact of EUS in the management of indeterminate biliary strictures.

Methods This was a retrospective, single-center, descriptive study including all patients presenting with a biliary stricture suspected on cholangio-MRI (MRCP) without evident mass, and subsequently explored by EUS over a six-year period (2019–2025). Collected data included clinical, biological, morphological, histological, and follow-up characteristics.

Results Twenty-five patients were included. The median age was 59 years (range 42–85), with a slight male predominance (14 men, 11 women). Clinically, all patients initially presented with cholestatic jaundice, with a mean total bilirubin (TB) level of 12,1 mg/dL.

The strictures were distal (common bile duct) in 83% of cases (20 patients) and hilar in 17% (5 patients). The median stricture length was 10 mm, and the appearance was predominantly malignant in 8 cases, and benign in 5 cases.

Fine-needle aspiration/biopsy (FNA/FNB) was performed in 64% of patients (16/25), using variable-caliber needles: mainly 22G (63%), followed by 20G (25%) and 19G (12%), according to lesion location and consistency. Histopathological analysis revealed malignant lesions in 13 cases (52%), mainly cholangiocarcinomas (n = 7) and pancreatic head adenocarcinomas (n = 6).

Benign lesions were observed in 7 patients (28%), including fibrotic Odditis, post-cholecystectomy biliary strictures, primary sclerosing cholangitis, and IgG4-related cholangitis.

A minor hemorrhagic complication post FNB/A was reported, with no other major adverse events.

Regarding therapeutic outcomes, 4 patients with malignant disease (16%) underwent curative surgical resection, and 4 others (16%) received palliative chemotherapy.

Conclusions EUS enabled a definitive diagnosis in nearly 80% of malignant cases, thereby guiding therapeutic management. It represents a key first-line diagnostic tool in the evaluation of biliary strictures, owing to its high-resolution imaging and ability to obtain targeted tissue samples. Further systematic

histological correlation and prospective follow-up studies are warranted to refine the overall diagnostic performance of this technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP309 Diagnostic Performance of Artificial Intelligence Models for the Early Diagnosis of Gastric Cancer: A Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1821249

Aims Gastric cancer remains a major contributor to global cancer mortality. Although endoscopy is the most effective method for detecting early gastric cancer (EGC), the identification of subtle early lesions continues to pose a clinical challenge. Artificial intelligence (AI) has emerged as a promising adjunct to enhance diagnostic accuracy. AI systems are trained using different methodological approaches, and their diagnostic performance may vary. This meta-analysis aimed to evaluate the diagnostic accuracy of AI-assisted endoscopy for EGC and to compare the performance of different AI systems

Methods PubMed, Embase, Cochrane, and Web of Science were systematically searched for articles. Pooled sensitivity and specificity were calculated using random-effects models; an SROC curve was constructed and AUC estimated. Histopathology served as the reference standard. Subgroup analyses were performed according to AI system type and endoscopic imaging modality. Risk of bias was assessed using the QUADAS-2 tool, and publication bias was evaluated with funnel plots

Results Twenty-one studies were included, conducted in China, Japan and Korea. AI achieved an overall AUC of 0.96 (95% CI, 0.94–0.98), pooled sensitivity of 91% (95% CI, 88–94), and specificity of 90% (95% CI, 85–94), with substantial heterogeneity. Deep-learning systems showed sensitivity comparable to hybrid machine learning–deep learning models (89.9% [95% CI, 84.1–93.8] vs 91.2% [95% CI, 85.5–94.8]) but achieved significantly higher specificity (89.4% [95% CI, 86.3–91.9] vs 83% [95% CI, 79.2–86.3], $p \leq 0.005$). No significant methodological or publication bias was identified [1–41]

Conclusions AI-assisted endoscopy demonstrates high diagnostic accuracy for the early detection of gastric cancer. AI systems are not equivalent: deep-learning models provide the best performance, particularly due to their superior specificity

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ferlay J, Ervik M, Lam F, Laversanne M, Colombet M, Mery L et al. Global cancer observatory: cancer today (version 1.1). Lyon, France: International Agency for Research on Cancer.
- [2] Miller KD, Nogueira L, Devasia T, Mariotto AB, Yabrof KR, Jemal A, Kramer J, Siegel RL. Cancer treatment and survivorship statistics. *CA Cancer J Clin* 2022; 72 (5): 409–36
- [3] Zhang LM, Zhang Y, Wang L, Wang JY, Liu YL. Diagnosis of gastric lesions through a deep convolutional neural network. *Dig Endosc* 2021; 33 (5): 788–96
- [4] An P, Yang D, Wang J et al. A deep learning method for delineating early gastric cancer resection margin under chromoendoscopy and white light endoscopy. *Gastric Cancer* 2020; 23: 884–892
- [5] Hosny A, Parmar C, Quackenbush J et al. Artificial intelligence in radiology. *Nat Rev Cancer* 2018; 18: 500–10
- [6] Samuel AL. Some studies in machine learning using the game of checkers, II-recent progress. *Ibm J. Res. Dev* 1988; 11: 335–6
- [7] Dey A. Machine learning algorithms: a review. *IJCSIT* 2016; 7: 1174–9
- [8] Lecun Y et al. Gradient-based learning applied to document recognition. *Proc IEEE* 1998; 86: 2278–324
- [9] Schmidhuber J. Deep learning in neural networks: an overview. *Neural Netw* 2015; 61: 85–117

- [10] Castellino RA. Computer aided detection (CAD): an overview. *Cancer Imag* 2005; 5: 17–19
- [11] Chiarello MM, Fico V, Pepe G, Tropeano G, Adams NJ, Altieri G, Brisinda G. Early gastric cancer: A challenge in Western countries. *World J Gastroenterol* 2022; 28 (7): 693–703
- [12] Chartrand G, Cheng PM et al. Deep learning: a primer for radiologists. *Radiographics* 2017; 37: 2113–31
- [13] Higgins JPT, Thompson SG, Deeks JJ, Altman DG. Measuring inconsistency in meta-analyses. *BMJ*. 2003; 327: 557–60. doi:10.1136/bmj.327.7414.557
- [14] Reitsma JB, Glas AS, Rutjes AW, Scholten RJ, Bossuyt PM, Zwinderman AH. Bivariate analysis of sensitivity and specificity produces informative summary measures in diagnostic reviews. *J Clin Epidemiol* 2005; 58: 982–90
- [15] Agarwal S et al. Evaluation of the use of convoluted neural network for detecting early gastric cancer and predicting its invasion depth: A systematic review and meta-analysis. *Dig Liver Dis*. 2025;
- [16] Wu L., Zhou W., Wan X., Zhang J., Shen L. et al. A deep neural network improves endoscopic detection of early gastric cancer without blind spots. *Endoscopy* 2019; 51 (6): 522–531. doi:10.1055/a-0855-3532
- [17] Ueyama H., Kato Y., Akazawa Y. et al. Application of artificial intelligence using a convolutional neural network for diagnosis of early gastric cancer based on magnifying endoscopy with narrow-band imaging. *Journal of Gastroenterology and Hepatology* 2021; 36 (2): 482–489. doi:10.1111/jgh.15190
- [18] Chang Y.H., Shin C.M., Lee H.D et al 2024; Real-World Application of Artificial Intelligence for Detecting Pathologic Gastric Atypia and Neoplastic Lesions. *Journal of Gastric Cancer* 24 (3): 327–340
- [19] Lee H., Chung J.-W. et al. Validation of Artificial Intelligence Computer-Aided Detection on Gastric Neoplasm in Upper Gastrointestinal Endoscopy. *Diagnostics* 2024; 14 (23): 2706. doi:10.3390/diagnostics14232706
- [20] Tang D., Wang L. et al. Development and validation of a real-time artificial intelligence-assisted system for detecting early gastric cancer: A multicentre retrospective diagnostic study. *EBioMedicine* 2020; 62: 103146. doi:10.1016/j.ebiom.2020.103146
- [21] Horiuchi Y., Hirasawa T. et al. Performance of a computer-aided diagnosis system in diagnosing early gastric cancer using magnifying endoscopy videos with narrow-band imaging (with videos). *Gastrointestinal Endoscopy* 2020; 92 (4): 856–865. doi:10.1016/j.gie.2020.04.079
- [22] Hirasawa T. et al. Application of artificial intelligence using a convolutional neural network for detecting gastric cancer in endoscopic images. *Gastric Cancer* 2018; 21 (4): 653–660. doi:10.1007/s10120-018-0793-2
- [23] Ikenoyama Y. et al. Detecting early gastric cancer: Comparison between the diagnostic ability of convolutional neural networks and endoscopists. *Digestive Endoscopy* 2021; 33 (1): 141–150. doi:10.1111/den.13688
- [24] Hu H., Gong L., Dong D. et al. Identifying early gastric cancer under magnifying narrow-band images via deep learning: a multicenter study. *Gastrointestinal Endoscopy* 2021; 93 (6): 1333–1341. doi:10.1016/j.gie.2020.11.014
- [25] Kanesaka T. et al. Computer-aided diagnosis for identifying and delineating early gastric cancers in magnifying narrow-band images. *Gastrointestinal Endoscopy* 2018; 87 (5): 1339–1344. doi:10.1016/j.gie.2017.11.029
- [26] Zhou B., Rao X., Xing H., Ma Y., Wang F., Rong L. A convolutional neural network-based system for detecting early gastric cancer in white-light endoscopy. *Scandinavian Journal of Gastroenterology* 2022; 57 (11): 1309–1317. doi:10.1080/00365521.2022.2113427
- [27] Namikawa K., Hirasawa T. et al. Artificial intelligence–based diagnostic system classifying gastric cancers and ulcers: comparison between the original and newly developed systems. *Endoscopy* 2020; 52 (10): 877–883. doi:10.1055/a-1194-8771
- [28] Feng J., Yu S. et al. A system based on deep convolutional neural network improves the detection of early gastric cancer. *Frontiers in Oncology* 2022; 12:1021625. doi:10.3389/fonc.2022.1021625
- [29] Noda H., Kaise M., Higuchi K. et al. Convolutional neural network-based system for endocytoscopic diagnosis of early gastric cancer. *BMC Gastroenterology* 2022; 22: 237. doi:10.1186/s12876-022-02312-y
- [30] Li L., Chen Y., Shen Z. et al. Convolutional neural network for the diagnosis of early gastric cancer based on magnifying narrow band imaging. *Gastric Cancer* 2020; 23 (1): 126–132. doi:10.1007/s10120-019-00992-2

- [31] Li J., Zhu Y., Dong Z. et al. Development and validation of a feature extraction-based logical anthropomorphic diagnostic system for early gastric cancer: A case-control study. *eClinicalMedicine* 2022; 46: 101366. doi:10.1016/j.eclinm.2022.101366
- [32] Dong Z., Tao X., Du H. et al. Exploring the challenge of early gastric cancer diagnostic AI system face in multiple centers and its potential solutions. *Journal of Gastroenterology* 2023; 58 (10): 978–989. doi:10.1007/s00535-023-02025-3
- [33] Dong Z., Wang J., Li Y. et al. Explainable artificial intelligence incorporated with domain knowledge diagnosing early gastric neoplasms under white light endoscopy. *npj Digital Medicine* 2023; 6: 64. doi:10.1038/s41746-023-00813-y
- [34] Wu L., He X., Liu M., Xie H., An P., Zhang J., Zhang H., Ai Y. et al. Evaluation of the effects of an artificial intelligence system on endoscopy quality and preliminary testing of its performance in detecting early gastric cancer: a randomized controlled trial. *Endoscopy* 2021; 53 (11): 1199–1207. doi:10.1055/a-1350-5583
- [35] Wu L., Wang J. et al. Deep learning system compared with expert endoscopists in predicting early gastric cancer and its invasion depth and differentiation status (with videos). *Gastrointestinal Endoscopy* 2022; 95 (1): 92–104. doi:10.1016/j.gie.2021.06.033
- [36] He X., Wu L. et al. Real-time use of artificial intelligence for diagnosing early gastric cancer by magnifying image-enhanced endoscopy: a multi-center diagnostic study (with videos). *Gastrointestinal Endoscopy* 2022; 95 (4): 671–678. doi:10.1016/j.gie.2021.11.040
- [37] Deeks J.J. et al. The performance of tests of publication bias and other sample size effects in systematic reviews of diagnostic test accuracy was assessed. *Journal of Clinical Epidemiology* 2005; 58 (9): 882–893
- [38] Viechtbauer W. Conducting meta-analyses in R with the metafor package. *J Stat Softw* 2010; 36 (3): 1–48
- [39] Lee MCM, Parker CH, Liu LWC, Farahvash A, Jeyalingam T. Impact of study design on adenoma detection in the evaluation of artificial intelligence-aided colonoscopy: a systematic review and meta-analysis. *Gastrointest Endosc* 2024; 99 (5): 676–687.e16
- [40] Jiang K, Jiang X, Pan J, Wen Y, Huang Y et al. Current Evidence and Future Perspective of Accuracy of Artificial Intelligence Application for Early Gastric Cancer Diagnosis with Endoscopy: A Systematic and Meta-Analysis. *Front Med (Lausanne)* 2021; 8: 629080
- [41] Pei-Chin C et al. The Accuracy of Artificial Intelligence in the Endoscopic Diagnosis of Early Gastric Cancer: Pooled Analysis Study. *J Med Internet Res* 2022; 24 (5): e27694

Exciting Esophageal Trinkets

16/05/2026, 09:00–10:00

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PYP310 Post-peroral endoscopic myotomy dyspeptic symptoms: A novel adverse event to consider prior to treatment?

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Aims There is evidence regarding the occurrence of dyspeptic symptoms due to gastroparesis following thoracic surgeries and esophagectomies, as a consequence of iatrogenic vagal nerve injury. Peroral endoscopic myotomy (POEM) involves sectioning the esophagogastric muscularis propria, often transmurally, which could affect the vagal plexus and, therefore, produce gastroparesis and dyspepsia symptoms and as an adverse event. The aim of our study was to evaluate the prevalence of dyspepsia symptoms in patients undergoing POEM at our center.

Methods Cross-sectional study including patients who underwent POEM at our center (June 2018 – December 2024). Demographic, clinical, endoscopic, and manometric variables were collected. Through telephone interviews, the presence of dyspeptic symptoms before and after the procedure was assessed, as well as the perceived quality of life after the intervention using a Likert scale (0–4).

Results A total of 112 patients who underwent POEM between 6 and 78 months prior to the study were evaluated. Ninety-four percent of patients had an Eckardt Score ≤ 3 , with high or very high improvement in quality of life (score 3–4) in 90 % of patients. Thirty-two patients (28 %) with dyspeptic symptoms were identified, of which 25 (78 %) presented postprandial distress-type symptoms (fullness/early satiety). Among patients with dyspepsia, 15 patients experienced symptoms before the procedure, while 17 cases (15 %) corresponded to new-onset dyspepsia. No statistically significant associations were found between any variables and the occurrence of dyspepsia.

Conclusions Up to 15 % of patients undergoing POEM experienced de novo post-POEM dyspeptic symptoms. Seventy-eight percent of these patients presented fullness/early satiety, possibly related to iatrogenic vagal nerve injury. However, quality of life manifestly improved in 90 % of cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP311 Diagnostic Yield of Multilevel Biopsies and Rate of Progression in Eosinophilic Esophagitis (EoE): A Long-Term Follow-Up Cohort Study

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DOI 10.1055/s-0046-1821251

Aims Background: Current guidelines for eosinophilic esophagitis (EoE) recommend obtaining biopsies from three different esophageal levels to maximize diagnostic yield, as well as life-long treatment to prevent complications such as dysmotility and strictures. However, most available evidence comes from randomized controlled trials, and in real-world practice—where the disease is relatively uncommon—biopsy protocols are often not strictly followed. Furthermore, the natural history of EoE and the timing of disease progression remain insufficiently characterized.

Aims: To describe diagnostic delay in a real-world setting and to evaluate rates of endoscopic progression over long-term follow-up.

Methods We performed a retrospective review of medical records from patients diagnosed with EoE or other non-GERD esophagitis at Umeå University Hospital (Umeå, Sweden) between 2014 and 2024. Data collected included patient demographics, comorbidities, endoscopic findings at the index gastroscopy, diagnostic delay between the initial gastroscopy and definitive histological diagnosis, presenting symptoms, and treatments received [1–4].

Results Of the 38 patients initially screened, 22 were included in the final analysis with a confirmed diagnosis of EoE. Seventeen patients (77 %) were male, with a mean age of 51 years (SD: 38–64). Overall, 15 patients (68 %) presented with food bolus impaction, 19 (86 %) reported dysphagia, and 14 (70 %) had dysphagia lasting more than 6 months, and 2 (10 %) experienced weight loss. Atopic comorbidities were present in 11 patients (52 %), including asthma in 10 (45 %) and atopic dermatitis in 2 (9 %). The diagnosis was established at the index gastroscopy in 17 of the 22 patients (77 %), despite the recommended multilevel biopsy protocol—obtaining samples from three esophageal levels—being followed in only 23 procedures (38 %). The median diagnostic delay between the first gastroscopy and the definitive histological diagnosis was 4.5 weeks. At index gastroscopy, 38 % of patients displayed rings, 11 % had furrows, 13 % had exudates, and 5 % had strictures. After a mean follow-up of 39 months, 4 % displayed rings, 6 % furrows, 11 % exudates, and 4 % strictures. Overall, 21 patients (95 %) received treatment: 1 patient (4 %) followed an elimination diet, 3 (13 %) received fluticasone, 8 (36 %) budesonide, and 20 (90 %) proton pump

inhibitors (PPIs). Ten patients (45%) received more than one treatment modality.

Conclusions In this real-world cohort, the diagnostic yield of esophageal biopsies was high, even when the guideline-recommended multilevel protocol was not strictly adhered to, enabling diagnosis in approximately three-quarters of patients. The median diagnostic delay was about one month. Nearly all patients received treatment, and after a mean follow-up of 39 months, there was no clinically relevant endoscopic progression.

Conflicts of Interest RV and UA are consultant to Boston Scientific

References

- [1] Moawad FJ et al. *Am J. Gastroenter.* 2013
- [2] Dellon ES et al. *Gastroenterology.* 2018
- [3] Eid R et al *Journ Allergy Clin Immunology Pract.* 2022
- [4] Dellon ES et al. *Am. Journ. of Gastroenter.* 2025

PYP312 Endoscopic Ultrasound (EUS)-guided portal pressure gradient measurement: clinical usefulness

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DOI 10.1055/s-0046-1821252

Aims We report our experience on EUS-guided portal pressure gradient measurement (EUS-PPGm).

Methods Prospective study of patients referred for EUS-PPGm. A 25G dedicated needle was used. A 19G FNA needle was used for EUS-guided bilobar liver biopsy (EUS-BLB).

Results EUS-PPGm was performed in 72 patients. Indications: Assessment of MASLD in morbid obese patients: 43. Portal hypertension (PH): 26. Evaluation for curative therapy in hepatocellular carcinoma (HCC): 3. Additional procedures were performed in the same endoscopic session: Fifty-three (74%) EUS-BLB, 3 band ligation for esophageal varices and 1 EUS-guided coil therapy for gastric varices. EUS-PPGm was obtained in 65/72 patients (90%). In 12/43 morbid obese patients (28%) the EUS-PPGm was > 6 mmHg without varices nor fibrosis on EUS-BLB. In morbid obese patients, there was a statistically significant difference in the S3 score of steatosis in the group of portal hypertension (33%) in comparison with the no portal hypertension group (4%). Patients were treated accordingly with the results of EUS-PPGm. In 7 cases (10%) EUS-PPGm was not obtained. For rapid breathing movements (1 case) and for non-reliable pressure measurements (6 cases). In one case the 25G needle passed in close proximity to the hepatic artery. We experienced difficulty in puncture the hepatic and the portal vein in one and two cases, respectively. In one case the 25G needle failed to transverse the liver capsule. Mean time to obtain EUS-PPGm 23 ± 2 minutes for EUS-BLB 16 ± 2 minutes and for combined EUS-PPGm plus EUS-BLB 44 ± 2 minutes. Three adverse events were observed: 1 mild epigastric pain, 1 self-limited bleeding from the cardias and 1 atrial fibrillation.

Conclusions EUS-PPGm, even combined with EUS-BLB, seems safe, providing relevant clinical information. A noteworthy proportion of morbid obese patients were precociously diagnosed of portal hypertension in early reversible stages without liver fibrosis on EUS-BLB.

Conflicts of Interest Rafael Romero-Castro is a consultant to Cook Medical. The other authors declare they do not have conflicts of interest.

PYP313 Modified endoscopic vacuum therapy as first-line approach in the management of upper gastrointestinal tract leaks and fistulas

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DOI 10.1055/s-0046-1821253

Aims Endoscopy has emerged as the first-line treatment of anastomotic leaks and fistulas after esophagogastric surgery. Endoscopic vacuum therapy (EVT) is one of the most commonly used options with clinical success above 66%. However, it is associated with high costs, can be technically challenging, and is associated with the need of parental nutrition. Our center adopted a strategy using a handcrafted modified EVT (mEVT) based on a nasojejunal tube, allowing concomitant enteral nutrition. The aim of this study is to evaluate the feasibility and efficacy of mEVT as single or combined therapy in clinical practice.

Methods We report all consecutive patients treated with mEVT in our center, between 01/01/2023 and 31/10/2025 and with a 30-day follow-up period were included. All had upper gastrointestinal tract defect referred to mEVT by the multidisciplinary team conference.

Results In total, 24 patients were referred to mEVT, 17 (70.8%) were male, with a median age of 59 (IQR 54-69) years. The aetiology of the defect was predominantly postoperative (91.6%): 12 oncologic cases, 8 bariatric surgery cases (4 sleeve gastrectomies, 3 bypass surgeries and 1 single anastomosis stomach-ileal bypass) and 1 iatrogenic gastric injury (intraoperative). In 17 patients (70.8%), postoperative sepsis with organ dysfunction required intensive care admission. The median defect diameter was 10.0 (IQR 5.0-25.0) mm. Diagnosis occurred, a median of 6.0 (IQR 4-14) days after surgery and mEVT was the first-line therapeutic option in 18 patients (75%). 12 patients (50%) had abscess cavity associated to the leak. Adjunctive endoscopic techniques were used in 15 patients (62.5%), mostly including double-pigtail stents or over-the-scope clips. Clinical success was achieved in 22 patients (91.6%) after a median of 3 (IQR 2-5) sessions and the mean duration of each session was 6.03 (± 1.16) days. Four postoperative patients were treated without complementary percutaneous drainage. Patients required exclusive parenteral nutrition only for a median of 3 days (IQR 0-7) and were fed via enteral nutrition during a median of 14 (IQR 8-28) days, starting on the day of mEVT placement. There were no adverse events related to mEVT. Clinical failures, in 2 patients, corresponded to 2 tracheoesophageal fistulas and 1 gastrocutaneous fistula. Four deaths occurred: 2 due to defect-related complications and 2 due to underlying disease.

Conclusions mEVT is an innovative and straightforward solution with a high success rate, comparable to what has been reported with conventional techniques. It stands out as a low-cost alternative, enabling optimized enteral nutrition during treatment, preventing infection and malnutrition risk. We present iconography (endoscopic images and videos) of the treated cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP314 Predicting Need For Step-Up Approach And Recurrence In Endoscopic Management Of Anastomotic Strictures After Esophagectomy: Results From A 10-Year Multicenter Retrospective Study From Tertiary Referral Centers

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DOI 10.1055/s-0046-1821254

Aims Anastomotic stricture (AS) is a common late complication after esophagectomy. Evidence guiding endoscopic escalation (“step-up”) and the risk of post-treatment recurrence remains limited. We assessed clinical, surgical, and procedural determinants of (i) need for step-up therapy and (ii) recurrence after initial endoscopic success.

Methods We conducted a ten-year multicenter retrospective study at two Milan tertiary centers (2014–2024). Adults with naïve post-esophagectomy AS underwent standardized endoscopic management (bougie or pneumatic dilatation with predefined step-up options: incision therapy, stenting, steroid injection). Outcomes included technical (TS) and clinical success (CS), safety, rate of step-up and recurrence, and uni/multivariable predictors for change of strategy and recurrence.

Results Among 1,729 esophagectomies, 61 patients (3.5%) developed benign AS. Initial therapy was bougie in 54.1% and pneumatic in 45.9%. TS was reached in 100% and CS in 93.4%. Safety was favourable (1/61, 1.6%). Overall, 39.3% required a change of strategy, typically early: the first switch occurred at a median of 35 days, and 62.5% within 30 days, most often for failure to achieve a ≥ 2 -mm lumen gain (66.7%). On multivariable analysis, higher BMI (OR 0.81 per 1 kg/m², $p = 0.022$) and baseline dysphagia < 2 (OR 0.13, $p = 0.006$) independently reduced the likelihood of step-up. Among patients with CS, recurrence occurred in 24.6% (14/57). In models restricted to surgical variables, stapled versus hand-sewn anastomosis was protective (OR 0.11, $p = 0.022$), whereas procedure type (McKeown vs Ivor-Lewis) and calibre ≤ 25 mm were not significant.

Conclusions Endoscopic treatment of post-esophagectomy AS is highly feasible and effective. Early escalation clusters within the first month and is more likely in patients with lower BMI and greater dysphagia, supporting closer early surveillance. After initial success, stapled anastomosis appears to mitigate recurrence risk [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dell’Anna G, Fanizza J, Mandarino FV, Barchi A, Fasulo E, Vespa E, Fanti L, Azzolini F, Battaglia S, Puccetti F, Cossu A, Elmore U, Facciorusso A, Dell’Anna A, Fuccio L, Bruni A, Massironi S, Annesse V, Malesci A, Donatelli G, Rosati R, Danese S. The Endoscopic Management of Anastomotic Strictures After Esophagogastric Surgery: A Comprehensive Review of Emerging Approaches Beyond Endoscopic Dilatation. *J Pers Med*. 2025; 15 (3): 111. doi:10.3390/jpm15030111 PMID: 40137427 PMID: PMC11943101

PYP315 Proximally-releasing, cervical-specific esophageal stent for cervical esophageal lesions: a 13-year experience in a tertiary center

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DOI 10.1055/s-0046-1821255

Aims Self-expandable metallic stent (SEMS) in the cervical esophagus remains challenging, as this region is often considered a relative contraindication for stenting and is commonly associated with complications (foreign-body sensation, migration). The NITI-S Cervical Esophageal Stent (Taewoong Medical) featuring a proximal release mechanism, was specifically designed to address these limitations. Our aim was to evaluate safety, efficacy, and associated adverse events (AEs) associated with this cervical-specific esophageal stent design [1,2].

Methods Retrospective, observational, single-center study. All cases with placement of a NITI-S Cervical stent placement (2012–2025) were identified. Epidemiological, clinical, and technical variables were collected. Follow-up included clinical outcomes and stent-related complications (► **Table 1**).

► **Table 1** Demographic And Clinical Characteristics (N = 31)

VARIABLE	N (%)
SEX	
Male	22 (71)
Female	9 (29)
AGE	Mean: 73 years
INDICATION	
Stenosis	24 (77)
Fistula	3 (10)
Perforation	4 (13)
NEOPLASTIC ORIGIN	
Yes	22 (71)
No	9 (29)
TYPE OF NEOPLASIA	
Esophageal squamous cell carcinoma	13 (42)
Esophageal adenocarcinoma	2 (6.4)
Malignant head-and-neck tumor	4 (13)
Lung adenocarcinoma	2 (6.4)
PALLIATIVE TREATMENT	
Yes	21 (67.7)
No	10 (32.3)

Results Among 520 patients who underwent esophageal stenting during the study period, 31 received a cervical-specific stent (71% male; mean age 73 years). The most predominant indication (71%) was malignant stenosis (esophageal or head-and-neck cancer). Technical success was 90%; three cases required immediate stent removal due to intraprocedural malposition. Clinical

success (restoration of oral intake) was achieved in 92 %. Mild AEs occurred in 18.75 % of cases, mainly pain and foreign-body sensation. Migration occurred in 25 % (4 proximal, 3 distal), and tissue ingrowth in 7 %. Overall, 8 patients (26 %) required stent removal due to migration or intolerance. No procedure-related mortality was observed. Mean follow-up was 2.9 months (SD $\pm$ 5.6). In 57 % of cases, follow-up ended due to patient death

Conclusions This 13-year series represents one of the largest published experiences with cervical-specific SEMS. Despite the inherent challenges of cervical esophageal stenting, our results demonstrate high technical (90 %) and clinical (92 %) success rates with acceptable tolerability, supporting their role in palliative management of malignant cervical esophageal stenosis

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Verschuur EML, Homs MYV, Steyerberg EW, Haringsma J, Wahab PJ, Kuipers EJ et al. A new esophageal stent design (Niti-S stent) for the prevention of migration: a prospective study in 42 patients. *Gastrointest Endosc* 2006; 63 (1): 134–40
- [2] Verschuur EML, Kuipers EJ, Siersema PD. Esophageal stents for malignant strictures close to the upper esophageal sphincter. *Gastrointest Endosc* 2007; 66 (6): 1082–90

PYP316 Collaborative Transoral Endoscopic Resection for Superficial Hypopharyngeal Squamous Cell Carcinoma: Comparative Short-term Outcomes of ESD, ELPS, and TOECS

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DOI 10.1055/s-0046-1821256

Aims The management of superficial hypopharyngeal squamous cell carcinoma (HPSCC) has traditionally been led by head and neck surgeons; however, recent advances in endoscopic technology have enabled greater involvement of gastroenterologists, increasing the importance of multidisciplinary collaboration. At our institution, endoscopic submucosal dissection (ESD) has been the primary treatment modality, followed by the introduction of endoscopic laryngo-pharyngeal surgery (ELPS) and Transoral Endoscopic Cooperative Surgery (TOECS). This study aimed to clarify the unique characteristics of these treatment approaches by comparing their short-term therapeutic outcomes.

Methods We retrospectively analyzed 149 patients with 184 HPSCC lesions who underwent transoral endoscopic resection. Patients were divided into three treatment groups: ESD (n = 138), ELPS (n = 21), and TOECS (n = 26).

In the TOECS procedure, gastroenterologists performed marking, subepithelial injection, and circumferential mucosal incision using a standard ESD high-frequency dissection knife. Subsequent submucosal dissection was performed by head and neck surgeons using the same knife mounted on a transoral surgical attachment.

Outcomes evaluated: En bloc resection rate, R0 resection rate, horizontal (HM) and vertical (VM) margin positivity, and dissection speed (mm²/min).

Complications including postoperative bleeding, perforation, and laryngeal edema.

Results En bloc resection rates for ESD, ELPS, and TOECS were 96.4 %, 100 %, and 100 %, respectively. R0 resection rates were 84.6 %, 76.2 %, and 72 %, with no significant differences among the groups. HM positivity was significantly lower in the ESD group compared with ELPS and TOECS (9.4 % vs. 23.8 % and 24 %, $p < 0.05$). VM positivity was observed only in the ESD group (5.8 %), without a significant difference, although this suggested a tendency toward shallower dissection.

Dissection speed was similar among the groups (10.4 vs. 9.0 vs. 8.6 mm²/min). Postoperative bleeding occurred in 2.2 % of ESD cases and in none of the ELPS or TOECS cases. Laryngeal edema occurred in 1.7 % of ESD cases. No perforations were observed in any group.

Conclusions For HPSCC, ESD demonstrated the lowest HM positivity rate, indicating its advantage in precise lateral margin control. ELPS and TOECS

showed no VM-positive cases, suggesting that these procedures may facilitate deeper submucosal dissection. Dissection speed and safety profiles were comparable across all modalities. TOECS, performed using shared endoscopic devices, may also contribute to cost reduction.

These findings highlight the importance of close collaboration between gastroenterologists and head and neck surgeons in the transoral management of HPSCC, with a comprehensive understanding of each modality's characteristics contributing to improved therapeutic outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP317 Z-POEM versus flexible endoscopic septotomy for Zenker's diverticulum: a retrospective analysis of recurrence and symptom control

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DOI 10.1055/s-0046-1821257

Aims Endoscopic needle-knife diverticulotomy is an established treatment for Zenker's diverticulum. Zenker peroral endoscopic myotomy (Z-POEM), introduced at our center in 2021, allows creation of a submucosal tunnel and performance of a full septotomy. This technique enables a more complete division of the cricopharyngeal muscle and may therefore result in fewer recurrences and more durable long-term symptom control. The aim of this retrospective study was to evaluate technical feasibility, recurrence and complication rates, and the duration of symptom resolution across different therapeutic approaches, with particular focus on Z-POEM.

Methods Between January 2014 and June 2024, a total of 162 endoscopic interventions for Zenker's diverticulum were performed at our center, representing one of the larger single-center cohorts reported to date. Procedures included 117 needle-knife diverticulotomies, 35 Z-POEM procedures, and 10 alternative techniques. Patient demographics were recorded (mean age 71 $\pm$ 10.35 years, 66 % male) as well as diverticulum size (mean 2.71 $\pm$ 1.46 cm). Follow-up was performed retrospectively for patients who had undergone an intervention from 2019 onward. Structured follow-up (telephone and/or endoscopic) was conducted in 2024–2025, yielding evaluable data for 100 procedures (follow-up rate 65 %) with a median follow-up of 24 months (IQR 18–45). Symptom burden was assessed using a standardized score adapted from the Eckardt Score, focusing on the two consistently available domains: dysphagia and regurgitation. Patients were additionally asked to report the duration of subjectively perceived symptom resolution. Outcomes included symptom improvement, complication rates, time to recurrence and recurrence rates.

Results Median procedure time was comparable between techniques (needle-knife 27 min [6–83] vs. Z-POEM 24.5 min [11–65]). Complications occurred in 8.55 % of needle-knife procedures (10/117) and 11.43 % of Z-POEM procedures (4/35).

Analysis of clinical outcomes was based on the follow-up cohort with evaluable data (n = 100). Within this cohort, both techniques resulted in marked symptom improvement. Median dysphagia scores improved from 2 to 1 after needle-knife and from 1.5 to 0 after Z-POEM. Regurgitation improved from 1.5 to 0 in both groups. The median duration of symptom resolution was 12 months (IQR 6–26) after needle-knife and 13 months (IQR 12–22.5) after Z-POEM. Among patients experiencing recurrence, symptom-free intervals were 9 months (IQR 6–12) for needle-knife and 6 months (IQR 3–12) for Z-POEM.

Recurrence rates differed substantially between techniques, with 79 % recurrence after needle-knife and 43 % after Z-POEM. These rates are higher than commonly reported in the literature, most likely reflecting a follow-up bias, as patients tended to return primarily in the case of symptomatic recurrence and no scheduled endoscopic reassessment was performed. In multivariate logistic regression, Z-POEM was independently associated with significantly lower odds

of recurrence compared with needle-knife (OR 0.197, 95 % CI 0.063–0.587, $p = 0.004$).

Conclusions Z-POEM proved to be an effective and safe treatment option for Zenker's diverticulum and was associated with significantly lower recurrence rates compared with needle-knife diverticulotomy. Both techniques resulted in meaningful symptom improvement, but Z-POEM achieved complete resolution more consistently and showed an independent association with reduced recurrence in multivariate analysis. These findings underscore the clinical relevance of a complete septotomy and support Z-POEM as a durable and effective endoscopic treatment option for Zenker's diverticulum.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP318 AI-Enhanced Prediction of Esophageal Variceal Bleeding in Portal Hypertensive Gastropathy

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Aims Esophageal variceal bleeding (EVB) remains a major cause of morbidity in portal hypertension. Classical predictors provide limited individualized risk estimation. This study aimed to identify predictors of EVB in portal hypertensive gastropathy (PHG) using both multivariate logistic regression and an artificial intelligence (AI) based machine-learning model [1].

Methods A retrospective cohort of 213 PHG patients (64 with EVB) was analyzed. Clinical, laboratory, and endoscopic variables, including ascites, encephalopathy, platelet count, MELD, albumin, creatinine, H. pylori status, variceal grade, PHG severity, GAVE, NSBB use, and intestinal metaplasia were collected. Univariable and multivariable logistic regression models were constructed. A Random Forest classifier was developed to assess non-linear interactions and determine variable importance. Model performance was evaluated using the area under the ROC curve (AUC) (► Table 1).

► Table 1

Predictor	Adjusted OR	95% CI	P
Encephalopathy	2.46	1.33–5.05	0.013
Ascites	1.81	1.10–3.20	0.018
Platelet (per 10,000/mm ³)	0.98	0.96–0.99	0.048

Results Multivariate analysis identified three independent predictors of EVB: encephalopathy (OR 2.46, $p = 0.013$), ascites (OR 1.81, $p = 0.018$), and low platelet count per 10,000/mm³ decrement (OR 0.98, $p = 0.048$). The Random Forest model achieved an AUC of 0.75. AI-based feature importance analysis revealed platelet count as the strongest predictor, followed by MELD, creatinine, albumin, age, ascites, NSBB use, and high-grade varices.

Conclusions In patients with PHG, encephalopathy, ascites, and thrombocytopenia independently predict EVB. AI modeling highlights additional contributors, particularly MELD-related parameters, capturing patterns not detected by classical analysis. Integrating statistical and AI-derived predictors may enhance individualized bleeding-risk stratification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Zhao H., Zhang X., Huang B. et al. Application of machine learning methods for predicting esophageal variceal bleeding in patients with cirrhosis. Eur Radiol 35: 1440–1450 2025. doi:10.1007/s00330-024-11311-4

PYP319 Endoscopic Vacuum Therapy and VacStent for the Treatment of Gastrointestinal Tract Leaks and Fistulae: A Multicenter Prospective Study

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DOI 10.1055/s-0046-1821259

Aims Gastrointestinal (GI) tract leaks and fistulae—whether spontaneous or resulting from postoperative leakage or dehiscence—pose substantial clinical challenges and carry significant morbidity and mortality. Endoscopic vacuum therapy (EVT) and hybrid EVT-Self-expanding metal stent (SEMS) technology have emerged as promising minimally invasive therapeutic options as alternative to surgery. This multicenter prospective study evaluates the effectiveness and safety of EVT and hybrid EVT-SEMS in the management of GI tract leaks and fistulae

Methods A total of 32 patients were prospectively included, of which 27 received EVT by Esosponge/Endosponge (Boston Scientific, Marlborough, Massachusetts, USA) and 5 received hybrid EVT-SEMS by VacStent Glä (Micro-Tech Europe GmbH, Düsseldorf, Germany) from 2022 onward across 2 Portuguese centers. Demographic data, clinical characteristics, and treatment outcomes were collected. The primary endpoint was successful closure of the leak or fistula, confirmed through both endoscopic and radiologic assessment. Secondary outcomes included the need for adjuvant endoscopic therapy, and complication, readmission, and mortality rates.

Results Median follow-up was 100 weeks (IQR 56) and 82.1 % of the patients included were male ($n = 22$), with a median age of 67 years (IQR 12). Most sponges were placed in the upper GI tract ($n = 19$) for malignant aetiology (75.8 % of cases). Three patients received sponge in the lower GI tract due to surgery for pelvic/perianal abscess ($n = 2$) and prostatic cancer ($n = 1$). Both endoluminal and intracavitary sponges were used, with the former (median 4 [1–37]) being more frequently used than the latter (median 1 [0–11]). Main aetiology for VacStent placement was Boerhaave syndrome ($n = 4$) and surgery for esophageal adenocarcinoma ($n = 1$). One every three patients (30.3 %) presented with sepsis at admission and median timing until device placement was 11.5 days (IQR 17.2). Median mural defect size was 15 mm (IQR 15) and median hospitalization length was 55 days (IQR 50.7). EVT by sponge/VacStent therapy achieved a high overall closure rate of 84.2 % (100 % for VacStent alone, $p = 0.342$). Although a median of 4.5 treatment sessions was required, the need for additional non-EVT endoscopic interventions remained low (5.3 %). Technique-related complications were uncommon (5.3 %) and included migration and late stenosis, and readmission rates were low (13.5 %). Mortality was low and not directly associated with device use. After multivariate logistic regression, sponge at upper GI tract was significantly associated with endoscopic success (OR 0.019, CI95 % 0.001–0.531, $p = 0.020$), but sepsis at admission proved to be an important factor, although without statistical significance (OR 0.09, CI95 % 0.06–1.315, $p = 0.078$).

Conclusions This multicenter prospective study demonstrates that EVT and hybrid EVT-SEMS are highly effective and safe modalities for treating spontaneous and postoperative GI tract leaks/fistulae. With strong closure rates, minimal complications, and favorable overall outcomes, these vacuum-based therapies represent valuable endoscopic strategies and support their expanding role in managing of complex GI leaks/fistulae.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Seeing more, missing less in the small bowel

16/05/2026, 09:00–10:00

Emerald 3

PYP320 Artificial Intelligence versus conventional scoring for assessing small bowel capsule endoscopy cleanliness in Crohn's disease

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Aims Evaluation of cleanliness in capsule endoscopy is essential to validate the exam. However, yet reliable evaluation of bowel cleanliness remains challenging. The validated KODA score provides robust assessment but is time-consuming and impractical in routine practice. We aimed to evaluate the performance of an AI-based tool (AXAROLite, Augmented Endoscopy) compared with the KODA score for assessing small bowel cleanliness in Crohn's disease (CD) patients.

Methods This was a post-hoc analysis of a multicenter randomized controlled trial (NCT05117996) including 142 CD patients undergoing small bowel capsule endoscopy (SBCE) after either a standard PEG-based or simplified clear liquid preparation. All videos were evaluated for cleanliness using the KODA score by trained readers. The same videos were analyzed using the AI-based AXAROLite tool. Correlation, agreement, and diagnostic performance of AXAROLite were compared with the KODA score. Clinical factors influencing AI-assessed cleanliness were also investigated.

Results Correlation between the KODA score and the AI-AXAROLite score was found strong for the whole SB ($p = 0.61$; $r_2 = 0.35$; $p < 0.001$) and moderate to strong for each of the four quartiles analyzed: $p = 0.52$; $r_2 = 0.24$; $p < 0.001$, $p = 0.56$; $r_2 = 0.24$; $p < 0.001$, $p = 0.50$; $r_2 = 0.21$; $p < 0.001$, $p = 0.62$; $r_2 = 0.41$; $p < 0.001$ for the first, the second, the third and the fourth quartiles, respectively. When compared to the qualitative evaluation of the SB cleanliness i.e. good, fair or poor, both the KODA and the AXAROLite scores decreased similarly. The median [IQR] values of AXAROLite scores were respectively 75.0 [59.0-84.0], 56.0 [42.0-67.0] and 41.00 [25.75-59.75]. The differences were statistically significant between a good and a fair or poor cleanliness ($p < 0.001$) AXAROLite demonstrated excellent diagnostic accuracy for detecting adequate cleanliness defined as KODA > 2.25 (AUROC = 0.85, 95 % CI 0.79–0.92), with an optimal threshold of 72 % clean frames (sensitivity 86 %, specificity 72 %). In multivariate analysis, the activity of the disease and the SB transit time influenced negatively the AXAROLite score: $\beta = -7.87$ [-15.29; -0.44], $p = 0.0382$ and $\beta = -0.04$ [-0.06; -0.01], $p = 0.0031$ respectively. The behavior, the location of the disease, the endoscopic severity and the presence of an anastomosis, did not modify independently the AXAROLite SBscore.

Conclusions AXAROLite provides a rapid, fully automated, and accurate evaluation of small bowel cleanliness in CD, comparable to the validated KODA score. Its integration into routine workflows may streamline reporting and reduce inter-observer variability.

Conflicts of Interest Le Berre, Catherine: Abbvie, Amgen, Celltrion, Ferring, Fresenius Kabi, Galapagos, Gilead, Janssen, Lilly, MSD, Nordic Pharma, Pfizer, Sandoz, Takeda. Leenhardt, Romain: co-founder and shareholder of Augmented Endoscopy Collins, Michael: consulting fees from Abbvie, Celltrion, Janssen, Amgen, Sanofi, Sandoz and Takeda De Maissin, Astrid: fees from Abbvie, Galapagos and Takeda Flamant, Mathurin: lectures or consulting fees from Abbvie, Amgen, Celltrion, Ferring, Fresenius Kabi, Lilly Janssen, MSD, OSE Immunotherapeutics, Pfizer, Sandoz, Takeda, and Tillotts Trang, Caroline: personal fees from Ferring, Janssen, Mayoly Spindler, Norgine, Abbvie, MSD, and Takeda Bouguen, Guillaume: Grants from Abbvie, Ferisinus, Personal Fees: Abbvie, Takeda, Fresinus, Amgen, Biogène, Arena, Ferring, Gilead, Janssen, MSD, Pfizer, Sandoz, Takeda, Tillots, Vifor pharma Histace, Aymeric: co-founder and shareholder of Augmented Endoscopy Dray, Xavier: co-founder and shareholder of Augmented Endoscopy, lectures or consulting fees from Abbvie, Alfasigma, AnX Robotica, Fujifilm, Jinshan, Medtronic, Norgine, Bourreille, Arnaud: Grants from Takeda, MaunaKea technologies, Personal Fees from Abbvie, Celltrion, Ferring, Galapagos, Gilead, MSD, Medtronic, OSE Immunotherapeutics, Janssen, Pfizer, Roche, Takeda, Tillotts, Vifor pharma

PYP321 Reducing environmental dispersion of capsules after small bowel endoscopy

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DOI 10.1055/s-0046-1821261

Aims To evaluate the retrieval rate of capsules for environmental motivation after videocapsule endoscopy (VCE), considering demographic and travel-related factors

Methods This is a prospective monocentric study enrolling patients undergoing VCE at the Endoscopy Unit of the Policlinico of Milano, a tertiary referral center in a urban area. Patients were invited to retrieve the capsule on the basis of its environmental impact. Data collected included age, travel distance, number of transportation means, travel time and out-of-pocket costs. Differences were assessed between patients who retrieved capsule after its evacuation and those who did not. Associations were analyzed using descriptive statistics and Pearson correlations. 0.04 kg of CO₂ has been considered as a single capsule carbon footprint [1].

Results 142 patients were enrolled (51 % females, mean age 53 years, range 14–88). Main indications were celiac disease (22 %), IBD (35 %) OGIb (27 %). 58 (41 %) of capsules has been correctly retrieved and returned to the Endoscopic Center. The median travel distance was 11.5 km (mean 41.3 km, SD 151.1). Patients travelled with an average of 1.4 transportation means, with a median travel time of 40 minutes (mean 50.8 min, SD 43.3) and a mean travel cost of 12 euros (median 5 euros, SD 16.3). No statistically significant differences emerged between patients who reported VCE and those who did not regarding age, travel distance, means, time, costs or VCE indication. Moderate correlations were observed between travel time, distance, and expenditure. The carbon footprint of retrieved capsules 2.32 kg of CO₂.

Conclusions In this study, roughly half of the patients retrieved capsules after VCE due to an environmental motivation, demonstrating a sensitivity regarding this issue. Capsule retrieval after VCE was not associated with differences in demographic or travel parameters. However, substantial travel distances and associated costs underline the importance of addressing logistical barriers to optimize equitable access to diagnostic endoscopy and limitate environmental impact of VCE. Although the carbon footprint of capsules is low, the most important factor is the recycle of rare and environmentally dangerous material. Further research is warranted to evaluate targeted interventions for patient support and service decentralization to improve outcomes and reducing Capsules dispersion.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pioche M, Cunha Neves JA, Pohl H, Lê MQ, Grau R, Dray X, Yzet C, Mochet M, Jacques J, Wallenhorst T, Rivory J, Siret N, Peillet AL, Chevaux JB, Mion F, Chaput U, Jacob P, Grinberg D, Saurin JC, Baddeley R, Rodriguez de Santiago E, Cottinet PJ and the Sustainability Committee of the French Endoscopy Society (SFED). The environmental impact of small-bowel capsule endoscopy. *Endoscopy*. 2024; 56 (10): 737–746. doi:10.1055/a-2313-5142 Epub 2024 Apr 24 PMID: 38657660

PYP322 Artificial Intelligence for GI Bleeding: Transcontinental Multicenter Validation of Automated Vascular and Haematic Detection in Capsule Endoscopy

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DOI 10.1055/s-0046-1821262

Aims Capsule endoscopy (CE) enables minimally invasive visualization of the small bowel and is a cornerstone in the evaluation of gastrointestinal bleeding and anemia. Vascular lesions, including red spots and angiectasias, together with blood or haematic residues, provide essential clues regarding the origin, presence, severity and timing of bleeding. Their reliable detection remains difficult due to reader fatigue, interpretative variability and the demanding duration of CE review. Artificial intelligence offers a compelling opportunity to enhance accuracy and efficiency, yet robust real-world multicenter evidence is still scarce.

This study aimed to evaluate the real-life performance of a deep learning convolutional neural network trained to detect both vascular lesions and blood/haematic residues in complete CE studies.

Methods We conducted a prospective, multicenter validation comparing AI-assisted CE reading with conventional interpretation. A total of 423 complete CE videos from three CE systems across ten high-volume centers in Portugal, Spain, Brazil, Australia, Uruguay, and the United States were analyzed. After standard reading (SoC), an independent expert performed AI-assisted review, and discrepancies were adjudicated by a third expert from an external center to establish the reference standard. Diagnostic performance metrics and AUC-ROC were calculated for both strategies. Reading time was evaluated for AI assisted reading.

Results AI-assisted reading identified 213 exams with confirmed vascular lesions, compared with 143 detected by conventional reading. For vascular lesions, AI demonstrated markedly higher sensitivity (94.2 % vs. 63.3 %) but lower specificity (64.5 % vs. 77.3 %). Overall accuracy was higher with AI (89.7 % vs. 76.1 %), and the AUC-ROC was superior (79.4 % vs. 70.3 %). McNemar's test demonstrated a significant difference between methods ($p < 0.05$).

For blood and haematic residue detection, AI outperformed SoC in all metrics. It detected the presence of blood in 38 exams vs 34 in the standard reading. The sensitivity was higher in the AI group (85.0 % in SoC vs 95.0 % in AI) and so

was the specificity (96.9 % vs 97.8 %), overall accuracy (95.7 % vs 97.8 %), and AUC-ROC (91.0 % vs 96.4 %).

AI assisted reading reduced the average reading time to 316 seconds per exam.

Conclusions CE interpretation augmented by artificial intelligence significantly improves the detection of vascular lesions and haematic residues, two pivotal elements in the assessment of gastrointestinal bleeding and anemia, while substantially reducing reading time. The use of multiple CE systems strengthens interoperability and the involvement of centers across six countries and three continents enhances generalizability. These findings support the integration of AI tools into CE workflows to elevate diagnostic accuracy, streamline efficiency and reinforce clinical decision-making in patients with suspected or confirmed gastrointestinal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP323 Artificial Intelligence for Detection of Small Bowel Erosions and Ulcers in Capsule Endoscopy: Real-World Evidence from a Multicentric Transcontinental Prospective Study

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DOI 10.1055/s-0046-1821263

Aims Capsule Endoscopy (CE) is a minimally invasive exam that has emerged as a central modality for evaluating small bowel inflammatory disorders, particularly Crohn's disease. Precise identification of ulcers and erosions is fundamental for assessing disease activity, informing therapeutic decisions, and monitoring treatment response. Although CE provides unparalleled visualization of mucosal pathology, manual interpretation remains time-consuming and susceptible to notable interobserver variability. Advances in artificial intelligence, especially convolutional neural networks, now present a timely opportunity to enhance diagnostic accuracy, reduce variability, and improve workflow efficiency. Continued development and rigorous clinical validation are warranted to realize their full potential in routine practice. Our aim is to develop and validate a robust AI model capable of detecting and distinguishing small bowel ulcers and erosions across multiple CE systems and international clinical centers.

Methods We performed a prospective, multicenter study between January 2021 and September 2025, including six centers in Portugal, Spain, Brazil, Uruguay, Australia, and the United States. A total of 423 complete CE examinations were analyzed. AI reports generated by a deep learning model were analyzed by an expert and the AI-assisted report was compared with standard-of-care (SoC) interpretations, using an expert consensus panel as the reference standard. Diagnostic performance was evaluated using sensitivity, specificity, overall accuracy, and area under the receiver operating characteristic curve (AUC-ROC). Reading time was also recorded for the AI-assisted reading.

Results Expert consensus identified ulcers or erosions in 127 patients (30.0 %). Compared with the reference standard, SoC achieved 68.5 % sensitivity, 90.8 %

specificity, and 83.7% accuracy. AI-assisted reading demonstrated higher sensitivity (88.2%) with slightly lower specificity (79.7%), resulting in comparable overall accuracy (82.4%). The AI model achieved a higher AUC-ROC than SoC (83.9% vs. 79.6%). AI identified lesions in 112 patients, outperforming SoC, which detected lesions in 87 patients. These results were consistent across devices and centres. Mean AI-assisted reading time was 318 seconds per exam.

Conclusions The AI-based software improved the detection of small bowel ulcers and erosions compared with standard care, showing higher sensitivity, comparable overall accuracy, and a meaningful reduction in reading time. This validation demonstrates that artificial intelligence can deliver consistent diagnostic performance across different devices and clinical settings while markedly accelerating case review. Shorter reading times have direct implications for clinical scalability, enabling higher throughput, reducing workload, and expanding access to capsule endoscopy in routine practice. These findings support further integration and evaluation of artificial intelligence to optimize endoscopic assessment and strengthen the management of inflammatory bowel disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP324 Redefining treat-to-target in Crohn's disease: a pan-intestinal, multidevice deep learning model for the detection and differentiation of ulcers and erosions in capsule endoscopy

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DOI 10.1055/s-0046-1821264

Aims Treat-to-target approaches are a mainstay in Crohn's disease management, with evidence showcasing the benefit of capsule endoscopy driven strategies. Pan-intestinal capsule endoscopy (PCE) allows a minimally invasive evaluation of both the small bowel and colon, potentially improving disease monitoring and therapeutic decision-making. Nevertheless, this approach is hampered by lengthy reading times and observer intervariability. Artificial intelligence (AI), specifically convolutional neural networks (CNNs), have proven their ability for diagnosis of ulcers and erosions and inflammatory activity assessment. This study aimed to develop and validate an interoperable pan-intestinal AI model for detection of ulcers and erosions and determination of their clinical significance according to Saurin classification.

Methods 195,955 frames (132,302 enteric, 63,653 colonic) from 1,585 exams performed in two reference centers between January 2017 and August 2025 were included for model development and testing. Data included exams from six different capsule endoscopy devices. After expert-based consensus, 71,382 frames containing ulcers and erosions were identified and differentiated according to Saurin classification, while the remaining 124,573 frames depicted normal mucosa. The dataset was divided in training / validation and testing sets with a 90%/10% patient split design. The model was evaluated using the testing using accuracy, sensitivity and specificity.

Results Normal mucosa was identified with 86.6% accuracy, 88.2% sensitivity and 82.4% specificity. Ulcers and erosions were identified with 86.6% accuracy, 72.6% sensitivity and 93.0% specificity.

When stratifying ulcers and erosions according to their bleeding potential, lesions with uncertain bleeding potential (P1UE) were identified with 85.6% accuracy, while ulcers with high bleeding potential (P2U) were identified with 98.6% accuracy.

Conclusions PCE enables a minimally invasive treat-to-target strategy in Crohn's disease. A multidevice AI model demonstrated high accuracy in identifying ulcers and erosions in a pan-intestinal setting, as well as stratifying them according to their clinical significance. Additionally, the pan-intestinal evaluation was performed without the need of segmentating the small bowel and colon, reducing computational requirements and representing another step toward clinical implementation. Further clinical validation studies are before integrating deep learning models into PCE, with the potential to transform patient management in inflammatory bowel disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP325 Functional topography of the small bowel: physiologic clustering of lesions and its impact on capsule diagnostic yield

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Aims Small-bowel capsule endoscopy (SBCE) allows a functional segmentation of the intestine into temporal tertiles (SB1-SB3). Although vascular lesions are often described in proximal and distal regions, the overall topography of small-bowel pathology and its relationship with transit and diagnostic yield remain poorly defined.

Methods This study aimed to characterize the functional distribution of small-bowel lesions and to explore how small-bowel transit time (SBTT) influences diagnostic performance.

We retrospectively reviewed 604 complete SBCEs with measurable gastric (GTT) and small-bowel transit times.

Lesions were classified as vascular, erosive, ulcerative, hemorrhagic, structural, or neoplastic, and localized within SB1–SB3 using standardized text-based mapping.

To assess the relationship between SBTT and diagnostic yield, transit time was stratified into three duration groups (short, intermediate, long) corresponding to the lower, middle, and upper thirds of its distribution. Statistical comparisons used χ^2 , Mann–Whitney, and Kruskal–Wallis tests.

Results The cohort had a mean age of 63.7 ± 17.7 years (50.2% female).

Mean gastric transit time (GTT) was 35.2 ± 24.6 min, showing a mild, non-significant trend toward longer values with age ($p > 0.05$) and no sex-related differences ($p > 0.3$). Mean SBTT was 295.7 ± 118.1 min, increasing significantly with age ($p < 0.01$) and in males ($p < 0.05$).

Vascular, erosive, ulcerative, and hemorrhagic lesions followed a bimodal proximal–distal pattern (all $p < 0.0001$), while structural and neoplastic lesions were evenly distributed.

Overall diagnostic yield was 80%. Examinations with positive findings had longer SBTT (300.6 vs 276.1 min, $p < 0.05$). The likelihood of detecting relevant lesions increased progressively across the three SBTT duration groups (76.8%, 77.4%, and 85.6%; $p < 0.05$).

Conclusions Functional topography analysis reveals distinct proximal–distal clustering of vascular and inflammatory lesions, suggesting specific pathophysiologic mechanisms along the small-bowel axis. Longer SBTT was associated with higher diagnostic yield, identifying transit time as a potential quality metric in SBCE. These findings support a more physiologic interpretation of capsule studies and may inform strategies to optimize visualization and reporting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP326 Is Capsule Endoscopy Safe in Patients with Cardiac Devices? A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821266

Aims Background The number of patients with cardiac implantable electronic devices (CIEDs) is rising. These individuals are often older, comorbid, and on antiplatelet or anticoagulant therapy, placing them at greater risk of iron deficiency anaemia and gastrointestinal bleeding. Despite two decades of video capsule endoscopy (VCE) use, uncertainty about its safety in CIED carriers persists due to long-standing concerns over electromagnetic interference, limiting access to this valuable diagnostic tool. This study seeks to clarify and reconcile the long-standing disconnect between industry-driven recommendations and the clinical evidence base by synthesising, updating, and critically examining the totality of available data [1–18].

Aim: To assess the safety and diagnostic performance of VCE, among patients with CIEDs being investigated for gastrointestinal bleeding.

Methods A systematic review was conducted using EMBASE, MEDLINE, and PubMed. A random-effects meta-analysis of proportions, using the Freeman–Tukey double arcsine transformation (FTDT), assessed the following: adverse cardiac events, signal interference, and diagnostic yield

Results From 275 publications, 18 studies involving 443 patients were included. Transient CIEDs malfunction occurred in 0.9% of cases (4/443), with no clinically significant adverse events. The pooled estimate for cardiac malfunction was 0% (95% CI: 0–1%) for Implantable cardioverter–defibrillators (ICDs) and left ventricular assist devices (LVADs), and 0% (95% CI: 0–6%; $I^2 = 63\%$) for pacemakers (PM). Signal interference affecting video quality was reported in only 1.8% of patients (8/443), with a pooled rate of 0% (95% CI: 0–2%; $I^2 = 0\%$). LVADs had a slightly higher interference rate of 1% (95% CI: 0–6%; $I^2 = 25\%$). The pooled diagnostic yield was 69% (95% CI 58–80; $I^2 = 55.5\%$), a finding that aligns closely with previously published estimates and reinforces the consistency of results across device types (► **Table 1**).

Conclusions This meta-analysis demonstrates that VCE can safely be performed in patients with CIEDs, presenting with anaemia or gastrointestinal bleeding. Adverse events and signal interference were rare, with no major adverse events and no significant compromise in diagnostic yield. These findings support review of existing guidelines to improve outcomes for patients with CIEDs, a population at increased risk of gastrointestinal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Elias G, Toubia N. Safety of capsule endoscopy in the setting of implanted cardiac defibrillators: a brief report. *Am J Gastroenterol* 2009; 104 (7): 1856–7
- [2] Moneghini D, Lipari A, Missale G, Minelli L, Cengia G, Bontempi L et al. Lack of interference between small bowel capsule endoscopy and implantable cardiac defibrillators: an 'in vivo' electrophysiological study. *United European. Gastroenterol J* 2016; 4 (2): 216–20
- [3] Payeras G, Piqueras J, Moreno VJ, Cabrera A, Menendez D, Jimenez R. Effects of capsule endoscopy on cardiac pacemakers. *Endoscopy*. 2005; 37 (12): 1181–5
- [4] Leighton JA, Sharma VK, Srivathsan K, Heigh RI, McWane TL, Post JK et al. Safety of capsule endoscopy in patients with pacemakers. *Gastrointest Endosc* 2004; 59 (4): 567–9
- [5] Dirks MH, Costea F, Seidman EG. Successful videocapsule endoscopy in patients with an abdominal cardiac pacemaker. *Endoscopy*. 2008; 40 (1): 73–5
- [6] Bandorski D, Lotterer E, Hartmann D, Jakobs R, Bruck M, Hoeltgen R et al. Capsule endoscopy in patients with cardiac pacemakers and implantable cardioverter-defibrillators – a retrospective multicenter investigation. *J Gastrointest Liver Dis* 2011; 20 (1): 33–7
- [7] Leighton JA, Srivathsan K, Carey EJ, Sharma VK, Heigh RI, Post JK et al. Safety of wireless capsule endoscopy in patients with implantable cardiac defibrillators. *Am J Gastroenterol* 2005; 100 (8): 1728–31
- [8] Harris LA, Hansel SL, Rajan E, Srivathsan K, Rea R, Crowell MD et al. Capsule Endoscopy in Patients with Implantable Electromedical Devices is Safe. *Gastroenterol Res Pract* 2013; 2013: 959234
- [9] Stanich PP, Kleinman B, Betkerur K, Mehta Oza N, Porter K, Meyer MM. Video capsule endoscopy is successful and effective in outpatients with implantable cardiac devices. *Dig Endosc* 2014; 26 (6): 726–30
- [10] Cuschieri JR, Osman MN, Wong RC, Chak A, Isenberg GA. Small bowel capsule endoscopy in patients with cardiac pacemakers and implantable cardioverter defibrillators: Outcome analysis using telemetry review. *World J Gastrointest Endosc* 2012; 4 (3): 87–93
- [11] Meyer MM, Young SD, Sun B, Azzouz M, Firstenberg MS. Endoscopic evaluation and management of gastrointestinal bleeding in patients with ventricular assist devices. *Gastroenterol Res Pract* 2012; 2012: 630483
- [12] Chung JW, Hwang HJ, Chung MJ, Park JY, Pak HN, Song SY. Safety of capsule endoscopy using human body communication in patients with cardiac devices. *Dig Dis Sci* 2012; 57 (6): 1719–23
- [13] Truss WD, Weber F, Pamboukian SV, Tripathi A, Peter S. Early Implementation of Video Capsule Enteroscopy in Patients with Left Ventricular Assist Devices and Obscure Gastrointestinal Bleeding. *ASAIJ* 2016; 62 (1): 40–5

► **Table 1** Characteristics and Summary Findings of the 18 Included Studies

Type of device	Total number of cardiac devices (n)	VCE brand	Image transmission inference	Cardiac malfunction rate
Overall	443	Given Imaging, M2A, MiroCam, Olympus EndoCapsule	1.8% (8/443)	0.9% (4/443)
PPM	172	Given Imaging, M2A, MiroCam, Olympus EndoCapsule	1.7% (3/172)	2.3% (4/172)
ICD	79	Given Imaging, M2A, MiroCam, Olympus EndoCapsule	0%	0%
LVAD	144	Given Imaging, M2A	4.9% (7/144)	0%
Other	48	Given Imaging, M2A	0%	0%

- [14] Amornsawadwattana S, Nassif M, Raymer D, LaRue S, Chen CH. Video capsule endoscopy in left ventricular assist device recipients with obscure gastrointestinal bleeding. *World J Gastroenterol* 2016; 22 (18): 4559–66
- [15] Hanson BJ, Koene RJ, Roy SS, Eckman PM, John R, Chaudhary NA et al. Safety and Outcomes of Capsule Endoscopy in Patients with Left Ventricular Assist Device: a Single-Center Retrospective Case Series. *J Cardiovasc Transl Res* 2016; 9 (4): 402–4
- [16] Zikos TA, Pan J, Limketkai B, Banerjee D, Fernandez-Becker N. Efficacy of Video Capsule Endoscopy in the Management of Suspected Small Bowel Bleeding in Patients With Continuous Flow Left Ventricular Assist Devices. *Gastroenterology Res* 2017; 10 (5): 280–7
- [17] Itskoviz D, Ben Avraham B, Banai H, Avni I, Ben Gal T, Dotan I et al. Video capsule endoscopy is safe and effective in suspected small bowel bleeding among left ventricular assist device recipients. *Int J Artif Organs* 2018; 41 (12): 833–7
- [18] Kasia C, Appannagari A, Joshi A, Venu M. Safety of wireless capsule endoscopy in patients with implantable cardiac devices. *JGH Open* 2020; 4 (2): 241–4

PYP327 Pan-intestinal capsule is a good FIT in suspected mid-lower gastrointestinal bleeding; interim results of a prospective Irish study

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DOI 10.1055/s-0046-1821267

Aims Pan-intestinal capsule endoscopy (PIC) examines both the small bowel and colon noninvasively in a single test. PIC has been proposed as a first line diagnostic examination in the setting of suspected mid-lower gastrointestinal bleeding (MLGIB), as an alternative to performing a colonoscopy first and then a small bowel capsule. MLGIB is defined as those with iron-deficiency anemia (IDA) and either suspected occult (FIT) or overt gastrointestinal bleeding after a nondiagnostic gastroscopy.

Aim to evaluate the efficacy of a PIC first approach in patients with suspected MLGIB.

Methods Following local ethics committee approval consecutive adult patients with IDA and overt or occult GI bleeding were prospectively enrolled. Study participants provided a faecal immunological test (FIT, results expressed in ng/mL) and baseline bloods prior to undergoing a gastroscopy followed by PIC on the same day for outpatients and after a short interval for inpatients. Basic demographics, clinical data, endoscopy and capsule findings were recorded. Key outcomes analysed included diagnostic yield (potential haemorrhagic lesions (PHLs) – small bowel and colon), safety, capsule performance measures including transit and image quality. Analysis of potential predictors of performance was also performed. Those with hematemesis, fresh anorectal type bleeding, known diagnosis of inflammatory bowel disease, decompensated chronic liver disease, known small bowel disease, those who had undergone gastroscopy or colonoscopy within 1 year, those with any contraindication to capsule endoscopy were excluded.

Results In all 77 patients have been consented to date. Of these 10 did not proceed to either gastroscopy or PIC (2 failed patency capsules, 3 withdrew consent for PIC, 1 declined bowel preparation, 2 have had OGD/Colonoscopy in different institution, 1 lost follow up and 1 patient did not attend for their procedure). A further 21 are awaiting either procedure. A total of 46 have completed both procedures and results are available for analysis in 43 patients. Of these 36 (84%) presented with IDA and 7 (16%) with overt bleeding. Patients had a mean age of 64.8 years (range 32–88), and 24 (56%) were female. Of these 17/43 (40%) were receiving blood thinners and use was similar in both overt and occult groups. Mean haemoglobin level = 9.8 g/dL (range 5.6–13.3 g/dL). Haemoglobin levels were similar in overt and occult groups; 8.9g/dL and

9.9g/dL respectively. A FIT was available in 28/36 (78%) of patients with occult bleeding. The mean FIT was 102 ng/mL (median 13, range 0 – 31000).

PIC performance was as follows; complete transit rate 67% (29/43), adequate image quality rate also 67% (29/43) and 56% (24/43) had both adequate preparation and complete transit.

PHLs were detected in 21% (n = 9) of patients; 2/7 (29%) in the overt group vs 7/36 (19%) in the occult group, p = 0.6. PHLs were detected in the small bowel in 5 (12%) patients, (3 angiodysplasias, 1 bleeding jejunal diverticulum and 1 small bowel stricture) and in the colon in 4 (9%) patients (2 colorectal cancers, 1 large > 2cm polyp and 1 significant radiation proctitis). Of note 15/43 (35%) required either completion endoscopy or therapeutic endoscopy either to obtain histological diagnosis or treat PHLs.

There was a trend for a higher positivity in older subjects and those on a blood thinner which did not reach statistical significance. There was a moderate correlation between FIT level and positive PIC, r = 0.47, p = 0.01, 95% CI 0.13–0.71. ROC analysis suggest a FIT level of ≥ 24 ng/mL, has a sensitivity of 100% and specificity of 62.5% with AOC 83 for a positive PIC.

Conclusions Early analysis of our ongoing study of PIC in suspected MLGIB has found a high potential haemorrhagic lesions detection rate (21%), including colorectal cancer, despite issues with overall performance. PHLs were evenly distributed between the small bowel and colon highlighting the potential benefit of this modality. FIT appears to strongly predict significant disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP328 Real World Multicenter Evaluation of AI Assisted Detection of Protruding Lesions on Capsule Endoscopy

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DOI 10.1055/s-0046-1821268

Aims Capsule Endoscopy (CE) provides a minimally invasive technique for comprehensive assessment of the gastrointestinal tract. Protruding lesions are frequent findings with heterogeneous prevalence and clinically relevant implications, yet their consistent detection remains challenging due to the extensive duration of CE studies and the influence of reader fatigue and human error. Artificial intelligence has emerged as a promising strategy to strengthen diagnostic accuracy, although robust real-world evidence supporting its clinical value is still limited. This study assessed the diagnostic performance of a deep learning convolutional neural network software for the identification of protruding lesions in complete CE videos under routine clinical conditions, generating clinical evidence that may inform the responsible integration of AI into CE practice and guide future validation efforts.

Methods Our group conducted a prospective, multicenter validation comparing AI-assisted CE interpretation with conventional reading. A total of 423 CE videos, acquired using three different CE systems across ten centers in Portugal, Spain, Brazil, Uruguay, Australia, and the United States, were included. After the initial standard reading, an independent expert performed AI-assisted review using a CNN specifically trained for small bowel protruding lesion detection. Discrepancies between the two readings were evaluated by a third expert from an external center to establish the reference standard. Diagnostic performance was quantified using sensitivity, specificity, and accuracy.

Results AI-assisted interpretation identified 49 confirmed protruding lesions, compared with 24 detected through conventional reading. Sensitivity was substantially higher with AI (94.2% vs. 46.2%), while specificity was lower (79.5% vs. 93.4%). McNemar's test demonstrated statistically significant superiority of AI-assisted reading ($p = 0.015$). Additionally, AI support markedly reduced the mean reading time, with a median examination time of 316 seconds per video.

Conclusions AI-assisted review of complete CE studies substantially increases the detection of protruding lesions compared with conventional interpretation, accompanied by only a modest reduction in specificity. The inclusion of data from multiple CE systems addresses interoperability limitations, and the participation of centers from six countries across three continents strengthens the generalizability of the findings. Overall, these results support the real-world clinical applicability of AI in CE and provide a rationale for its integration into diagnostic workflows to enhance performance and efficiency

Conflicts of Interest none

PYP329 Preliminary Investigation of Capsule Endoscopy Transit Control Using an Ingestible Peristaltic Stimulator

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DOI 10.1055/s-0046-1821269

Problem to solve Control of capsule endoscopy (CE) movement remains challenging despite recent advances in magnetic navigation. Prolonged gastrointestinal (GI) transit time often limits complete examination, particularly in patients with reduced GI motility.

Innovation An ingestible peristaltic stimulator (PS) may facilitate active propulsion of the capsule.

(1) Electrical and pressure thresholds required to induce peristalsis in the terminal ileum and colon were measured during colonoscopy in 10 healthy volunteers (5 men, 5 women). (2) Two PS-CE prototypes (pressure-based and electrical) were evaluated in 5 patients after written informed consent. The PS balloon was automatically inflated or electrically activated at preset intervals during CE progression. Small-bowel transit time (SBTT) and large-bowel transit time (LBTT) were recorded.

Results Pressure-based stimulation required 75 ± 13 mmHg to induce peristalsis, whereas electrical stimulation required only 5 ± 3 μ A, achievable with a coin battery or wireless power transfer. Peristaltic propagation averaged approximately 3 cm/s, and stimulation cycles were set below 0.2 Hz to respect the refractory period of Auerbach's plexus. With PS assistance, SBTT was reduced from 207 ± 37 min to 46 ± 16 min, and LBTT from 684 ± 232 min to 37 ± 12 min.

Although preliminary, electrical stimulation demonstrated markedly lower activation thresholds than pressure-based stimulation. Transit times are influenced by preparation quality and patient characteristics; thus, larger studies with matched controls and statistical validation are required. Development of wireless-powered PS devices without an onboard battery may further improve safety.

Conclusions An ingestible electrical peristaltic stimulator appears feasible and may substantially shorten CE transit time. Further controlled trials are needed to establish safety, efficacy, and clinical utility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

A little bit of everything – but all endoscopy

16/05/2026, 10:30–11:30

Emerald 4

PYP330 Environmental impacts of current endoscopic dilations strategies: life cycle assessment and clinical effectiveness of the bougiecap

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DOI 10.1055/s-0046-1821270

Aims Benign esophageal stricture dilation can be achieved by different methods, yet their environmental impact has not been compared and the clinical efficacy of the bougie cap (BC) device is not well known. This study evaluated the BC dilatation technique in terms of feasibility, effectiveness and safety, and compared its waste generation and carbon footprint to reusable bougie and single-use hydrostatic balloon dilatation, using life cycle assessment (LCA).

Methods We conducted a multicenter study on a prospectively maintained cohort of patients. Consecutive adult patients with dysphagia secondary to an esophageal benign stricture, requiring endoscopic management in a French tertiary center, were screened for inclusion.

The primary endpoint was the technical success of the BC dilatation. This was defined as the successful passing of the stricture using the BC technique only. Technical failure was defined as the need for a rescue technique (reusable bougie or balloon) and/or the inability to pass the stricture at the end of the procedure. The secondary endpoints were the number of dilations per patient, adverse events and symptoms 3 months after the last endoscopy. The cradle-to-grave LCA was conducted according to ISO 14040/44 by an independent expert company (Apesa).

Results Between January 2022 and September 2025, 125 patients with BC dilatation for benign esophageal stricture were included. Amongst the study population, 51 patients were men (40.8%) and the mean age was 61.6 years ($+/- 17.3$). Regarding the clinical presentation, 98 patients (78.4%) had dysphagia to solids, 8 (6.4%) had dysphagia to liquids, 6 had aphagia (4.8%) and 4 (3.2%) were asymptomatic. The mean follow-up was 7.8 months ($+/- 9.7$). Eight patients (6.4%) died during follow up.

The type of stricture was iatrogenic in 54 patients (43.2%), inflammatory in 47 patients (37.6%), thermal in 11 patients (8.8%) and caustic in 6 patients (4.8%). The underlying cause was endoscopic treatment (mucosectomy, endoscopic submucosal dissection) in 27 patients (21.6%), peptic in 23 patients (18.4%), anastomotic in 17 patients (13.6%).

A total of 299 dilations were performed (26 of which for a 2nd stricture in a same patient). Successful initial dilatation was achieved in 264 cases (88.3%). Rescue dilatation with a balloon was required in 28 cases (9.4%). All rescue dilations succeeded. Final dilatation was achieved successfully in 292 cases (97.7%). Data was missing in 7 cases. The mean number of BC dilatation per patient was 2.1. Adverse events occurred in 11 cases (3.7%), amongst which 3

perforations (1 %) were noted. Three months after the last endoscopic dilatation, 101 patients (80.8 %) experienced no symptoms.

Single-use balloon dilation generated 427 grams (g) of equipment and approximately 20 ml of contrast agent and water. Bougie dilation generated 50 g of waste for the packaging of peracetic acid bottle and use 170 ml of peracetic acid and 5 l of controlled tap water. BC generated 1 to 4 g of plastic (depending of the size) and 1 g of packaging waste. The respective carbon footprint for the different strategies were 0.06 and 0.63 kg CO₂e for the BC without and with guidewire, 1.35 kg CO₂e for the reusable bougie (with guidewire) and 3.49 kg CO₂e for the single use balloon dilation (with guidewire).

Conclusions In this multicenter study including 125 patients (299 dilatations) with benign esophageal stricture, the technical success of bougiecap dilatation was achieved in 88.3 % of cases with an adverse events rate of 3.7 %. Life cycle assessment revealed stark differences in the environmental impact between dilatation techniques, with the bougie cap strategy being the less impacting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP331 Pillcam Genius Pilot Experience – An Erudite Innovative -Time to ditch the belt?

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DOI 10.1055/s-0046-1821271

Aims Capsule endoscopy (CE) is a useful modality to investigate the small bowel (SB). Since its invention in 2001, several iterations and prototypes have been developed¹. Pillcam Genius is a new technology where the data recorder has been replaced entirely with a link device which is placed on the patients' abdomen. This allows the patient to post the link device back containing the data and hasten reaching a diagnosis. We conducted a pilot study to assess the utility of this new technology and acceptability of patients [1].

Methods This was a prospective multicentre site study of patients having Pillcam Genius. Demographic data and blood parameters, findings at CE and diagnosis, and follow-up data were collated.

Results A total of 30 patients from 4 sites in the United Kingdom, France, Italy and Germany underwent SB investigation with PillCam Genius from September 1st, 2025 to November 28th, 2025. The median age was 72.5 years (52.0–80.0) with 57 % of females. The commonest indications were overt gastrointestinal (GI) bleeding (40 %) and iron deficiency anaemia (IDA) (37 %), and Crohn's disease (17 %). All procedures but one were completed (97 %), with no cases of CE retention. About half (53 %) of the CE were done in an outpatient setting, the remaining ones as inpatients.

In the 23 patients with suspected SB bleeding (overt and IDA), the median age was 76 years (57–83) and median ASA score was 2.5 (2–3). The diagnostic yield for P1 and P2 lesions was 57 %, while for P2 lesions only was 22 %. Management was altered in 26 % (5–23), with suggested enteroscopy in 22 % (4 patients) and starting treatment with somatostatin analogues in 4 % (1 patient).

In patients with overt GI bleeding, the diagnostic yield for P1 and P2 lesions was 33 %, while for P2 lesions only was 17 %. The median time of CE from presentation of overt bleeding was 6.5 days (4.5–15). The mean small bowel transit was 4h30m (SD 2h06m). One patient had a rebleeding episode at 7 days, all other

11 patients did not have any rebleeding episodes at 7 days or at follow-up. The median follow-up time was 21 days (9–28).

All patients tolerated Pillcam Genius well and were satisfied with the minimalist technology.

Conclusions The pilot study has demonstrated that Pillcam Genius is a good addition to the current technology of CE with a high diagnostic yield. It has the potential to reduce travel burden of the patient and hence reduce carbon emissions. It also has the potential to offer a hub and spoke service to smaller and more remote hospitals which do not have a CE service and reduce time to diagnosis particularly with large referral centres covering wide catchment areas.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kim M, Jang HJ. Recent technological advances in video capsule endoscopy: a comprehensive review. Clin Endosc 2025. doi:10.5946/ce.2025.135 Epub ahead of print PMID: 41017553

PYP332 Opportunities to reduce the environmental impact of endoscopy: a detailed material flow analysis of diagnostic colonoscopy

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DOI 10.1055/s-0046-1821272

Aims Gastrointestinal endoscopy is the third largest contributor to hospitals' environmental footprint. Colonoscopy, among the most performed endoscopic procedures, is considered to have a significant environmental footprint, yet the exact impact is unknown. We analyzed the material flow of diagnostic colonoscopy procedures and identified opportunities for reducing their environmental impact.

Methods A single-center material flow analysis (MFA) was conducted during a normal work week with diagnostic colonoscopy procedures. Waste was collected, weighted, and categorized by product type. The material composition was identified. Using visual mapping, we identified which products were used and disposed of at each stage of the procedure.

Results Fifteen diagnostic colonoscopy procedures were audited. Mean total waste mass of a colonoscopy procedure was 0.58 ± 0.01 kg, with a mean of 46 products per procedure. This equals an average waste mass of 1169 kg for all diagnostic colonoscopy procedures performed annually in this hospital. Plastic-based products constituted the largest product category (22.67 %). Nitrile made up the largest material category (14.1 % of the total weight of materials). The total estimated carbon footprint for all analyzed waste was 1.77 kgCO₂e, with nitrile and polypropylene (PP) being the largest contributors.

Most products were used and disposed in the preparation stage of the colonoscopy procedure.

Conclusions Plastic-based materials formed the largest contributor to the total used product weight, with nitrile being the most frequently used material type (14.1 %). These findings inform decision-makers in designing targeted interventions to reduce the environmental impact of diagnostic colonoscopy, for example by considering more sustainable materials such as fiber-based materials. The prepared visual map makes waste generation discussable among healthcare professionals, thereby supporting a collaborative approach to identify sustainable opportunities.

Conflicts of Interest Dr. Peter Siersema is Editor-in-Chief of Endoscopy

PYP333 Reducing the energy consumption of endoscope drying: a comparison of two drying methods

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DOI 10.1055/s-0046-1821273

Aims Energy consumption is a major contributor of endoscopy department's environmental impact. A significant portion of the energy consumption comes from the reprocessing of reusable endoscopes, however, data on the amount of electricity used for drying endoscopes is limited. We measured and compared the energy consumption of conventional drying cabinets and a novel automated drying process, the PlasmaTYPHOON (Pentax medical), that dries endoscopes within 1 to 3 minutes. Our aim was to understand the environmental impact of both drying processes and to evaluate if the PlasmaTYPHOON could contribute to the reduction of carbon footprint and costs.

Methods Energy consumption of conventional drying cabinets and the automated drying process were measured for one week, using a Voltcraft SEM500 energy measurement device. Measurements were conducted on a 24/7 basis, capturing both active operation and standby power consumption. To assess workflow implications and material use, a Product Journey Map (PJM) analysis was performed, documenting all process steps, task durations, staffing requirements, and consumables for each of the two drying methods.

Results The automated drying process required 34.5 times less energy per endoscope than conventional drying cabinets: drying a single endoscope in a drying cabinet consumed 1.08 kWh, whereas the automated drying process used 0.03 kWh. Over one week, the automated drying process dried 109 endoscopes compared with 25 endoscopes dried in the drying cabinets. Using grey electricity, the nine drying cabinets at Erasmus MC generate an estimated 6,257 kg CO₂ annually, whereas the automated drying process accounts for only 88 kg CO₂ per year. The reduction in energy use also resulted in 71 times lower energy costs annually, 3777 euros for the drying cabinets and 53 euros for the automated drying process. PJM analysis demonstrated that the automated drying process required 3 times more workflow steps, 5 additional consumables, and an extra staff person to manage the drying cycle. However, consumable-related environmental impact to incinerate was little compared with reduced environmental impact caused by energy savings.

Conclusions The automated drying process substantially reduces the energy consumption of endoscope drying while enabling higher throughput. Although the automated drying process introduces additional workflow steps and requires additional consumables, its net environmental benefits remain substantial due to reduced energy consumption. Optimizing workflow integration and reducing consumable use may further strengthen the sustainability advantages of this novel technology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP334 Operational and financial impact of the introduction of endoscope tip protection

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DOI 10.1055/s-0046-1821274

Aims The growing number of gastrointestinal endoscopic procedures is associated with increasing risk of equipment damage, with consequences for workflow efficiency, scheduling, and hospital costs. The distal end of flexible endoscopes is particularly vulnerable during transport and handling, and even minor trauma can cause substantial downtime and expensive repairs. Proper handling is known to reduce preventable damage, and distal-tip protection devices offer an additional safeguard by shielding the endoscope tip during storage and transfer. In April 2025, our center introduced a single-use tip protector (Bumper, Vytil, France; unit cost 2.2 €). This study evaluated the operational and economic impact of its routine implementation, comparing institutional activity before and after its introduction.

Methods We conducted a retrospective analysis comparing two periods: April–September 2024 (no tip protection) and April–September 2025 (universal use of tip protection on all gastroscopes, colonoscopes, duodenoscopes, and EUS scopes). Institutional maintenance and activity records were reviewed to extract the total number of procedures, downtime days, repair events, and repair-related costs for each period. For 2025, the total expenditure on single-use tip protectors was calculated as 2.2 € per procedure. Outcomes were expressed as cumulative values and rates per procedure. Primary endpoints were changes in repair frequency, downtime, and total financial impact after inclusion of protection costs.

Results A total of 2,105 procedures were performed in 2024 and 2,654 in 2025. Downtime decreased from 579 days in 2024 to 303 days in 2025, a reduction of 276 days (48%). Repair events decreased from 12 to 4 (74% reduction), corresponding to a drop in repair rate from 0.57% to 0.15% of procedures. Repair-related costs fell markedly from 17,987 € in 2024 to 943 € in 2025, yielding 17,044 € in direct savings (95% reduction). The cost of the protection program in 2025 was 5,839 €. After incorporating this expenditure, the overall net saving was 11,205 €. Cost per procedure decreased from 8.55 € in 2024 (repairs only) to 2.56 € in 2025 (repairs + protection), representing a 70% relative reduction. The incremental cost-effectiveness ratio showed a net saving of 40.6 € per downtime day avoided.

Conclusions Routine application of a distal-tip protector led to a major reduction in repair events, instrument downtime, and repair-associated costs. The intervention remained strongly cost-saving, improving both operational continuity and economic efficiency. These results support systematic distal-tip protection as an effective and inexpensive measure to preserve endoscope integrity and optimize resource utilization.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP335 Discrimination Experiences and Work-Related Well-Being of Gastroenterologists in Germany

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DOI 10.1055/s-0046-1821275

Aims Due to the increasing shortage of physicians, the proportion of internationally recruited professionals in gastroenterology in Germany is rising. At the same time, physicians with a migration background repeatedly report hostility, discrimination and racism. Systematic data on the impact of these aspects on work-related well-being are still limited. This study aimed to assess the prevalence and impact of hostility and discrimination on occupational-related well-being among gastroenterologists in Germany [1–14].

Methods We conducted an anonymous online cross-sectional survey among gastroenterologists working in Germany (June–July 2025). Sociodemographic and professional characteristics, migration experience, frequency and burden of hostility from various actor groups and work-related well-being were recorded using a shortened German version of the “Thriving from Work” questionnaire.

Results 430 individuals completed the questionnaire (response rate 10.4%); 32% reported a migration background (19% first generation). In the past 24 months, 91.6% of participants with and 90.3% without a migration background reported at least one experience of hostility; a job change due to hostility was reported significantly more often by individuals with a migration background (20.6% vs. 5.7%). In the regression model (adjusted $R^2 = 0.49$), older age ($\beta = 0.08$; $p < 0.05$) and first-generation migration background ($\beta = 1.84$; $p = 0.03$) were associated with higher work-related well-being. Conversely, higher burden from hostility ($\beta = -10.42$; $p < 0.001$), cumulative hostility experiences ($\beta = -0.22$; $p < 0.001$) and lower knowledge of coping strategies ($\beta = -0.98$; $p < 0.05$) predicted lower well-being.

Conclusions Hostility is a widespread problem in the daily work of gastroenterologists in Germany and is closely linked to work-related well-being. Despite higher exposure, first-generation migrant physicians report comparatively higher well-being. Clinics and practices have a clear mandate to establish structural prevention and support measures to reduce discrimination and strengthen the retention of an increasingly international medical workforce. Endoscopy units could represent a particularly vulnerable setting, as physicians are exposed to high procedural demands, time pressure and complex patient interactions. These conditions may amplify the impact of hostility and discrimination on professional well-being and team dynamics. While the general problem of workplace hostility in gastroenterology is beginning to be recognized, specific data on endoscopy units remain limited, therefore further targeted research is needed to better understand the prevalence, mechanisms and consequences of hostility in this environment, but also to offer structural prevention and support measures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Schumann M, Maaz A, Peters H. Doctors on the move: a qualitative study on the driving factors in a group of Egyptian physicians migrating to Germany. *Global Health* 2019; 15: 2. doi:10.1186/s12992-018-0434-x
- [2] Elnahas M, Kamhieh-Milz S, Fetouh S et al. Job Satisfaction Among First-Generation Migrant Physicians in Anesthesiology and Intensive Care Medicine in Germany. *Healthcare (Basel)* 2024; 12: 2107. doi:10.3390/healthcare12212107

[3] Beigang S, Fetz K, Kalkum D et al. Diskriminierungs- erfahrungen in Deutschland. Ergebnisse einer Repräsentativ- und einer Betroffenenbefragung. Hg v Antidiskriminierungsstelle des Bundes Baden-Baden. Nomos; 2017

[4] Somani R, Muntaner C, Hillan E et al. A Systematic Review: Effectiveness of Interventions to De-escalate Workplace Violence against Nurses in Health-care Settings. *Saf Health Work* 2021; 12: 289–295. doi:10.1016/j.shaw.2021.04.004

[5] Rossi MF, Beccia F, Cittadini F et al. Workplace violence against healthcare workers: an umbrella review of systematic reviews and meta-analyses. *Public Health* 2023; 221: 50–59. doi:10.1016/j.puhe.2023.05.021

[6] Neidlinger SM, Peters SE, Gundersen DA et al. Thriving from work questionnaire: German translation and validation. *BMC Public Health* 2024; 24: 1634. doi:10.1186/s12889-024-19037-0

[7] Peters SE, Sorensen G, Katz JN et al. Thriving from Work: Conceptualization and Measurement. *Int J Environ Res Public Health* 2021; 18: 7196. doi:10.3390/ijerph18137196

[8] Scheepers RA, Boerebach BCM, Arah OA et al. A Systematic Review of the Impact of Physicians' Occupational Well-Being on the Quality of Patient Care. *Int J Behav Med* 2015; 22: 683–698. doi:10.1007/s12529-015-9473-3

[9] Haas JS, Cook EF, Puopolo AL et al. Is the professional satisfaction of general internists associated with patient satisfaction. *J Gen Intern Med* 2000; 15: 122–128. doi:10.1046/j.1525-1497.2000.02219.x

[10] Roth C, Wetzel E, Mora R et al. Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job demand during workplace integration: a cross-sectional study. *BMC Nurs* 2021; 20: 77. doi:10.1186/s12912-021-00581-8

[11] Pantenburg B, Lupp M, König H-H et al. Job satisfaction of foreign-national physicians working in patient care: a cross-sectional study in Saxony, Germany. *Journal of Occupational Medicine and Toxicology* 2016; 11: 41. doi:10.1186/s12995-016-0129-2

[12] Can E, Kassa A, Kakavand S et al. Foreign healthcare professionals in Germany: discrimination experiences and equal treatment at two large university hospitals. *Healthcare (Basel)* 2022; 10: 2339. doi:10.3390/healthcare10122339

[13] Klingler C, Marckmann G. Difficulties experienced by migrant physicians working in German hospitals: a qualitative interview study. *Hum Resour Health* 2016; 14: 57. doi:10.1186/s12960-016-0153-4

[14] Bundesärztekammer. Ergebnisse der Ärzttestatistik 2024 2025;

PYP336 Simulation-Based Training for Endoscopy Nurses Improves Device-to-Field Time: A Prospective Study

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DOI 10.1055/s-0046-1821276

Aims Assistant performance is pivotal to endoscopy efficiency, yet nurse training is often informal. We evaluated whether structured simulation plus theory improves nurse-dependent workflow.

Methods Prospective, parallel-group study of 20 endoscopy nurses allocated 1:1 to Simulation + Theory (training) or Control. Each nurse assisted 10 live procedures (5 gastroscopies, 5 colonoscopies; 200 observations) with the same endoscopist. The prespecified mix included diagnostic biopsies, dilation, cold-snare polypectomy (CSP), hot-snare polypectomy (HSP), endoscopic mucosal resection (EMR), and endoscopic submucosal dissection (ESD); EMR/ESD com-

plexity used the Size-Morphology-Site-Access (SMSA) score. The primary outcome was device-to-field time (DTF; seconds). Secondary outcomes were micro-tasks (exchange, injection, balloon, hemostasis, generator change, retrieval). We summarized medians [range] and fit regression models on log DTF with nurse-clustered standard errors, adjusting for case index, procedure type, age, experience, mentor presence, and SMSA. Learning windows were cases 1–3, 4–6, and 7–10; a difference-in-differences contrast compared pre/post case 4.

Results Groups were similar at baseline (cases 1–3). From case 4 onward, the training group was faster and remained so through case 10. The adjusted post-training effect corresponded to a time ratio of 0.81 (95% CI 0.80–0.83; $p < 0.001$). Improvements were consistent across procedures and largest for EMR/ESD; secondary micro-tasks showed similar patterns [1–6].

Conclusions A brief Simulation + Theory program produced rapid, durable gains in nurse device readiness, independent of seniority. Embedding structured nurse training in endoscopy services may enhance efficiency and support expanding therapeutic workloads.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khan R, Scaffidi MA, Grover SC, Gimpaya N, Walsh CM. Simulation in endoscopy: Practical educational strategies to improve learning. *World J Gastrointest Endosc* 2019; 11 (3): 209–18
- [2] (ESGENA) ESoGaENaA. ESGENA Core Curriculum for Endoscopy Nursing 2008;
- [3] Singh S, Sedlack RE, Cook DA. Effects of simulation-based training in gastrointestinal endoscopy: a systematic review and meta-analysis. *Clin Gastroenterol Hepatol* 2014; 12 (10): 1611–23.e4
- [4] Antonelli G, Voiosu AM, Pawlak KM, Gonçalves TC, Le N, Bronswijk M et al. Training in basic gastrointestinal endoscopic procedures: a European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) Position Statement. *Endoscopy*. 2024; 56 (2): 131–50
- [5] Elendu C, Amaechi DC, Okatta AU, Amaechi EC, Elendu TC, Ezech CP et al. The impact of simulation-based training in medical education: A review. *Medicine (Baltimore)* 2024; 103 (27): e38813
- [6] Ho KMA, Banerjee A, Lawler M, Rutter MD, Lovat LB. Predicting endoscopic activity recovery in England after COVID-19: a national analysis. *The Lancet Gastroenterology & Hepatology* 2021; 6 (5): 381–90

PYP337 Muscle activation, muscular overuse and perceived exertion in upper GI endoscopy in a clinical setting: comparison of single-use and reusable gastroscopes using wearable EMG sensors

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DOI 10.1055/s-0046-1821277

Aims Musculoskeletal strain is a major occupational burden in gastrointestinal endoscopy, with many endoscopists developing work-related overuse injuries during their careers. Even with this high prevalence, real-time data on muscular exertion during clinical procedures remain limited to date. This study analysed muscular activity and rate of perceived exertion (RPE) while performing EGD with single-use and reusable gastroscopes under matched conditions.

Methods Two trained endoscopists (m/f) performed a total of 16 EGDs. For each endoscopist, four single-use (aScope Gastro, Ambu A/S) procedures were matched to four reusable (GIF-HQ190, Olympus) procedures based on similar ASGE complexity levels and comparable procedure durations. A wearable multi-sensor electromyographic shirt (ErgoShirt, Myontec Ltd.; sampling rate 1000 Hz) was used to record real-time muscle activation of the endoscopists while performing the procedures. Perceived exertion was assessed immediately after each procedure using the Borg scale (ranging between 6 and 20, e.g. 9: “very

light”, 16: “very very hard”). To obtain the muscle load, data was processed using MATLAB (Mathworks), with descriptive analysis.

Results The average duration of the procedures was 7 minutes, with an average ASGE complexity of 2 for the procedures performed by the male physician and of 1 for the ones of the female endoscopist. The male physician reported a mean RPE of 9 (“very light”) when using the single-use vs. 11 (“light”) for reusable procedures. The female examiner reported a mean RPE of 9 for single-use versus 10 for reusable. EMG analysis supported these findings: with reusable gastroscopes, muscle activation was classified more in overload and risk zones relatively to the procedure duration compared to single-use scopes.

Conclusions This preliminary study demonstrated a relevant exertion within endoscopy procedures and an ergonomic advantage of lighter single-use gastroscopes by reduced muscular exertion and lower perceived workload. They data lead to the conclusion that lighter scopes as single-use gastroscopes may help mitigate long-term musculoskeletal strain in endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP338 Ergonomic Evaluation of Muscle Load During Simulated Endoscopic Submucosal Dissection: Comparison Between Single-use and Reusable Gastroscopes

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DOI 10.1055/s-0046-1821278

Aims Musculoskeletal injuries (MSI) are prevalent among gastrointestinal (GI) endoscopists due to prolonged static postures during procedures such as endoscopic submucosal dissection (ESD). Maintaining such postures and repetitive movements with the endoscope increases muscle strain and fatigue, particularly in the upper limbs and back. We have previously reported that lighter endoscopes may mitigate these risks by reducing muscle activation and fatigue. Single-use endoscopes, being lighter than reusable ones, could therefore benefit endoscopists during lengthy procedures like ESD. This study aimed to compare muscle activation when using single-use versus reusable gastroscopes during simulated ESD procedures.

Methods Ten experienced endoscopists (one female; age 37 ± 6 years; experience 9 ± 6 years) performed simulated ESDs using a single-use and a reusable gastroscope in an ESD-training model (G-Master). G-Master was employed to standardize task conditions among participants. Participants performed four ESD tasks (10-minute easy and a 20-minute complex ESD task using both gastroscopes) in randomized order, with a 15-minute break between scopes and a 2-minute interval between tasks for model setup. Muscle activity was recorded during the simulated ESDs using a validated ErgoShirt (Myontec) equipped with surface electromyography (sEMG) sensors measuring activation of major upper body muscles. To calibrate the sEMG sensors, the maximal voluntary contraction (MVC) was carried out by performing two sets of specific movements, for a minimum of five seconds each muscle. After performing each of the four simulated ESDs, the rate of perceived exertion (RPE) was verbally expressed by the participant to quantify exercise intensity using the Borg scale ranging between 6 and 20 (Borg, 1998). sEMG data were analyzed using Muscle Monitor Software (Myontec) and processed in MATLAB (MathWorks) to calculate muscle load (%MVC) as the normalized percentage of each muscle's MVC. Muscle load was categorized into five threshold zones (rest, healthy load, overload, high overload, and at-risk) based on magnitude and risk, as defined by the ErgoLink software linked to the ErgoShirt system. Data was reported

using the mean and standard deviation, and analyzed using paired t-tests, with statistical significance set at $P < 0.05$.

Results The RPE was 12 ± 2 ("light" to "somewhat hard") for the easy task with both gastroscopes. During the complex task, the RPE increased to 13 ± 2 ("somewhat hard") with the single-use gastroscope and 14 ± 1 ("somewhat hard" to "hard") with the reusable gastroscope. The single-use gastroscope showed a statistically significant reduction in RPE during the complex task ($p < 0.05$), but not in the easy task. sEMG data from the right arm were excluded due to interference from high-frequency instruments, and data from the trunk muscles were unavailable because of undershirt worn by the participants or calibration issues. Among the recorded muscles, significant differences were found only in the triceps and biceps, both showing lower average %MVC values when using the single-use gastroscope, particularly in the triceps during both tasks and in the biceps during the easy task ($p < 0.05$). The left wrist flexors and biceps spent a higher proportion of time in the "rest" and "healthy load" zones with the single-use device compared to the reusable one (easy: 71 % vs. 65 %; complex: 69 % vs. 57 %). Triceps and deltoids remained mostly in the healthy range for all conditions. Significant positive correlations were observed between RPE and the %MVC of triceps and deltoids. Muscle activation over time revealed greater wrist flexor overload in the second half of tasks for both scopes, indicating progressive fatigue.

Conclusions This study is the first to quantify muscle load during simulated ESD using wearable surface electromyography. The single-use gastroscope was associated with a significantly lower rating of perceived exertion during complex tasks, indicating a potential ergonomic advantage under prolonged procedural conditions. Among all monitored muscles, only the triceps and biceps showed statistically differences between the two gastroscopes, with consistently lower triceps activation when using the single-use endoscope. In conclusion, the use of lightweight gastroscopes may alleviate physical strain during lengthy or complex procedures, thereby contributing to the prevention of work-related musculoskeletal injuries.

Conflicts of Interest B. Veronica is employed by Company Ambu.

PYP339 Audit of tissue sampling in chronic diarrhoea: a green endoscopy initiative

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DOI 10.1055/s-0046-1821279

Aims The healthcare sector contributes significantly to carbon emissions, which leads to devastating impacts on the environment [1] and on human health. It is our responsibility to promote sustainable work practices, and reduce carbon emissions where possible, without negatively impacting on the quality of patient care. Chronic diarrhoea is a common indication for lower GI endoscopy. In a macroscopically normal appearing colon, current practice is to take biopsies to assess for microscopic colitis (MIC), looking for histological changes of lymphocyte infiltration or a collagenous subepithelial band. This is a relatively uncommon condition, but with increasing prevalence [2]. ESGE guidelines suggest biopsies should be taken from the right and left side of the colon and sent to pathology in separate containers [3]. While based on expert histopathological opinion, this recommendation was not supported by robust evidence. We have previously demonstrated 100 % sensitivity for MIC with a right sided biopsy protocol in a multicentre retrospective review [4]. Our local histopathologists confirmed there is no diagnostic benefit in separating left and right specimens for this indication. We reviewed our biopsy practice and assessed potential reductions in carbon emissions that could result from a change in practice.

Methods Patients referred for colonoscopy to investigate chronic diarrhoea (January–March 2024) were identified. Cases with a macroscopically normal colon were isolated. Biopsy practice for the assessment of microscopic colitis

was analysed, including the number of biopsies taken, location biopsied and the total number of histopathology containers sent to the laboratory. Findings were compared with current ESGE guidelines. A previous time motion assessment had been completed in our lab to calculate the total staff time per container [4]. Data on CO₂ emissions generated by processing each histopathological sample was estimated based on previous studies. From this, we assessed the potential reduction in carbon emissions with adherence to the current ESGE guidelines and then compared to our proposal; that all biopsies could be inserted into the one container.

Results A total of 205 colonoscopies were performed for chronic diarrhoea during the study period. Patients with a history of IBD, or poor prep requiring repeat procedure (43 %, $n = 89$) were excluded. A total of 351 containers were sent to pathology, a mean number of was 3.02 per case, and a range of 0–7. The recommended right and left biopsies were sent in 20 (18.8 %) of cases, with a single pot of random colon biopsies sent in 5 cases (4.7 %). Biopsies were taken from a macroscopically normal terminal ileum in 51 cases (48.1 %). No cases of microscopic colitis were confirmed. Time-motion assessment found the mean total staff time per biopsy container was 8 min 37s, resulting in time savings of 2.6 working days for laboratory staff per year, if we reduced to a single container. The carbon emissions resulting from analysis of colon biopsies is 0.29 kg CO₂ equivalent (CO₂e) per container [5], producing CO₂e of 407.26 kg/year with current practice. Adherence to ESGE Guidelines would produce savings of 138.04 CO₂e or 272.6 kg CO₂e if a single container protocol was adopted – annual savings of 1090.4 kg CO₂e or the equivalent of 4467 km driven by a petrol-powered vehicle [6].

Conclusions Auditing adherence to biopsy guidelines can result in significant reductions in inappropriate sampling and container use, leading to significant improvements in CO₂e and workload. The use of a single container protocol can further reduce carbon emissions while investigating for MIC. We found no cases of MIC in our study, but discovered that endoscopists took many more than the recommended number of biopsies. This included at the terminal ileum, taken in nearly half of cases, without any additional diagnostic benefit. We propose that right and left colon biopsies should be collected in a single container, to further decrease carbon emissions and the burden on histopathology [7].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Chen-Xu J, Corda MO, Varga O, Viegas S. Health burden and costs attributable to the carbon footprint of the health sector in the European Union. *Environ Int* 2024; 190: 108828. doi:10.1016/j.envint.2024.108828
- [2] Pardi DS, Tremaine WJ, Carrasco-Labra A. American Gastroenterological Association Institute technical review on the medical management of microscopic colitis. *Gastroenterology* 2016; 150 (1): 247–274. doi:10.1053/j.gastro.2015.11.006
- [3] Miehke S, Guagnozzi D, Münch A et al. European guidelines on microscopic colitis: United European Gastroenterology and European Microscopic Colitis Group statements and recommendations. *United European Gastroenterol J*. 2021; 9 (1): 13–37. doi:10.1177/2050640620951905
- [4] 10.1053/j.gastro.2015.11.006 3 Miehke S, Guagnozzi D, Münch A et al. European guidelines on microscopic colitis: United European Gastroenterology and European Microscopic Colitis Group statements and recommendations. *United European Gastroenterol J*. 2021; 9 (1): 13–37. doi:10.1177/2050640620951905
- [5] Leung E, Alshareef Y, Costigan C, Sihag S, Kripakaran D, Connolly Y, O'Donnell S, Breslin N, O'Connor A, Ryan B, Abdul Z, Ion C, O'Hara F, McNamara D. The "right" biopsy protocol for microscopic colitis: reduced workload and carbon footprint while maintaining diagnostic accuracy. *Endoscopy*. 2025; 57 (S2): S622. doi:10.1055/s-0045-1806626
- [6] Gordon IO, Sherman JD, Leapman M, Overcash M, Thiel CL. Life cycle greenhouse gas emissions of gastrointestinal biopsies in a surgical pathology laboratory. *Am J Clin Pathol* 2021; 156 (4): 540–549. doi:10.1093/ajcp/aqab021
- [7] United States Environmental Protection Agency Greenhouse gas equivalencies calculator. 2025; Available from <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

PYP340 Dual-Loop Assisted Endoscopic Full-Thickness Resection versus Conventional Endoscopic Full-Thickness Resection for Gastric Subepithelial Tumors

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DOI 10.1055/s-0046-1821280

Aims While conventional endoscopic full-thickness resection (C-EFTR) can completely remove gastric subepithelial lesions (SELs) originating from the muscularis propria or with predominant extraluminal growth, operating on lesions in "difficult locations" such as the gastric fundus, fornix, and lesser curvature of the gastric body is often challenging due to difficult endoscopic positioning. Double-loop ligation endoscopic full-thickness resection (DL-EFTR) creates a pseudo-pedunculated, polyp-like morphology by applying double loops at the lesion base using a ligation device, theoretically reducing technical difficulty and resection time. This study is the first multicenter retrospective cohort comparison of the clinical efficacy and economic differences between DL-EFTR and C-EFTR for gastric SELs ≤ 15 mm.

Methods Patients with gastric SELs who underwent DL-EFTR or C-EFTR between March 2023 and September 2025 at South China Hospital, Shenzhen University, and Shenzhen Bao'an Central Hospital were included. All procedures were performed by senior endoscopists, and the study was approved by the ethics committee. A 1:1 propensity score matching (PSM) was performed using gender, age, lesion size, location, and pathological type as covariates. After balancing baseline characteristics, operative time, technical success rate, complete resection rate, postoperative nasogastric tube placement rate, hospital stay, and costs were compared between the two groups.

Results Sixty-six patients (22 DL-EFTR, 44 C-EFTR) were initially analyzed. After PSM, 13 patients remained in each group, with no significant differences in baseline characteristics. The median operative time was significantly shorter in the DL-EFTR group (28.5 min vs. 49.0 min, $P < 0.05$). The technical success and complete resection rates were 100% in both groups. Significantly fewer patients in the DL-EFTR group required postoperative nasogastric tube placement (2 cases, 15.4%) compared to the C-EFTR group (9 cases, 69.2%) ($P < 0.05$). No significant difference was found in hospital stay (6.4 ± 3.0 d vs. 6.6 ± 1.6 d, $P > 0.05$). Both procedure costs and total hospitalization costs were significantly lower in the DL-EFTR group (all $P < 0.05$). No severe complications, such as intraoperative perforation, hemorrhage, or delayed bleeding, occurred in either group.

Conclusions For gastric SELs ≤ 15 mm, DL-EFTR ensures complete resection while significantly shortening operative time, reducing the need for nasogastric tube placement, and lowering medical costs, representing a safe, economical, and easily promotable innovative endoscopic technique. Limited by its retrospective design, prospective, large-sample, randomized controlled trials are needed to further validate its long-term efficacy and safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP341 Duodenal Adenoma EMR: Demonstrating good safety profile and resection outcomes, and high prevalence of synchronous colorectal cancers

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DOI 10.1055/s-0046-1821281

Aims Endoscopic resection by mucosal resection (EMR) is the ESGE-recommended therapy for treatment of non-ampullary duodenal adenomas. Other important aspects of management include surveillance for recurrence, and colonic evaluation. While procedural outcomes from EMR are established, the application of follow-up and surveillance is less clear. We reviewed a decade of practice to benchmark local outcomes against guidelines and identify pathway improvement opportunities within our tertiary endoscopy referral centre.

Methods Ten year retrospective evaluation of all non-ampullary duodenal adenomas ≥ 10 mm resected between 2014–2024. Data were obtained from electronic patient records and endoscopy procedure databases. Procedural safety, recurrence, and adherence to ESGE surveillance pathways and colonic evaluation guidance were assessed, including comparisons before and after the 2021 ESGE guideline update.

Results A total of 78 adenomas in 64 patients were resected by EMR within the evaluation period. Of these, 44 patients had sporadic adenomas and the remainder a polyposis syndrome (16 FAP, 3 Peutz-Jaeghers, 1 MUTYH). In the adenoma group, en-bloc resection was achieved in 28/78 (35.9%). Margins were R0 in 17/78 (21.8%), R1 4/78 (5.1%), and Rx 57/78 (73.1%), reflecting use of piecemeal EMR.

Delayed bleeding occurred in 3/78 (3.8%), and perforation in 0 patients. All of the bleeding events occurred in adenomas ≥ 30 mm ($p = 0.006$), suggesting a size-dependent risk. Clip closure was performed in 26/78 (33.3%) and haemostatic forceps and / or topical haemostatic agent in 17/78 (21.8%).

Endoscopic surveillance after index treatment was variable with 44/64 (68.8%) patients undergoing first surveillance within one year. Residual adenoma was found in 6/64 (9.4%) patients which were treated endoscopically. Persistent residual adenoma was seen at second follow in one patient which was cleared successfully with no recurrence on subsequent examinations. Residual rates were higher for patients with adenomas ≥ 30 mm (23.1% v 4.6%, $p = 0.023$). With regards to colonic surveillance algorithms; of those with sporadic adenoma, colonic evaluation was completed in 27/44 (61.4%). Of these, 5/44 (11.4%) cases of synchronous colorectal cancer were identified.

Conclusions EMR is highlighted in our evaluation as a safe and effective technique in our institution for the management of non-ampullary duodenal adenomas. Low bleeding rates can be achieved with selective use on a case-by-case basis of adjunctive prophylactic techniques. There are important learning points from our evaluation regarding historical deviation from current ESGE guidelines.

Surveillance programs after resection have followed different intervals to the current recommended standards introduced in the 2021 guidance. Given significant rates of residual disease in those with resection of larger adenomas (≥ 30 mm), adherence to these guidelines is important. Residual disease can then be treated successfully with good outcomes as demonstrated in our data. The ESGE guidance recommends performance of a colonoscopy in cases of duodenal adenoma. The importance of this is highlighted in our study by findings of high rates of synchronous colorectal cancer in our cohort in those without polyposis syndromes. Despite this, a significant proportion of patients did not have any colonic evaluation suggesting the need for standardised local pathways to optimise adherence with guidelines.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP342 Efficacy of Gel immersion ESD including papilla for superficial duodenal epithelial tumors

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DOI 10.1055/s-0046-1821282

Aims Endoscopic submucosal dissection including the papilla (ESDIP) for superficial duodenal epithelial tumors (SDETs) is minimally invasive but technically challenging due to the complex local anatomy and exposure to bile and pancreatic juice. SDETs involving the papilla are not a general indication for laparoscopic endoscopic cooperative surgery because they are directly adjacent to the pancreas. To overcome these difficulties, we introduced gel immersion ESDIP (GI-ESDIP) in 2022. This study aimed to compare the clinical outcomes of GI-ESDIP with those of conventional ESDIP (C-ESDIP).

Methods We retrospectively analyzed 29 consecutive ESDIP cases performed at our institution between January 2016 and October 2025. All procedures were performed using a scissor-type knife, with prophylactic biliary and pancreatic stent placement and attempted complete closure of the mucosal defect. Clinical characteristics, procedural outcomes, and adverse events were compared between the C-ESDIP group (n = 13, 2016–2022) and the GI-ESDIP group (n = 16, 2022–2025).

Results Baseline characteristics were comparable between groups. Median lesion size was not significantly different (37 vs. 31.5 mm, $P = 0.357$). Median procedure time was significantly shorter in the GI-ESDIP group (58 vs. 101 min, $P = 0.020$). En bloc resection was achieved in 100% of cases in both groups, and R0 resection rates were similar (76.2% vs. 87.5%, $P = 0.632$). The median number of intraoperative bleeding points was significantly lower in the GI-ESDIP group (4 vs. 8, $P = 0.004$). No intraoperative perforation occurred in either group. Muscularis propria exposure tended to be lower in the GI-ESDIP group (0% vs. 23.1%, $P = 0.078$). Delayed adverse events were comparable (7.7% vs. 12.5%), with one delayed perforation in each group, and one delayed bleeding and one cholangitis in the GI-ESDIP group. No pancreatitis occurred. One local recurrence was observed in the GI-ESDIP group and one metastatic recurrence in the C-ESDIP group.

Conclusions GI-ESDIP appears to reduce intraoperative bleeding and shorten procedure time, likely due to its stable visual field, buoyancy-assisted tissue elevation, and maintenance of a low intraluminal pressure environment. These findings suggest that gel immersion may enhance the safety and efficiency of papilla-involving duodenal ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP343 The role of endoscopic treatment for advanced duodenal adenomas in patients with familial adenomatous polyposis: a long-term single-center experience

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DOI 10.1055/s-0046-1821283

Aims Patients with familial adenomatous polyposis (FAP) develop duodenal adenomatous polyps, whose risk of malignant progression increases with advancing Spigelman stage. However, prophylactic duodenal surgery carries substantial morbidity and mortality.

This study aimed to evaluate the efficacy and safety of endoscopic treatment in FAP patients classified as Spigelman stages III–IV.

Methods A retrospective analysis was conducted on patients who underwent endoscopic duodenal surveillance and treatment at a tertiary referral center

between 2013 and 2025. Cold-snare polypectomy (CSP) and endoscopic mucosal resection (EMR) were the resection techniques employed. Data were collected on patient characteristics, polyp features, endoscopic procedures, histological findings, and Spigelman stage and score.

Results Between 2013 and 2025, 1035 EGDs were performed in 247 patients (55% male, median age 47 years, IQR 33–57) at out center, with a median follow-up of 84 months (IQR 49–115). Duodenal non-ampullary adenomas were detected in 130 patients (52.6%). Their Spigelman stage distribution was: 31 (23.8%) stage I, 44 (33.9%) stage II, 22 (16.9%) stage III, and 33 (25.4%) stage IV.

Among patients with advanced Spigelman stages, thirty-five (74% male, median age 53 years, IQR 40–60), 17 classified as stage IV and 18 as stage III, underwent endoscopic treatment for duodenal polyps. During a median follow-up of 32 months (IQR 17–90), 268 polyps were resected in 122 endoscopic procedures (57% CSP). The median polyp size was 10 mm (IQR 7–10.5), 76.5% of resected polyps were located in the descending duodenum, and 17.5% harbored high-grade dysplasia. After therapeutic work-up, 69% of patients achieved downstaging of baseline Spigelman stage ($p < 0.001$). The median Spigelman score decreased from 8 (IQR 8–9) to 6 (IQR 5–8) ($p < 0.001$), while the proportion of patients with high-grade dysplasia declined from 74.3% to 5.7% ($p < 0.001$). Kaplan-Meier analysis showed median times to re-progression and re-treatment after the first endoscopic treatment of 42 and 45 months, respectively.

No major adverse events occurred. One patient required surgery for multiple high-grade dysplasia adenomas not amenable to endoscopic resection, and no duodenal cancer were observed during the study period.

Conclusions Endoscopic treatment proved to be safe and effective in downstaging both Spigelman score/stage and histological dysplasia severity, thereby reducing the need for prophylactic surgery in FAP patients with advanced duodenal disease. Given the risk of re-progression in this setting, multiple endoscopic resections are often required to achieve long-term disease control.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP344 Minor Papillary Adenoma Resection and long-term outcomes

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DOI 10.1055/s-0046-1821284

Aims Adenomas of the minor papilla are difficult to diagnose and are uncommon. However, they are pre-malignant and require removal. Data on endoscopic papillectomy (EP) for removal of these lesions is limited. We aimed to evaluate the effectiveness, safety, and long-term outcomes of endoscopic minor papillectomy.

Methods A retrospective analysis of endoscopic papillectomy (EP) procedures was conducted at a single tertiary center over a 164-month period to November 2024. Patients who underwent minor EP were included and descriptively compared with major EP cases to explore differences in clinical features, safety, and long-term follow-up.

Results Among 215 patients who underwent EP, 10 with minor papillary adenomas were included. Of the remaining 205 major papilla lesions, 162 were non-malignant adenomas and were used for descriptive comparison. Identification of minor papilla lesions was inconsistent: 3(30%) were referred as major papilla lesions, 3(30%) as duodenal polyps, and 4(40%) specifically as minor papilla lesions. The minor papilla cohort had a mean age of 67, with 6 patients (60%) being female. Most lesions were of sporadic origin (90%). Compared to major papillary adenomas, minor papillary lesions were similar in size (median

20 mm; $p = 0.256$), and had a similar EP procedure time (69 min vs 60 min; $p = 0.68$). Adverse events were minimal: two patients (20%) had delayed bleeding not requiring intervention, and one (10%) had post-EP pancreatitis, comparable to major EP. Median follow-up was 22 months (IQR 6–33), with two recurrences, both managed successfully with cold avulsion with snare tip soft coagulation (CAST). Three cases with pancreatic divisum were resected successfully with minimal adverse events and no recurrence. No patients required surgery or developed malignancy during follow-up.

Conclusions Minor papilla adenomas have similar characteristics as the major papilla. They can be safely and effectively removed endoscopically. Even in the setting of pancreatic divisum, adverse events are infrequent.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP345 Immediate recognition and endoscopic closure of duodenal perforations: the key to therapeutic success. Twenty years of experience in a specialist centre

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DOI 10.1055/s-0046-1821285

Aims Duodenal perforation is a rare but serious complication of digestive endoscopy, associated with significant morbidity and mortality. Traditionally treated surgically, its management now tends towards endoscopic approaches thanks to the development of advanced closure devices. Nevertheless, specific data on duodenal perforations remain limited and prognostic factors poorly defined.

Methods We conducted a single-centre retrospective study including all patients who presented with iatrogenic duodenal perforation of type Stapfer I or II during diagnostic or therapeutic endoscopy between November 2004 and December 2023. Demographic, clinical, endoscopic and evolutionary data were collected. The primary endpoint was the clinical success of endoscopic treatment, defined as complete healing without the need for surgery. Secondary endpoints included initial technical success, clinical success after a single procedure, and the impact of the time to diagnosis (immediate vs. delayed) and the type of endoscopy (diagnostic vs. therapeutic).

Results Thirty-five patients (mean age 65.5 ± 12.6 years; 51.4% women) were included. Perforation occurred during ERCP (40%), EUS (31.4%), EGD (20%) or duodenoscopy (8.6%). The mechanism was related to a therapeutic manoeuvre in 68.6% of cases, and the most common location was the second duodenum (62.9%), of which 72.7% were periampullary. Perforation was identified intra-procedurally in 82.9% of cases. The initial technical success rate of endoscopic treatment was 90.3%, reaching 100% after repeat procedures. Overall clinical success was achieved in 71.4% of cases, including 60% after a single session, with a median healing time of 5 days [2–107]. Salvage surgery was necessary in 28.6% of patients. Overall mortality was 8.6%. Immediate diagnosis was associated with better outcomes: more frequent clinical success after one procedure (69.0% vs. 16.7%; $p = 0.028$), shorter hospital stay (12.0 ± 14.1 vs. 79.2 ± 60.9 days; $p = 0.001$) and fewer intensive care admissions (10.3% vs. 50%; $p = 0.049$). Perforations occurring during endoscopy were associated with a higher rate of reoperation (34.7% vs. 16.7%; $p = 0.001$) and a longer hospital stay (12.0 ± 14.1 vs. 79.2 ± 60.9 days; $p = 0.001$) and less need for intensive care (10.3% vs. 50%; $p = 0.049$). Perforations occurring during therapeutic endoscopy required more endoscopic procedures (3.3 vs. 1.3; $p = 0.048$).

Conclusions Endoscopy enables effective management of iatrogenic duodenal perforations, with clinical success in over 70% of cases and a reduction in the need for surgery. Immediate recognition of the perforation is a major prognostic factor, significantly improving the outcome. The development of advanced closure devices reinforces the role of the endoscopic approach, but

comparative studies are needed to define the optimal strategy and choice of equipment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP346V Loop assisted underwater resection of a large duodenal lipoma: An unexpected culprit behind upper gastrointestinal bleeding

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DOI 10.1055/s-0046-1821286

Abstract Text

A 68-year-old woman presented with abdominal pain and melena. Urgent OGD revealed an ulcerated pedunculated subepithelial duodenal lesion, and CT/EUS confirmed a 50-mm lipoma causing intussusception. Endoscopic treatment was performed by placing an endoloop at its base and resecting most of the lesion with a 20-mm snare. Both steps were performed underwater, which provided better lesion positioning and safety, given its proximity to the duodenal walls. Histology confirmed a benign lipoma. Different strategies have been described to be safe and effective for the endoscopic treatment of gastrointestinal lipomas, including loop-and-let-go, but spontaneous detachment posed a high obstruction risk in this case. Combining loop placement with underwater resection allowed for a safe, single-session treatment also allowing histological analysis [1–4].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0e59cc4d-78e0-40d1-a65a-74fbe082bcc4/Uploads/19978_Duodenal_Lipoma%20ESGE.MOV

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Skinner T, Yi Fu M, O'Neill RS et al. Duodenal Lipoma Presenting with Life-threatening Upper Gastrointestinal Hemorrhage Treated with Endoscopic Mucosal Resection. *JGLD* 2025; 34 (2): 155
- [2] Yang B, Jiang F, Lu P, Han H. Minimally invasive management of large duodenal lipoma: endoscopic submucosal dissection. *J Int Med Res* 2021; 49 (12): 1–11
- [3] Strnisa L, Plut S, Golob S, Gavric A. Endoscopic resection of a large symptomatic duodenal lipoma. *Gastroenterol Hepatol* 2024; 47 (4): 384–386
- [4] Domingues A, Araújo R, Silva G et al. Endoscopic resection of a giant duodenal lipoma: a case report. *Endoscopy* 2025; 57 (S 01): E1259–E1260

PYP347 Recurrence after endoscopic papillectomy for papillary adenoma: risk factors and long-term treatment outcomes

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DOI 10.1055/s-0046-1821287

Aims Endoscopic papillectomy (EP) for papillary adenoma is effective but is compromised by recurrence rates exceeding 20%. Data on managing recurrence is scant. We evaluated risk factors for recurrence and its management.

Methods Patients with histologically confirmed major papilla adenomas treated by EP at a tertiary center over 164 months to November 2024 were included. Residual or recurrent adenoma (RRA) was defined histologically. Treatments included hot snare excision and cold avulsion with snare tip soft coagulation(-CAST). Margin thermal ablation(MTA) using snare tip soft coagulation(STSC)

was used at index EP from 2020. Success was defined as negative endoscopic and histologic biopsy at the EP site during follow-up.

Results Inclusion criteria were met by 166/215 EP cases. Surveillance endoscopy was

performed in 162(97.6 %), with RRA observed in 39 (24.1 %). Multivariable logistic regression identified larger lesion size(OR 1.041/1mm;p = 0.0239), intraductal extension(OR 3.919;p = 0.010), and familial adenomatous polyposis (FAP)(OR 6.60;p = 0.0029) as risk factors for RRA. MTA was protective (OR 0.229;p = 0.0203). RRA treatment was performed in 37/39 (94.6 %). Intraductal recurrence was excluded as a specialised subgroup. 31 patients were treated for RRA with hot snare or CAST + /- MTA. In 28 patients with median follow-up 22months, 25(89.3 %) were cured. Adverse events were pancreatitis 2 and delayed bleed 1. No patient required surgical treatment for RRA.

Conclusions After EP for papillary adenoma, RRA occurs in 24%. Risk factors include lesion size, intraductal extension and FAP. MTA reduces the risk of RRA. Endoscopic treatment of RRA is safe, effective and durable.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP348 Prophylactic EUS-guided gastroenterostomy during circumferential duodenal and ampullary resection: a case report

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 DOI 10.1055/s-0046-1821288

Background Endoscopic resection of circumferential duodenal adenomas carries high stricture risk. We report prophylactic EUS-guided gastroenterostomy (EUS-GE) using a lumen-apposing metal stent (LAMS) performed during circumferential ampullectomy to maintain oral intake throughout the anticipated stricture formation and resolution phase.

Case A 53-year-old woman presented with dyspepsia. Endoscopy revealed a 50mm circumferential non-granular laterally spreading duodenal lesion involving the ampulla (Paris 0-IIa + Is, JNET 2A). MRCP and CT excluded intraductal extension and metastases. Piecemeal EMR with en bloc ampullectomy was performed. Biliary (8 × 60mm fully-covered metal stent) and pancreatic (7Fr × 5cm plastic) stents were placed. Given near-certain post-resection stricture, prophylactic EUS-GE was performed during the same session: a 20 × 10mm LAMS was deployed between the gastric antrum and jejunum under EUS and fluoroscopic guidance. This approach was chosen to reduce procedure burden and ensure uninterrupted oral intake during stricture management. Intraprocedural bleeding was controlled with soft coagulation and hemostatic gel. Mild post-ERCP pancreatitis resolved conservatively.

Outcome Histology confirmed tubulovillous adenoma with focal high-grade dysplasia. Over 22 months, the patient required seven balloon dilations (6–15mm) for duodenal stricture but maintained oral intake throughout via the gastroenterostomy. Two small residual adenoma foci were treated with cold snare polypectomy. No recurrence at last follow-up.

Conclusion Prophylactic EUS-GE during high-risk circumferential duodenal resection maintains quality of life by preserving oral intake during stricture management, reduces overall procedure burden, and avoids pancreaticoduodenectomy.

Conflicts of Interest no COI

PYP349 The effectiveness of a hemostatic gel (3D-Matrix 621-062) in the prevention of delayed bleeding after EMR of non-ampullary duodenal lesions

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DOI 10.1055/s-0046-1821289

Aims Duodenal endoscopic mucosal resection (EMR) has a high risk of bleeding. In a historical consecutive series of duodenal EMR in our hospital we found in 13/34 cases (38 %) active bleeding or high-risk stigma of bleeding (visible vessel after removal of a blood clot) on next day gastroscopy (EGD). Prophylactic application of a haemostatic gel (3D-Matrix 621-062) to the EMR field may be an easy way to prevent delayed bleeding¹.

The aim of the study was to assess the efficacy of 3D-Matrix 621-062 in reducing delayed bleeding following duodenal EMR.

Methods We conducted a single-arm, multicenter observational trial of patients undergoing hot-snare EMR of duodenal non-ampullary lesions of ≥ 10 mm.

Following EMR, 3D-Matrix 621-062 was applied directly to the EMR defect. The next day, an EGD was performed to detect active bleeding or high-risk stigma of bleeding (visible vessel after removal of a blood clot).

We hypothesized a 50 % decrease in bleeding stigma from 38 to 19%; sample size was calculated for power of 90 % and Alpha of 0.05. The number of subjects to be enrolled was 59 patients.

Results From October 2020 until August 2025, 59 patients from 5 different centers were included. Mean lesion size was 21.73 mm. 3D-Matrix 621-062 application was feasible in all patients. On EGD the next day, active bleeding (10 patients; 17 %) or visible vessel after removal of a blood clot (6 patients; 10 %) was seen in 16 patients (27 %) (Fisher's exact P = 0.35, NS). During hospital stay, melena and hematemesis were observed in respectively 4 (7 %) and 1 patient (2 %). Hypotension was not observed. Treatment by placement of a hemoclip was performed in only 9 patients (15 %) and relevant blood loss of ≥ 1 g/dL was seen in 3 patients (5 %).

Conclusions Application of 3D-Matrix 621-062 following duodenal EMR did not significantly decrease the rate of bleeding or bleeding stigmata on next day EGD in comparison to a historical cohort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

It's all about AI!

16/05/2026, 10:30–11:30

Emerald 5

PYP350 Exploring the Heterogeneity of Adenoma Detection Rate in Control Arms of CADe Randomized Trials: A Pooled Data and Meta-Regression Analysis

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 DOI 10.1055/s-0046-1821290

Aims Randomized controlled trials (RCTs) comparing computer-aided detection (CAdE) systems with standard high-definition colonoscopy exhibit marked variability in adenoma detection rate (ADR) across control (non-AI) arms. Since baseline ADR directly determines the magnitude of the apparent benefit of CAdE, understanding the sources of variability in human ADR is essential for interpreting AI-assisted performance. This study aimed to quantify the pooled ADR of control arms in CAdE RCTs and to identify the study-level factors explaining its heterogeneity through meta-regression (► **Table 1**).

► **Table 1** Meta-regression analysis investigating study-level factors associated with ADR.

Covariates	Number of studies	Beta coefficient ± SE	Adjusted R ² (%)	P value
Age	42	1.017 ± 0.002	67.0	<0.001
Sex (male)	42	1.006 ± 0.002	15.3	0.005
Region	42	0.887 ± 0.039	20.9	0.009
Study design (Monocentric vs Multicentric)	42	1.089 ± 0.050	7.0	0.070
Analysis (PP vs ITT)	42	0.950 ± 0.048	-1.0	0.320
Setting (screening/ surveillance vs diagnostic)	41	0.865 ± 0.037	26.8	0.001
Screening population ≥ 50 %	38	1.035 ± 0.048	-0.6	0.466
Endoscopist training level	40	1.012 ± 0.030	-3.3	0.698
Baseline ADR	11	1.490 ± 0.163	89.7	0.005
Withdrawal time	41	1.030 ± 0.005	61.2	<0.001

Abbreviations: SE = Standard Error; R² = Relative reduction in between-study variance: the value indicates the proportion of between study variance explained by covariate.

Methods We included all control groups from RCTs comparing standard colonoscopy with any CAdE platform. The primary outcome was pooled ADR, calculated using a random-effects model. Secondary outcomes included polyp detection rate (PDR) and adenoma miss rate (AMR). Heterogeneity was quantified using the inconsistency index (I²). Mixed-effects meta-regression explored associations between ADR and predefined moderators including patient age, sex, geographic region, study design, clinical setting, endoscopist experience, baseline ADR, and withdrawal time.

Results Forty-two control arms were analyzed. The pooled ADR was 0.35 (95 % CI, 0.30–0.41), with considerable heterogeneity (I² = 96.8 %). The pooled PDR was 0.50 (95 % CI, 0.44–0.55), while the pooled AMR was 0.37 (95 % CI, 0.33–0.40), again with considerable heterogeneity (I² = 97.0 %). Meta-regression demonstrated that age (p < 0.001), male sex proportion (p = 0.005), geographic region (p = 0.009), clinical setting (p = 0.001), baseline ADR (p = 0.005), and withdrawal time (p < 0.001) were the strongest predictors of variability in human ADR. In selected models, these covariates explained up to 89.7 % of the between-study variance.

Conclusions ADR in standard colonoscopy arms of CAdE RCTs is highly heterogeneous, reflecting demographic, contextual, and procedural quality differences across studies. This extreme baseline variability substantially shapes the observed effect size of CAdE systems, highlighting the need to contextualize AI performance against the intrinsic variability of human detection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP351 Blinded Multicenter Comparison of Colonoscopy Polyp detection with and without Computer-Aided system: Evaluating Performance in Real-World Practice

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Aims Computer-aided detection (CAdE) has been shown to improve outcomes in randomized trials. However, most studies occurred in controlled environments where endoscopists are aware of being monitored, potentially influencing performance and limiting real-world applicability. Our aim was to assess the impact of CAdE in routine multicentre practice, with endoscopists unaware that their performance was being evaluated and serving as their own controls.

Methods Prospective multicentre study across 13 units (March–September 2025) including adults aged ≥ 40 years undergoing colonoscopy. All six endoscopists executed procedures both in a centre where CAdE use is compulsory and in others without CAdE, unaware that their CAdE and nonCAdE performance was being compared. The primary outcome was adenoma detection rate (ADR). Secondary outcomes included combined adenoma plus clinically significant serrated polyp detection (A + CSSPDR), polyp detection (PDR), proximal neoplasia detection (PNDR), diminutive polyp detection (DPDR) and serrated detection rate (SDR).

Results Of 3161 eligible procedures, 2973 were analysed (947 CAdE; 2026 non-CAdE). ADR was higher with CAdE (34.4 % vs 30.7 %; p < 0.05). A + CSSPDR (40.3 % vs 35.8 %; p < 0.05), PDR, PNDR and DPDR were also significantly higher, while SDR showed a non-significant positive trend. CAdE remained independently associated with higher ADR (aOR 1.31, 95 % CI 1.11–1.55; p = 0.002) and A + CSSPDR (aOR 1.33, 95 % CI 1.13–1.56; p = 0.001) after adjusting for age, sex and indication; the magnitude of effect was attenuated once endoscopist-level adjustment was applied.

Conclusions In real-world practice, with fully blinded conditions, CAdE improves detection of adenomas and clinically relevant serrated lesions, though the effect varies between endoscopists. This underscores its utility while reflecting operator-driven variability.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP352 AI-Driven automated assessment of intestinal barrier impairment in IBD using probe confocal laser endomicroscopy

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DOI 10.1055/s-0046-1821292

► Table 1

	Overall barrier impairment	Epithelial barrier impairment	Vascular barrier impairment		
	IBD	CD	UC	IBD	IBD
Accuracy (95 % CI)	76.5 [64.7-88.2]	71.3 [53.6-85.7]	85.0 [70.0-100]	70.6 [56.9-82.4]	82.4 [70.6-92.2]
Sensitivity (95 % CI)	76.9 [63.2-89.5]	71.3 [50.0-90.0]	86.7 [66.7-100]	69.7 [53.1-84.6]	85.3 [72.4-96.8]
Specificity (95 % CI)	75.0 [50.0-100]	71.4 [33.3-100]	79.9 [33.3-100]	72.2 [50.0-92.9]	76.5 [53.8-94.7]
PPV (95 % CI)	90.9 [80.0-100]	88.3 [70.6-100]	92.8 [76.9-100]	82.1 [66.7-95.8]	87.9 [75.8-97.2]
NPV (95 % CI)	50 [26.7-73.3]	45.2 [15.4-75.0]	66.7 [25.0-100]	56.5 [35.7-76.6]	72.2 [50.0-92.9]
F1 score (95 % CI)	83.3 [73.0-91.7]	78.4 [62.5-91.3]	89.3 [75.0-100]	75.4 [61.8-86.2]	86.6 [76.7-94.4]
AUC (95 % CI)	81.5 [66.2-93.9]	82.9 [62.6-97.9]	83.9 [55.6-100.0]	83.7 [71.6-93.0]	88.0 [76.5-96.6]

Aims Barrier healing is emerging as a key therapeutic target in Inflammatory bowel disease (IBD), being more closely associated with sustained remission and improved long-term outcomes than endoscopic and histological remission alone. Accurate assessment of barrier integrity is therefore crucial to optimise disease management. Probe-based confocal laser endomicroscopy (pCLE) enables real-time structural and functional assessment of intestinal barrier. However, its interpretation remains complex and highly operator-dependent, limiting its reproducibility and widespread application. Preliminary studies have demonstrated the feasibility of using automated assessment of specific pCLE features to predict therapeutic response [1]. We aimed to develop and validate an artificial intelligence (AI)-driven pCLE system for standardised, objective assessment of barrier impairment (BI) in IBD.

Methods 156 high-quality pCLE videos from IBD patients undergoing colonoscopy in Ireland and UK were considered. Experienced endoscopists assessed the presence of BI according to a previously developed pCLE-scoring system [2], providing a reference standard for AI. An AI algorithm was developed to predict pCLE-based BI using a weakly supervised learning paradigm that exclusively employs video-level scoring. Frame-level features were extracted with ViT pretrained under DINOv2 self-supervised learning framework [3] and transformer-based architecture [4] aggregated these into a global video representation. A linear layer classifier with two output neurons generated the final video-level BI score. A total of 105 videos were used for training and validation of the framework, while 51 were reserved for testing. The model's ability to predict overall, epithelial, and vascular BI was evaluated. Diagnostic performance was expressed as sensitivity, specificity, accuracy, positive predictive value, negative predictive value, and F1 score.

Results Overall, 48 IBD patients (28 CD and 20 UC) were considered. 119/156 (76 %) videos showed BI, 68/101 (67 %) in Ireland and 51/55 (93 %) in the UK cohort. ► Table 1 details the diagnostic performance of the model. The AI algorithm achieved 77 % sensitivity, 75 % specificity, and 77 % accuracy in detecting overall BI at the video level. Moreover, the model assessed the presence of epithelial and vascular BI with 70 % and 85 % sensitivity, 72 % and 77 % specificity, 71 % and 82 % accuracy. Diagnostic performance was higher in UC than CD.

Conclusions Our AI model enables automated and standardised assessment of intestinal impairment in IBD, offering an objective and reproducible tool to monitor barrier healing as a novel therapeutic endpoint.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Shao Z, Bian H, Chen Y et al. TransMIL: Transformer based Correlated Multiple Instance Learning for Whole Slide Image Classification. Published online. 2021;
- [2] Oquab M, Darcet T, Moutakanni T et al. DINOv2: Learning Robust Visual Features without Supervision. Published online. 2024;
- [3] Iacucci M, Majumder S, Zammarchi I et al. Automated real-time imaging of intestinal barrier integrity and molecular profiling for early outcome prediction in inflammatory bowel disease – Endo-Histo-Barrier-Omics study. J Crohns Colitis. Published online 2025. doi:10.1093/ecco-jcc/jjaf200
- [4] Iacucci M, Jeffery L, Acharjee A et al. Computer-Aided Imaging Analysis of Probe-Based Confocal Laser Endomicroscopy With Molecular Labeling and Gene Expression Identifies Markers of Response to Biological Therapy in IBD Patients: The Endo-Omics Study. Inflamm Bowel Dis 2023; 29 (9): 1409–1420. doi:10.1093/ibd/izac233

PYP353 AI-assisted Intestinal Ultrasound – moving beyond static bowel wall thickness assessment towards a comprehensive full workflow solution

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DOI 10.1055/s-0046-1821293

Aims Intestinal ultrasound (IUS) is increasingly used for real-time assessment of inflammatory bowel disease (IBD) but quantitative analysis with artificial intelligence (AI) remains limited to bowel wall thickness (BWT) and single-frame segmentation, failing to exploit the temporal information in cine-loops (CLs). The aim here was to evaluate the accuracy of an AI model compared to expert central readers using IUS CLs.

Methods We developed a novel model using a semi-supervised algorithm combined with a temporal module, trained on 680,000 IUS images from 1572 CLs (327 patients from multiple centres). 1205 frames from 403 CLs on 94 patients were labelled by 8 domain experts (203 validation, 1002 training images). The CLs had various segments per patient with active IBD, and included axial, longitudinal and oblique sections. An external test set (27 patients, 58 CLs) of active Crohn's patients (ascending, transverse, descending colon), centrally read by 3 expert readers, was used for initial evaluation. The model was optimized to segment 9 categories including bowel wall (BW), psaos, iliac vessels (IV), and inflamed mesentery (IM). Each output was based on a current frame and context representations from previous frames. The model continuously segments and tracks anatomy, generating temporally coherent delineations and data that feed intra- and inter-frame measurement algorithms. On the validation set, we calculated the Dice similarity coefficient (DSC), an overlap-based metric, from the expert annotations. Intraclass correlation coefficient (ICC) scores from ground truth measurements were made for every labelled image.

Results Qualitative evaluation by domain experts confirmed consistency and anatomical precision of the outputs across a range of bowel regions and disease activity. Quantitatively, on the validation set our model achieved DSC of 0.73 [0.70 – 0.75], 0.26 [0.23 – 0.28], 0.62 [0.55 – 0.68], 0.63 [0.53 – 0.72], 0.72 [0.64 – 0.79] and 0.41 [0.32 – 0.49] for BW, peritoneal lining, rectus, psaos, IV and IM. Based on BW segmentations, the measurement algorithm achieved an ICC of 0.83 [0.77 – 0.87] between predictions and per frame expert measurements. On the external test dataset, the ICC between an aggregated AI-driven measurement per CL and the mean of all reader measurements was 0.83 [0.73 – 0.9].

Conclusions Unlike prior approaches focused on static frames or derived BWT estimation, this method preserves frame-to-frame continuity, enabling reproducible analysis of CLs with no manual pre-selection of measurement areas. Our model provides identification of many anatomical structures in addition to BWT, essential to moving AI beyond this measure and towards fully automated disease activity monitoring.

Conflicts of Interest Dolinger, Michael: Personal Fees: Consultant for Neurologica (Samsung Electronics subsidiary) Ernest-Suárez, Kenneth: Consulting/ Advisory Board Fees: Abbvie, AstraZeneca, Johnson & Johnson, Pfizer, Ferring, Sandoz, SatisfAI, TakedaGecse, Krisztina B.: Grant: Abbvie, Pfizer Inc, Celltrion, Galapagos/Alfasigma Personal Fees: Consultancy fees from AbbVie, Galapagos, Gilead, Immunic Therapeutics, Janssen, Pfizer Inc., Takeda; speaker honoraria from Celltrion, Eli Lilly, Janssen, Pfizer Inc., TakedaMaaser, Christian: Speaker honoraria and/or Advisory honoraria: Abbvie, Alfasigma, Biogen, Falk Foundation, Galapagos, Gilead, J&J, MSD Sharp & Dohme, Pfizer, Roche, Samsung, TakedaNovak, Kerri: Research Grants: Helmsley Trust, Pfizer, Janssen Adboard/ Consulting Fees: Abbvie, Janssen, Pfizer, Pendopharm, Takeda, Eli Lilly, Celltrion, Bristol Myers Non-financial Support (ultrasound machine): McKesson Pharmacy, Pfizer, CelltrionNylund, Kim: Other: PI in clinical trial (Takeda)Sagami, Shintaro: Advisory/Consulting/Speaker roles: AbbVie, Alimentiv, Bristol Myers Squibb, Celltrion, EA Pharma, Eli Lilly, Ferring, Gilead, Janssen, Kyorin, Mitsubishi Tanabe, Mochida, Nippon Kayaku, Pfizer, Takeda, Zeria Research Funding: Bristol Myers Squibb, EA Pharma, Gilead, Helmsley Charitable Trust, JIMRO, Kyorin, Miyarisan, Mochida, Nippon Kayaku, Pfizer, Sekisui Medical, Samsung, Takeda, ZeriaByrne, Michael: Founder and shareholder, Dova Health IntelligenceWilkens, Rune: Personal Fees: Janssen, Takeda Denmark, AbbVie, Pfizer Denmark, Alimentiv

PYP354 Retrospective Benchmarking of CAD EYE and ColoMAIA-2 Using Delay-Based Sensitivity and False-Alarm Metrics

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DOI 10.1055/s-0046-1821294

Aims To establish objective metrics for retrospective CADe evaluation and use them to directly compare Fujifilm CAD EYE with Maia Labs ColoMAIA-2 on identical colonoscopy recordings.

Methods This retrospective single-center study analyzed video data from 150 colorectal cancer screening colonoscopies (1945 minutes) performed by three expert endoscopists (> 10 years' experience). A total of 189 clinically significant polyps were identified in the recordings. CAD EYE operated in real time during procedures, while ColoMAIA-2 was applied offline. Outcome measures included: 1) detection delay from first polyp appearance; 2) delay-specific sensitivities at 100–5000 ms; 3) False alarms, expressed as false detections per minute; 4) percentage of video time with false alarms. False alarms were assessed only during active mucosal inspection (excluding polyp examinations and polypectomies). Bootstrap resampling was used to compute confidence intervals and p-values.

Results Across all short delays, ColoMAIA-2 achieved substantially higher sensitivity than CAD EYE. At 100 ms, sensitivity was 47.6% vs. 16.9%; at 200 ms, 67.2% vs. 33.9%; at 300 ms, 78.8% vs. 45.5%. At the clinically meaningful 500-ms delay, ColoMAIA-2 reached a sensitivity 86.8% (CI 81.5–91.5) compared with 62.4% (CI 55.6–69.3) for CAD EYE ($p < 0.001$). Mean detection delay was significantly shorter with ColoMAIA-2 (382 ms, CI 260–522) than with CAD EYE (814 ms, CI 650–985; $p < 0.001$). False-alarm frequency differed markedly. ColoMAIA-2 generated only 3.09 false alarms/min and 1.44% false-alarm time (all $p < 0.001$), whereas CAD EYE produced 37.4 false alarms/min and 4.67% of video time with false alarms. This represents roughly a twelve-fold reduction in individual false-alarm events. Qualitatively, CAD EYE produced a large number of false alarms in the presence of specific stool residue and blood.

Conclusions In identical colonoscopy recordings, ColoMAIA-2 delivered markedly faster polyp alerting and dramatically fewer false alarms compared with CAD EYE. These differences concern parameters known to influence adenoma detection and procedural flow. The proposed metrics (delay-specific sensitivities, false-alarms) provide a robust framework for clinically meaningful retrospective benchmarking of CADe systems.

Conflicts of Interest Michal Hradis, Petr Musil and Pavel Svoboda are contributing to technical development at MAIA LABS s.r.o.

PYP355 Endoscopic submucosal dissection in the colon after completion of the learning curve – a single-center analysis of factors associated with therapeutic failure and complications

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DOI 10.1055/s-0046-1821295

Aims To identify factors associated with therapeutic failure and complications after colorectal ESD in a single-center cohort covering the period after completion of the operator's learning curve.

Methods Retrospective analysis of 212 consecutive patients (2019–2022). Endpoints included therapeutic success (R0/Rx), adverse events according to the Clavien–Dindo classification, and potential predictors (pre-procedural bi-

opsy, hybrid resection technique [h-ESD], Paris classification, lesion size). The data derive from our own clinical series.

Results En bloc resection was achieved in 93.87 %, R0 in 91.04 %, and therapeutic success in 91.04 %; complications occurred in 8.02 % (bleeding 2.36 %, perforation 3.30 %). In univariable models, lack of success was more frequently associated with pre-procedural biopsy (OR 3.29; $p = 0.0168$) and h-ESD (OR 8.31; $p = 0.0025$). In the bivariable model, biopsy (OR 3.18; $p = 0.024$) and h-ESD ($p = 0.0045$) remained significant. Lesion size did not significantly affect efficacy ($p = 0.116$), but correlated with the risk of complications; higher risk was observed, among others, for Paris classification 0-IIa-Is.

Conclusions After completion of the learning curve, ESD provides high efficacy and acceptable safety also in a non-academic center. Avoiding routine biopsy before planned ESD and striving for full ESD (without hybrid resection) may increase the rate of radical resections and reduce complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP356 Impact of Comprehensive Artificial Intelligence Monitoring of Withdrawal Time and Bowel Preparation Quality on Adenoma Detection Rate

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DOI 10.1055/s-0046-1821296

Aims Accurately measuring the actual observation time (AOT), excluding biopsy or polypectomy time, remains a challenge during colonoscopy. Bowel preparation is another critical factor affecting the quality of colonoscopy. We aimed to evaluate the impact of comprehensive artificial intelligence (AI)-based monitoring of AOT and bowel preparation on adenoma detection rate (ADR).

Methods We developed an AI model that comprehensively assesses both withdrawal time and bowel preparation quality simultaneously. We validated the performance of the AI model by analyzing a total of 1,489 consecutive colonoscopy videos. The AI model assessed both crude withdrawal time (CWT), defined as the time from cecal intubation to anal withdrawal, and AOT. Each was classified into four groups: <6 min, 6–9 min, 9–12 min, and ≥ 12 min. Bowel preparation was classified as adequate or inadequate. Colonoscopy quality indicators such as ADR and adenomas per colonoscopy (APC) were compared across combined categories of AOT and preparation status.

Results The mean age of the 1,489 patients was 60.9 ± 12.9 years, and 71.1 % were male. As both CWT and AOT increased, the ADR increased significantly. ADR increased from 6.6 % in patients with CWT <6 min to 71.2 % in those with CWT ≥ 12 min ($p < 0.001$), and from 11.3 % in patients with AOT <6 min to 70.2 % in those with AOT ≥ 12 min ($p < 0.001$). ADR was significantly higher in the 6–9 min AOT group than in the 6–9 min CWT group (23.5 % vs. 16.5 %, $p = 0.005$). Advanced ADR was also significantly higher in the 6–9 min AOT group than in the 6–9 min CWT group. In addition, APC was significantly greater in the 6–9 min AOT group than in the 6–9 min CWT group (0.33 [95 % confidence interval (CI) 0.27 – 0.39] vs. 0.19 [95 % CI 0.15 – 0.22], $p = 0.002$). The ADR was significantly higher in the AI-assessed adequate preparation group than in the inadequate preparation group (41.1 % vs. 31.0 %, $p = 0.001$). APC was also significantly higher in the AI-assessed adequate preparation group. In the integrated analysis, the odds ratio (95 % CI) for ADR were 2.76 (1.67–4.79) with adequate preparation and AOT <9 min, 8.53 (4.91–15.46) with inadequate preparation and AOT ≥ 9 min, and 12.07 (7.4–20.76) with both adequate preparation and AOT ≥ 9 min, compared with inadequate preparation and AOT <9 min. Similar trends were observed for other outcomes, including multiple advanced ADR and APC.

Conclusions An integrated metric combining AI-assessed AOT and bowel preparation status offers a more detailed assessment of adenoma detection outcomes, including ADR and APC. Comprehensive AI-based monitoring of quality parameters may enhance colonoscopy performance without increasing the burden on endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP357 Computer-Aided Adenoma Detection in Routine Colonoscopy: A Concealed Multicenter Randomized Trial

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DOI 10.1055/s-0046-1821297

Aims Single-blinded randomized controlled trials (RCTs) have shown that computer-aided detection (CAdE) increases adenoma detection rate (ADR), whereas real-world implementation studies have reported no gains. Single-blinded design and awareness of being studied may inflate effect estimates while implementation studies might suffer from selection bias. We evaluated CAdE in routine practice within a concealed trial in which patients, endoscopists, and clinical staff were unaware of study participation and randomization.

Methods A concealed two-arm multicenter randomized controlled trial was conducted between July 2023 and August 2025 across three centers, enrolling patients aged 45–89 years undergoing diagnostic, screening, or surveillance colonoscopy. Patients were randomized 1:1 to an endoscopy room equipped with a CAdE system (intervention) or a room without CAdE (control). Endoscopists, nursing staff and patients were blinded to the existence of the trial. A research assistant did activate CAdE every morning before arrival of the endoscopy team, however, endoscopists could choose to deactivate CAdE. The primary outcome was ADR; secondary outcomes included CAdE utilization rate, adenomas per colonoscopy (APC), sessile serrated lesion detection rate (SSLDR), advanced lesion detection rate (ALDR), proximal APC (pAPC), and the proportions of neoplastic and non-neoplastic polyps. The primary analysis was intention-to-treat (ITT), with per-protocol (PP) analyses based on actual CAdE use. Generalized linear models estimated group differences.

Results Of 1,744 randomized patients, 1,673 were included in the analysis (control $n = 837$; intervention $n = 836$). Cross-over occurred in 89 (10.6 %) control and 71 (8.5 %) intervention patients. In ITT analysis, ADR did not differ significantly between groups (control: 31.5 %, 95 % confidence interval, CI: 28.4–34.8 vs intervention: 34.4 %, 31.2–37.8, $p = 0.225$). In PP analysis, ADR was higher when CAdE was used (40.6 %, 36.3–45.1 vs 34.7 %, 30.1–38.6; $p = 0.045$). When assigned to a CAdE-equipped room, endoscopists used the system in 57.5 % of eligible colonoscopies (481/836; ITT) and 92.9 % (471/507) in the PP population. Among PP patients, ALDR, APC, and pAPC were significantly higher with CAdE (e.g., ALDR 8.3 %, 6.1–11.1 vs 3.9 %, 2.5–5.8; $p = 0.002$), whereas SSLDR and the proportion of non-neoplastic polyps did not differ.

Conclusions In this concealed trial, randomization to a CAdE-equipped room did not significantly increase ADR in ITT analysis, but colonoscopies in which CAdE was used showed higher ADR and advanced lesion detection. These findings suggest that incomplete and selective adoption in routine care can attenuate the benefits observed in RCTs. Strategies to ensure consistent CAdE use are likely required for CAdE to meaningfully improve ADR outside of controlled study conditions.

Conflicts of Interest Daniel von Renteln is supported by a "Fonds de Recherche du Québec Santé" career development award. He has also received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. Roupén Djinbachian has received speaker fees from Fujifilm. The remaining authors declare that they have no conflict of interest.

PYP358 Computer assisted polyp detection and mucosal exposure device use in routine clinical practice and its effect on adenoma detection rates

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DOI 10.1055/s-0046-1821298

Aims Randomized controlled trials support the efficacy of both computer-aided detection (CADE) and mucosal exposure devices (MED) in improving adenoma detection, but implementation studies—particularly on their combined use in routine practice—are limited. We evaluated whether combining CADE and MED improves adenoma detection rate (ADR) in real-world colonoscopy.

Methods In this prospective implementation study, adults aged ≥45 years undergoing elective colonoscopy received standard, CADE-, MED-, or CADE + MED-assisted procedures. The primary outcome was ADR; secondary outcomes included advanced adenoma detection rate (AADR), sessile serrated lesion detection rate (SSLDR), adenoma per colonoscopy (APC), polyp detection rate (PDR), polyps per colonoscopy (PPC), and withdrawal time (WT).

Results We included 2552 patients undergoing standard (n = 1279), CADE-assisted (n = 829), MED-assisted (n = 225), or CADE + MED-assisted (n = 219) colonoscopies. ADR was 55.6% (95% CI [48.7–62.4]) in the CADE + MED group versus 29.3% (95% CI [26.5–32.3]), $p < 0.001$ in the standard group. The CADE + MED group showed significant increases in AADR, SSLDR, APC, PDR, and PPC compared to standard procedures (all $p < 0.001$). CADE- and MED-alone achieved ADRs of 41.6% (95% CI [38.0–45.3]) and 44.9% (95% CI [37.5–52.6]), respectively ($p < 0.866$). CADE + MED increased ADR compared with CADE alone ($p = 0.002$). Mean WT was shorter for standard procedures (9.9 min) than for assisted ones (11.9–13.6 min, all $p < 0.001$).

Conclusions Combining CADE and MED significantly improves ADR, AADR, SSLDR, and other key performance metrics versus standard colonoscopy. These data suggest a synergistic effect wherein optimized mucosal exposure enables CADE to realize its full detection potential for aiding routine colonoscopies.

Conflicts of Interest Daniel von Renteln is supported by a "Fonds de Recherche du Québec Santé" career development award. He has also received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Fujifilm and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, and Pendopharm. The remaining authors declare that they have no conflict of interest.

PYP359 Performance of GPT-5 in the Interpretation of IBD Colonoscopy and Histopathology Reports

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DOI 10.1055/s-0046-1821299

Aims Histopathological interpretation is crucial for diagnosing inflammatory bowel disease (IBD), distinguishing between Crohn's Disease (CD), Ulcerative Colitis (UC), IBD-Unclassified (IBD-U), and Non-IBD colitis (NIBDC). However, interobserver variability and limited expertise can reduce diagnostic accuracy. Accurate evaluation of both endoscopic and histological reports is essential for optimal IBD diagnosis. Large Language Models (LLMs) such as GPT-5 may offer clinical support in interpreting combined endoscopic–histological reports.

Methods We analyzed 100 real-life combined endoscopic and histological reports from ileo-colonoscopies, equally representing CD, UC, IBD-U, and NIBDC, collected across five Italian healthcare centers, including both IBD-specialized and non-specialized hospitals. A reference standard was established by an expert pathologist. Independent classifications were generated by GPT-5, five gastrointestinal pathologists, five IBD-expert gastroenterologists (GIs), and five non-expert GIs. Diagnostic performance (accuracy, recall, precision, F1-score), agreement with the reference standard (Cohen's κ), and inter-rater reliability (Fleiss' κ) were assessed.

Results GPT-5 achieved the highest agreement with the reference standard with the highest accuracy (76.0%), compared to pathologists (68.6%), IBD-experts (69.2%), and non-experts (63.2%). Agreement with the reference standard was substantial for GPT-5 ($\kappa = 0.671$) and moderate for human groups ($\kappa = 0.508–0.588$). GPT-5 showed perfect recall for CD and UC, high recall for NIBDC (96.0%), but poor performance for IBD-U (recall 8.0%, F1-score 14.3%) (► **Table 1**). Fleiss' κ indicated moderate agreement among pathologists and IBD-experts, and fair agreement among non-experts.

► **Table 1** Comparative performance metrics of pathologists, IBD-expert GIs, non-expert GIs, and GPT-5 compared with the reference standard.

Metric	Pathologists	IBD-expert GIs	IBD non-expert GIs	GPT-5
Accuracy (%)	68.6 (64.4–72.5)	69.2 (65.0–73.1)	63.2 (58.9–67.3)	76.0 (66.8–83.3)
Recall (%)				
▪ IBD-U	33.6 (25.9–42.3)	30.4 (23.0–38.9)	32.8 (25.2–41.4)	8.0 (2.2–25.0)
▪ CD	80.0 (72.1–86.1)	86.4 (79.3–91.3)	68.0 (59.4–75.5)	100.0 (86.7–100.0)
▪ UC	84.8 (77.5–90.0)	81.6 (73.9–87.4)	76.0 (67.8–82.6)	100.0 (86.7–100.0)
▪ NIBDC	76.0 (67.8–82.6)	78.4 (70.4–84.7)	76.0 (67.8–82.6)	96.0 (80.5–99.3)
Precision (%)				
▪ IBD-U	56.0 (44.7–66.7)	52.1 (40.8–63.1)	42.3 (32.9–52.2)	66.7 (20.8–93.9)
▪ CD	83.3 (75.7–88.9)	76.6 (69.0–82.8)	83.3 (74.9–89.3)	67.6 (51.5–80.4)
▪ UC	60.6 (53.2–67.5)	72.3 (64.4–79.1)	57.9 (50.3–65.2)	80.6 (63.7–90.8)
▪ NIBDC	73.1 (64.9–80.0)	67.6 (59.6–74.7)	69.3 (61.2–76.4)	82.8 (65.5–92.4)
F1-score (%)				
▪ IBD-U	42.6 (33.1–50.0)	38.5 (28.6–46.5)	36.9 (28.9–44.7)	14.3 (0.0–33.3)
▪ CD	81.6 (75.7–86.6)	81.3 (76.0–85.9)	75.0 (68.0–81.3)	80.6 (67.9–90.5)
▪ UC	70.0 (64.5–76.4)	76.7 (70.9–82.1)	65.9 (59.5–71.6)	89.3 (80.0–96.7)
▪ NIBDC	74.5 (68.5–80.0)	72.8 (66.4–78.0)	72.5 (66.1–78.7)	89.0 (77.8–96.4)

Conclusions GPT-5 demonstrated reliable performance in interpreting endoscopic and histological IBD histological reports, exhibiting high accuracy and strong agreement with the reference standard. While unreliable for IBD-U, GPT-5 may serve as a supportive tool in diagnosis and classification of IBD, particularly in centers with limited access to expert pathologists or IBD-specialists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

HPB sedation, bleeding and procedural risk

16/05/2026, 12:00–13:00

Emerald 4

PYP360 Bleeding risk of atezolizumab-bevacizumab during ongoing endoscopic variceal ligation in hepatocellular carcinoma: a two-centre retrospective study

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Aims The combination of atezolizumab and bevacizumab is an established first-line therapy for unresectable hepatocellular carcinoma (HCC). However bevacizumab is associated with an increased risk of gastrointestinal bleeding; in IMbrave150, upper GI bleeding occurred in ~7% of patients, leading to guideline recommendations for pre-treatment endoscopy and primary prophylaxis of oesophageal varices. Many centres therefore defer bevacizumab until endoscopic variceal eradication, delaying full systemic therapy. Two tertiary centres instead adopted an upfront bevacizumab strategy with endoscopic variceal

ligation (EVL) in parallel. We aimed to assess the safety and feasibility of this approach in a real-world setting [1].

Methods This retrospective two-centre cohort included 354 consecutive Patients (290 males, 81.9%; 63 females, 17.8%, mean age 65.7 years) with HCC treated with atezolizumab-bevacizumab between 2020 and 2024. The primary endpoint was any variceal bleeding with EVL before bevacizumab initiation compared with a non-upfront ligation group. Cox regression was used to assess the association between EVL and variceal bleeding, adjusting for variceal grade, Child–Pugh score and macrovascular invasion.

Results Overall, 15 variceal bleeding events occurred after bevacizumab initiation (4.2%), of which 10 occurred during therapy (2.8%) and 5 later than 6 months after treatment start (1.4%). In the varices subcohort (n = 145 with documented baseline varices), 57/145 (39.3%) patients underwent endoscopic variceal upfront ligation before therapy initiation, whereas 88/145 (60.7%) did not. Patients who underwent upfront ligation therapy were substantially more likely to have higher-grade varices (grade II/III), whereas the no-ligation group predominantly had grade I varices (p < 0.001). Despite this imbalance toward more advanced varices in the ligation group, the overall proportion of variceal bleeding events did not differ significantly between groups (8.9% vs 6.8%; p = 0.751). In grade-stratified analyses, no significant differences in variceal bleeding were observed within individual variceal grades, consistent with very low event counts per subgroup.

In time to event analyses among patients with complete follow up information for the Cox dataset (n = 124; 11 events), upfront ligation was not associated with time to variceal bleeding in an unadjusted Cox model (HR 1.24, 95% CI 0.38–4.09; p = 0.724). In the primary parsimonious model adjusting for baseline variceal grade (grade I reference; grade IV excluded), upfront ligation again showed no significant association with variceal bleeding (HR 0.65, 95% CI 0.13–3.28; p = 0.606), while baseline grade III varices were associated with a significantly increased hazard of bleeding compared with grade I (HR 8.25, 95% CI 1.23–55.31; p = 0.030); grade II was not significantly associated (HR 2.51, 95% CI 0.40–15.86; p = 0.329).

Sensitivity analyses yielded consistent findings. After adjustment for macrovascular infiltration, upfront ligation remained non-significant (HR 0.81, 95% CI 0.21–3.07; p = 0.753), and macrovascular infiltration itself was not associated with bleeding risk (HR 0.81, 95% CI 0.19–3.45; p = 0.777). Similarly, models

adjusting for Child–Pugh class or prior variceal bleeding did not identify significant predictors beyond variceal grade and did not materially change the null association between upfront ligation and time to variceal bleeding (HR 1.05, $p = 0.944$ and HR 1.27, $p = 0.715$, respectively). Using a Cox model stratified by baseline variceal grade (I–III), upfront ligation was also not significantly associated with time to variceal bleeding (HR 0.45, 95 % CI 0.09–2.14; $p = 0.312$).

Conclusions In this two-centre cohort uniformly applying bevacizumab during ongoing EVL, variceal bleeding incidence was low (4.2 %) and not elevated in comparison to a non upfront ligation group. Upfront EVL itself was not independently associated with a higher bleeding incidence when adjusted to variceal grade, Child–Pugh Score or macrovascular invasion.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Cheng AL et al. *J Hepatol.* 2022; 76: 862–873

PYP361 Risk Factors for Delayed Bleeding after Endoscopic Papillectomy: A Multicenter Retrospective Study

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DOI 10.1055/s-0046-1821301

Aims Delayed bleeding is a major adverse event of endoscopic papillectomy (EP). However, established preventive strategies and clear risk stratification remain ill-defined due to the rarity of the disease. We aimed to identify independent risk factors for delayed bleeding after EP using a large-scale multicenter dataset, specifically evaluating the impact of procedural interventions and pharmacological prophylaxis.

Methods We conducted a retrospective cohort study across 22 Japanese academic and community hospitals (2009–2020). Patients undergoing EP for ampullary tumors were included. To ensure homogeneity, patients requiring nasobiliary/nasopancreatic drainage or metallic biliary stents were excluded. We identified independent risk factors for delayed bleeding using multivariable logistic regression.

Results A total of 875 candidates were screened, and 848 patients were included in the final analysis. The overall incidence of delayed bleeding was 19.2 % (163/848). Severity was mild in 15.6 %, moderate in 2.4 %, and severe in 1.3 % of cases. Multivariable analysis identified prophylactic clipping (>50 % closure of the mucosal defect) as a significant independent preventive factor (Odds Ratio [OR] 0.49; 95 % Confidence Interval [CI] 0.28–0.81; $p = 0.007$). Conversely, independent risk factors included male sex (OR 1.82; $p = 0.002$), younger age (65 years; OR 2.82; 0.001), and pancreatic stent placement (OR 2.60; $p = 0.041$). Acid-suppressing agents (PPIs or H2RAs) showed no significant association with delayed bleeding.

Conclusions Prophylactic clipping significantly reduced the risk of delayed bleeding, whereas younger age, male sex, and pancreatic stent placement were identified as significant risk factors. Notably, acid-suppressing agents did not affect bleeding risk. The novel finding that pancreatic stent placement is a risk factor suggests that constant exposure of the ulcer bed to pancreatic juice via the stent may induce bleeding, warranting further investigation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP362 Therapeutic Success and Adverse Events in Endoscopic Papillectomy: a multicentric, retrospective study

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DOI 10.1055/s-0046-1821302

Aims To identify predictors of efficacy and safety following endoscopic papillectomy (EP), including therapeutic success, recurrence and adverse events. Secondly, we aimed to evaluate predictors of histopathological agreement.

Methods A multicenter, retrospective cohort study was conducted including adult patients from thirteen medical institutions who underwent EP for ampullary adenomas between January 2019 and December 2023. The main clinical outcomes were efficacy (endoscopic success and recurrence) and safety (reported adverse events, severity and management). Pre- and post-procedural histology was documented. Patient center volume was categorized as low, medium and high.

Results This cohort included 187 patients, 59.9% male, mean age 62.64 (± 13.41) years. Most of the ampullary lesions were not associated with genetically predisposed diseases (77.0%), incidentally detected on asymptomatic patients (76.5%), sized between 10mm and 20mm (63.1%), and with low-grade dysplasia (88.8%). En bloc resection was performed in 73.8% of the patients. Prophylactic measures to prevent acute pancreatitis were implemented in 95.2% of the procedures. Endoscopic success rate was 96.3%, with R0 resection rate of 74.3%. The mean follow-up was 32.8 (± 18.7) months. The median adenoma-free survival was 24.0 months (95% CI 9.3–38.7). Recurrence rate was 18.7%, most frequently detected at the first endoscopic surveillance (71.4%) and managed mostly endoscopically (85.7%). Re-recurrence rate was low (4.3%, $n=8$). Older age (OR = 0.95, 95% CI 0.91–0.99), intraductal extension (OR = 17.89, 95% CI 1.51–212.43), intraprocedural bleeding (OR = 3.55, 95% CI 1.34–9.39), and submucosal injection before resection (OR = 2.60, 95% CI 1.06–6.40) were significantly associated with higher recurrence rates. The most common adverse events were post-procedural pancreatitis (20.3%), mostly mild severity (78.9%), and bleeding (intraprocedural 18.2%; delayed 12.8%). No procedural-related deaths were observed in our cohort. None of the patient, procedure or lesion characteristics were related to post-procedural pancreatitis, cholangitis, papillary stenosis or perforation. Delayed bleeding was more common when submucosal injection was performed (OR = 2.96, $p=0.029$) and pancreatic stent was placed (OR = 5.05, $p=0.036$). The histopathological agreement between pre-procedural biopsy and post-procedural histology was observed in 75.4% of cases, with histopathological underestimation in 15% and overestimation in 9.6% of cases. Prior sphincterotomy correlated with reduced histopathological agreement ($\chi^2=21.81$; $p<0.001$), whereas pre-procedural evaluation with side-viewing endoscopy was associated to a higher likelihood of histopathological agreement ($\chi^2=11.10$, $p=0.004$). High-volume centers showed significantly higher rates of histopathological agreement ($\chi^2=15.59$, $p<0.001$). It is important to note that, in these centers, prior assessment with side-viewing endoscopy and endoscopic ultrasound (EUS), respectively [(97.3% ($n=72$)) and 71.6% ($n=53$))] was more often performed. Significantly higher recurrence rates (31.0%) were observed in low-volume centers compared with high-volume centers (12.2%) ($p=0.046$). Delayed bleeding occurred more frequently in low-volume centers ($p=0.032$).

Conclusions In our cohort, EP achieved high rates of therapeutic success with a favorable profile of adverse events, mostly amenable to conservative or endoscopic management. Recurrence was frequent and was associated to older age, intraductal extension, intraprocedural bleeding and submucosal injection before resection. High-volume centers showed significantly higher rates of histological agreement probably due to the more frequent use of prior evaluation with side-view endoscopy and EUS. Low-volume centers showed higher rates of recurrence rates and delayed bleeding. These results emphasize the importance of detailed pre-procedural staging, specialized training and the potential benefit of centralizing complex procedures to high-volume centers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP363 Reassessing Bleeding Risks in Endoscopic Drainage and Necrosectomy: Insights From a Large Cohort Study

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DOI 10.1055/s-0046-1821303

Aims Endoscopic management of walled-off necrosis (WON) has become the preferred minimally invasive approach, yet bleeding remains a significant complication. Identifying predictors of bleeding is essential to optimize patient selection, procedural planning, and postoperative monitoring.

Methods In this prospective cohort study, 153 patients undergoing endoscopic drainage and necrosectomy for WON were analyzed. Baseline demographics, clinical characteristics, stent type, number of necrosectomies, and nutritional status were collected. Outcomes included occurrence of bleeding and mortality. Univariate and multivariable logistic regression analyses were performed to identify predictors of bleeding. Kaplan–Meier analysis assessed bleeding risk over time.

Results The cohort had a mean age of 54.5 years and mean BMI of 25.3; 34.8% were female. The average WON size was 98.6 cm. Hot Axios stents were used in 68% of procedures, followed by Hanaro (18%), Spaxus (11%), and Z-EUS (1%). Coaxial pigtail stents were placed in most patients ($n=137$). Following LAMS placement, bleeding occurred in 15 patients (9.8%), including one death (0.65%). Univariate analysis identified increased bleeding risk with ≥ 4 necrosectomies (OR 4.6; 95% CI 1.0–21.4; $P=0.05$), parenteral nutrition use (OR 8.8; 95% CI 2.4–32.8; $P=0.001$), and presence of any organ failure (OR 15.4; 95% CI 4.5–52.7; $P<0.001$). Kaplan–Meier analysis showed no significant difference in bleeding risk over time (log-rank $P=0.647$). Multivariable analysis demonstrated that the presence of any organ failure was the strongest and only independent predictor of bleeding (OR 45.9; $P=0.01$).

Conclusions Among patients undergoing endoscopic treatment of WON, organ failure was the sole independent predictor of bleeding. These findings highlight the critical role of systemic disease severity—rather than procedural factors—in anticipating bleeding complications and guiding risk stratification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP364 Therapeutic EUS under endoscopist-guided sedation: safety and feasibility

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DOI 10.1055/s-0046-1821304

Aims Endoscopist-administered sedation is safe and widely used in Europe [1,2], but sedation in interventional-EUS (i-EUS) is usually performed by anesthesiologists [3]. Given the increasing demand and limited resources, this study aimed to evaluate the safety of endoscopist-led sedation in i-EUS.

Methods Retrospective, single center study, including all i-EUS performed between February 2020 and August 2025 in Hospital Universitario de Salamanca (Spain). Hemodynamically stable patients received propofol in boluses and continuous infusion administered by the endoscopist and nurses (with dedi-

cated training in sedation); along with high-flow nasal oxygen at 15 L/min. Optional midazolam, fentanyl, or hyoscine were also given. Drug doses, vitals and sedation-related adverse events are systematically recorded, prospectively, by the nurse responsible for sedation, using a form specifically designed for this purpose. Furthermore, any sedation-related adverse events are also documented in the endoscopy report.

Results 317 i-EUS were included (139 cholecystostomies, 66 gastroenterostomies, 57 pancreatic collections, 30 hepaticogastrotomies, 14 abscess drainages and 11 choledocoduodenostomies). 57 patients (18%) also underwent an ERCP or 2 i-EUS in the same session. Median age was 81.5 y.o. (IQR 67.4–88.4). ASA classification for anesthetic risk: I (1%), II (44%), III (50%), IV (5%). Comorbidities included OSA $n = 7$ (2.4%), COPD $n = 19$ (6%), LVEF $< 40\%$ $n = 4$ (1.3%), severe aortic stenosis $n = 1$ (0.3%). 6 hemodynamically unstable patients (1.9%) had sedation and support by ICU.

Mean propofol dose was 271 mg (CI 95% 254–289). Hyoscine was given to 75 patients (24.2%) with a median dose of 40 mg (IQR 20–40); Midazolam to 2 patients (0.6%), median dose 2 mg (IQR 1–3); and Fentanyl to 18 patients (5.8%), median dose 75 mcg (IQR 68.75–75).

There was one sedation-related adverse event (AE): a moderate desaturation in a 99-year-old patient without significant comorbidities, who received 80 mg of propofol. This was reversed with Bag-Valve-Mask ventilation by the endoscopist; allowing completion of the procedure (cholecystostomy). No aspirations, bradycardia requiring atropine, significant hypotension (systolic BP < 80 mmHg despite IV fluids), or need for urgent ICU support occurred. No sedation-related deaths were reported. One 92-year-old male with a metastatic cholangiocarcinoma died in the recovery room 40 minutes after finishing an uneventful hepaticogastrotomy. The cause of the death was unclear, since no autopsy was performed given age and comorbidities.

There were 8 LAMS misdeployments (2.5%) and 16 AEs (5%) including: bleeding (3.2%), migration (1.3%), bile leak (0.3%) and perforation (0.3%). None of these events were associated with sedation complications.

Conclusions In our series, endoscopist-led sedation with propofol for i-EUS was safe. Only one sedation-related AE (desaturation) occurred, which was moderate, managed by the endoscopist, and the procedure could be successfully completed. The presence of AEs or misdeployments inherent to these techniques was not associated with an increased rate of aspiration, hypotension, or other complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Triantafyllou K, Sidhu R, Tham T et al. Sedation practices in Gastrointestinal Endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) survey. *Endoscopy*. 2024; 56 (12): 964–974
- [2] Behrens A, Kreuzmayr A, Manner H et al. Acute sedation-associated complications in GI endoscopy (ProSed 2 Study): results from the prospective multicentre electronic registry of sedation-associated complications. *Gut* 2019; 68: 445–452
- [3] Maestro Antolín S, Moreira Da Silva BA, Santos Santamarta F et al. Severe cardiorespiratory complications derived from propofol sedation monitored by an endoscopist. *Rev Esp Enferm Dig* 2018; 110: 237–239

PYP365 Is ampulla of Vater morphology related to ERCP success and safety? A multicenter registry study

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DOI 10.1055/s-0046-1821305

Aims Ampulla of Vater morphology has been reported to impact cannulation and complication rates during ERCP. However, there are several morphology classification systems and results in literature are not unanimous. We aimed to test the above hypothesis using data from the Greek ERCP registry.

Methods We conducted a multicenter observational study with prospectively collected data from the Greek national ERCP database. Ampulla morphology was classified according to the Haraldsson classification (*United European Gastroenterology Journal*, 2017). The registry was searched for ERCP cases performed in Jan 2023 – Sept 2025, in patients with naïve ampulla of Vater. We performed univariate and multivariate analyses.

Results A total of 1675 ERCP cases in patients with naïve ampulla of Vater and available data from 6 centers regarding ampulla morphology were included (mean age 73 years (SD 15); 69% with bile duct stones, jaundice 63%, cholangitis/sepsis 16%, biliary stricture 12%). The most frequently described type of ampulla was type 1 ($n = 928$, 55.4%), followed by type 2 ($n = 395$, 23.6%), type 3 ($n = 287$, 17.1%) and type 4 ($n = 65$, 3.9%). Overall, 51.4% of the cases were performed electively, most patients (42.4%) had an ASA score of 2 (27.9% score 1, 25.6% score 3, 3.8% score 4, and 0.2% score 5) and underwent ERCP under conscious sedation (82.9% followed by 16.4% deep sedation, and 0.7% general anesthesia). The deep bile duct cannulation success rate was 94.3% and it was related to ampulla of Vater morphology ($p = 0.04$) with type 2 and 4 showing higher failure rates compared with type 1 ($p = 0.02$ and $p = 0.01$ respectively). The overall complication rate was 11.7%, with no significant difference among the four ampulla morphology types ($p = 0.2$). Post ERCP pancreatitis occurred in 6.6% and cholangitis in 5.8% but did not differ significantly among ampulla morphology types ($p > 0.05$). Perforation occurred in 4 patients and was only observed in type 2 ampullas. In multivariate analysis ampulla morphology types 2 and 4 were independent predictive factors of cannulation failure ($p = 0.001$; OR 2.0, 95% CI 1.3–3.0).

Conclusions Ampulla morphology type 2 and 4 appear to be associated with cannulation failure and possibly complications. These findings may have implications in daily clinical practice, especially in the field of ERCP training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP366 Safety of Outpatient ERCP in Patients Aged ≥ 80 Years: Complication Profiles and Hospital Admission Patterns

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DOI 10.1055/s-0046-1821306

Aims The safety of outpatient ERCP in patients aged ≥ 80 years remains uncertain, particularly regarding clinically relevant post-procedural complications and early need for hospital admission. Evidence from European centres is limited, and few studies analyse the timing of complications in very elderly patients. This study aimed to compare post-ERCP complications and 30-day unplanned admissions between elderly and younger adults in a real-world ambulatory setting.

Methods A retrospective cohort study was conducted using a prospectively maintained database of consecutive outpatient ERCPs. Patients were stratified into < 80 years and ≥ 80 years groups. Only post-procedural complications were analysed: pancreatitis, cholangitis, cholecystitis, perforation and other clinically relevant events. Hospital admission and ERCP-related readmission within

30 days were recorded. Complication timing was classified as occurring < 8 hours, 8–24 hours or > 24 hours. Comparisons used Fisher's exact test ($p < 0.05$). Statistical analysis was done with SPSS v29.0 [1].

Results A total of 304 outpatient ERCPs were included, of which 238 involved patients aged < 80 years and 66 aged ≥ 80 years. Post-ERCP pancreatitis was infrequent and similar between groups (1.7% vs 1.5%; $p = 1.00$). Cholecystitis, perforation and other complications also showed no significant differences. Cholangitis was significantly more frequent in elderly patients, occurring in 7.6% (5/66) of those aged ≥ 80 years compared with 2.1% (5/238) in younger adults ($p = 0.0427$). Thirty-day all-cause readmission occurred in 9.2% (22/238) of patients < 80 years and 10.6% (7/66) of those ≥ 80 years ($p = 0.92$). ERCP-related readmissions showed a similar pattern, with 5.0% (12/238) in younger patients and 7.6% (5/66) in the elderly, paralleling the higher incidence of cholangitis in the ≥ 80 cohort. In the temporal analysis of post-procedural complications, no differences were observed between groups for events occurring within < 8 hours or beyond 24 hours after ERCP. However, complications arising 8–24 hours post-procedure were significantly more frequent in patients aged ≥ 80 years (3.0% vs 0%; $p = 0.0466$), indicating a distinct early–delayed risk window in very elderly individuals (► **Table 1**).

► **Table 1**

Variable	< 80 years (n = 238)	≥ 80 years (n = 66)	p-value
Baseline			
Sex (male) n (%)	104 (43.7)	29 (43.9)	1.00
Suspected choledocholithiasis n (%)	152 (63.9)	35 (53.0)	0.12
Suspected malignant obstruction n (%)	67 (28.2)	29 (43.9)	0.019
Complications and Outcomes			
Pancreatitis n (%)	4 (1.7)	1 (1.5)	1.00
Cholangitis n (%)	5 (2.1)	5 (7.6)	0.0427
Cholecystitis n (%)	6 (2.5)	0 (0)	0.347
Perforation n (%)	1 (0.4)	0 (0)	1.00
Other complication n (%)	6 (2.5)	1 (1.5)	1.00
< 8 hours n (%)	7 (31.8)	1 (14.3)	0.29
8–24 hours n (%)	0 (0)	2 (28.6)	0.0466
> 24 hours n (%)	15 (68.2)	1 (57.1)	1.00
30-day all-cause admission n (%)	22 (9.2)	7 (10.6)	0.92

Conclusions Outpatient ERCP is safe in selected patients aged ≥ 80 years, with similar rates of pancreatitis, perforation, cholecystitis and overall readmission compared with younger adults. However, the significantly increased incidence of post-ERCP cholangitis and the higher frequency of 8–24-hour complications in the very elderly suggest that extended early post-procedure monitoring may be beneficial in this subgroup. These findings support the feasibility of ambulatory ERCP in older adults while highlighting the need for tailored surveillance strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Katsinelos P, Kountouras J, Chatzimavroudis G. et al. Outpatient therapeutic endoscopic retrograde cholangiopancreatography is safe in patients aged 80 years and older. *Endoscopy* 2011; 43: 128–133

PYP367 Feasibility and Safety of Ambulatory Endoscopic Retrograde Cholangiopancreatography: A Retrospective Analysis of Seven Years of Experience

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DOI 10.1055/s-0046-1821307

Aims Endoscopic retrograde cholangiopancreatography (ERCP) routinely used as an inpatient procedure, due to post-procedural complications [1, 2]. The inpatient setting allows close observation but also increases healthcare costs and may not be necessary for all patients [1]. Improved procedural safety, sedation practices, and early recovery protocols have raised the possibility of performing ERCP on an outpatient or ambulatory basis, allowing same-day discharge [3]. The present study aimed to evaluate the feasibility and safety outcomes of ambulatory ERCP performed in a tertiary referral center.

Methods A retrospective study of consecutive ERCP between June 2019 and October 2025 was performed. Safety was defined as the presence of early adverse events (≤ 72 hours). Adverse events were categorized as minor and serious. The latter included those that required new hospitalization after discharge (outpatients) or prolonged hospitalization (inpatients). Feasibility was defined as successful same-day discharge without unplanned admission or observation ≥ 24 hours. Ambulatory patients followed the center's local protocol and were advised to immediately report if pain, bleeding, dizziness, nausea, vomiting, or any alarm symptom arised.

Results A total of 6000 ERCPs were performed from 2019 to 2025. 1000 patients were randomly selected and reviewed, and 206 were excluded from the analysis. A total of 794 patients were enrolled and distributed into outpatient [382/794 (48,1%)] and inpatients [423/794 (53.2%)]. Overall median age was 54.0 (35 – 68) ($p = .005$) and 54.9% were female ($p = .267$). Previous ERCP procedures were more common in the outpatient group (20.7% vs 10.7%, $p < .001$), previous cholecystectomy was most common in the outpatient group (31.2% vs 23.3%, $p > .05$) (Table 1).

The most common ERCP indication was choledocholithiasis in the outpatient (74.9%) and inpatient (65.3%) groups, followed by tumor suspicion in the outpatient group (16.0%) and biliary sludge in the inpatient group (18.9%). Difficult cannulation in the outpatient and inpatient groups was 7.6% and 7.0%, respectively ($p = .764$). Sphincterotomy was performed in 90.8% of outpatient and 92.0% of inpatient, respectively ($p = .562$), and biliary stenting was reported in 28.3% and 24.5%, respectively ($p = .229$).

Complication rate was similar among groups with 14.4% in the outpatient and 9.7% in the inpatient group ($p > .05$). Bleeding was the most common adverse, being mild in forty-two outpatient cases (11.0%) and 28 inpatient cases (7.0%), managed with sclerotherapy; however, 2 cases in outpatient and 1 case in the inpatient group required hospitalization. A sub-analysis was conducted considering the serious adverse events that required hospitalization after discharge or extended hospital stay. There were 13 cases among the outpatients who required a new hospitalization after discharge, and 12 inpatients who required prolonged hospital stay ($p > .05$). Post-ERCP pancreatitis was higher in the outpatient groups (2.4%), compared to 2.2% of inpatients ($p > .05$). Most inpatient cases achieved technical success (99.5%, $p < .001$) and less clinical success

(88.8%, $p < .001$), compared to outpatient's (86.4% and 93.7%), respectively. No mortality was perceived in either group.

Conclusions Ambulatory ERCP proved to be a feasible and safe strategy, with complication and serious adverse event rates comparable to those of inpatient ERCP. Most adverse events were mild, and only a small proportion of patients required hospitalization or extended observation.

Conflicts of Interest Dr. Carlos Robles-Medranda is a key opinion leader for PENTAX Medical, CREO Medical, Motus, mdcons group, EndoSound, Limaca Medical, Micro-Tech and Gastri-tech Medical Supplies. Dr. Juan Alcivar-Vasquez is a key opinion leader for Micro-tech. All other authors declare no conflict of interest.

References

- [1] Jeurnink SM, Werner-Poley J, Steyerberg EW et al. ERCP as an outpatient treatment: a review. *Gastrointest Endosc* 2008; 68 (1): 118–23
- [2] Andriulli A, Loperfido S, Napolitano G et al. Incidence rates of post-ERCP complications: a systematic survey of prospective studies. *Am J Gastroenterol* 2007; 102: 1781–1788
- [3] Jeurnink SM, Werner-Poley J, Steyerberg EW et al. ERCP as an outpatient treatment: a review. *Gastrointest Endosc* 2008; 68 (1): 118–23

PYP368 Impact of Fluid Type and Timing on Post-ERCP Pancreatitis Severity: A Four-Year Retrospective Study

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DOI 10.1055/s-0046-1821308

Aims Post-ERCP pancreatitis is a recognized complication of ERCP and contributes significantly to patient's morbidity, prolonged hospitalization and mortality. Optimizing fluid management strategies has been proposed as a means of improving clinical outcomes, but the impact of different fluid types and timing remains uncertain. This study aims to assess whether intravenous fluid type (Hartmann's vs Normal Saline) and timing (Pre vs Post ERCP) were associated with pancreatitis severity or mortality among patients who developed post-ERCP pancreatitis at our district general hospital.

Methods A retrospective observational study was conducted using data from April 2021 to April 2025. Information was obtained from Electronic Patient Records and Endoscopy Unit documentation. The Revised Atlanta Classification was used in the diagnosis of pancreatitis as well as in assessing the severity throughout the hospitalization. Intravenous fluid type and timing, along with ERCP indications and difficulty of the ERCP procedures, length of stay and mortality were all evaluated (► **Table 1**).

► **Table 1** Fluid Type + Timing vs Severity and Mortality

Variable	Mild	Mod/ Severe	Mor- tality	No Mor- tality
Hartmann's	9	3	1	11
Normal Saline	6	2	0	8
Both	6	1	1	6
Fluid Unknown	5	1	1	5
Post Only	21	5	2	24
Pre Only	1	0	0	1
Pre + Post	4	2	1	5
Timing Unknown	0	0	0	0

Results 1,098 ERCP procedures were performed between April 2021 and April 2025. 33 cases (3.0%) met criteria for post-ERCP pancreatitis (PEP) with 20 inpatient procedures (61%) and 13 outpatients (39%). The majority of affected patients (73%) were older than 60 years. Regarding indications in patients with PEP, 14 ERCPs were undertaken for ductal stones, 11 for stent placement in pancreatic malignancy, 7 for stenting of benign or malignant ductal strictures, and 1 for a post-cholecystectomy bile leak. In terms of technical difficulty: 7 procedures required double-guidewire, 1 required pre-cut sphincterotomy, and 2 required both; all remaining cases were uncomplicated. Based on the Revised Atlanta Classification, 26 patients (79%) developed mild pancreatitis and 7 (21%) developed moderate/severe disease; all patients received intravenous fluids. Across patients with moderate/severe pancreatitis, the proportion of IV fluid types were as follows: Hartmann's 3 patients, normal saline 2 patients, Hartmann's and Normal Saline 1 patient, data unavailable 1 patient. In patients with mild pancreatitis, results were as follows: Hartmann's 9 patients, Normal Saline 6 patients, Hartmann's and Normal Saline 6 patients, Data unavailable in 5 patients. There was no significant association between fluid type and severity (Fisher–Freeman–Halton exact test, 4×2 , $p = 1.000$). Fluid type was also not associated with 28-day mortality ($p = 0.674$); deaths occurred in patients receiving both Hartmann's and Normal Saline (1/7, 14.3%), Hartmann's only (1/12, 8.3%) or with undocumented fluid type (1/6, 16.7%), and in none of those who received normal saline only (0/8). Regarding timing, moderate/severe pancreatitis occurred in 5/26 (19.2%) patients receiving post-procedure fluids only, 0/1 (0%) receiving pre-procedure fluids only, and 2/6 (33.3%) receiving both pre- and post-procedure fluids, with no significant association between timing and severity (Fisher–Freeman–Halton exact test, 3×2 , $p = 0.677$). Similarly, timing of fluids was not associated with 28-day mortality (post 2/26 [7.7%], pre 0/1, pre and post 1/6 [16.7%]; $p = 0.523$).

Conclusions Across this four-year cohort, neither the type nor the timing of IV fluid administration demonstrated a statistically significant relationship with severity or mortality in post-ERCP pancreatitis. Although the overall mortality rate was low, the absence of a detectable effect highlights the need for larger prospective studies to determine whether targeted fluid strategies may confer benefit in preventing progression or complications of PEP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP369 Impact of Obesity on Readmission Outcomes in Cirrhosis and Variceal Bleeding: Insights From the HCUP Database (2019–2024)

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DOI 10.1055/s-0046-1821309

Aims This study utilizes data from the Nationwide Admission Database (HCUP) from 2019 to 2024, analyzing 2,858,576 adult hospital admissions to assess the link between obesity and readmission rates in cirrhotic patients with variceal bleeding. It examines the impact of obesity, race, and gender on 30-day and 60-day readmission rates, employing chi-square tests and logistic regression to evaluate disparities across demographics. The models, which include race and gender, were analyzed for predictive accuracy using ROC curves and AUC statistics to enhance patient management strategies.

Methods This study analyzed data from the Nationwide Admission Database (HCUP) involving 2,858,576 adults from 2019 to 2024, focusing on 30-day and 60-day readmission rates for obese cirrhotic patients with variceal bleeding. It assessed the impact of obesity, race, and gender on these outcomes using chi-square tests and logistic regression to explore incidence and readmission disparities across demographics. The effectiveness of these models, incorporating race and gender, was evaluated through ROC curves and AUC statistics to pinpoint key predictors of readmission.

Results From 2019 to 2024, the Nationwide Admission Database (HCUP) provided data on 2,858,576 adult admissions, focusing on 110,124 patients diagnosed with cirrhosis and variceal bleeding, including 47,510 obese individuals (BMI over 30). Chi-square tests indicated significantly higher readmission rates for obese patients, with a p-value of 0.014 for 30-day and <0.001 for 60-day readmissions. The incidence of variceal bleeding also varied by obesity status, showing a p-value of 0.020. Logistic regression highlighted gender and race impacts on readmissions, particularly males and Hispanics influencing 60-day outcomes with coefficients of 0.62 and 0.54, respectively. The AUC for the 30-day model showed excellent predictive accuracy.

Conclusions This analysis shows obese patients have higher readmission rates than non-obese peers, highlighting complex care challenges. Logistic regression found gender and race—especially male and Hispanic patients—significantly affect 60-day readmissions. The 30-day model's high AUC confirms its predictive value, emphasizing the need for targeted interventions and healthcare strategies tailored to at-risk groups in managing cirrhosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

Redefining Endoscopic Practice: Time-Tested Methods and Next-Generation Technology

16/05/2026, 12:00–13:00

Emerald 5

PYP371 Reversible Electroporation in gastrointestinal neoplasms: Results of the first multicenter observational study in Spain

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DOI 10.1055/s-0046-1821310

Aims Reversible electroporation (REP) is a non-thermal technique that uses electrical pulses to induce transient pores in cellular membranes, facilitating the intracellular delivery of cytotoxic agents and promoting apoptosis. Its application in gastrointestinal neoplasms as a palliative treatment is promising, although data on its safety and efficacy are limited.

AIMS: To evaluate the safety and efficacy of REP in the palliative treatment of gastrointestinal neoplasms.

Methods A multicenter observational, descriptive, study with prospective follow-up was conducted. Patients with gastrointestinal neoplasms presenting with bleeding, obstructive symptoms, or requiring palliative treatment due to frailty, lack of response, or contraindication to surgery, chemotherapy, or radiotherapy were included.

Results Forty REP sessions were performed in 25 patients (18 men, 7 women), with a mean age of 75 years and high comorbidity (ASA III/IV in 76%). Fifty-six percent of patients had metastatic disease, and 26% had locally advanced disease. The most frequent tumor sites were gastric (64%), esophageal (25%), duodenal, and rectal. The main indications were bleeding (76%), pain, and obstructive symptoms. As cytotoxic agent, intratumoral calcium was used in 80% of cases and intravenous bleomycin in the remaining 20%. Adverse events were mild (Agree grade I) and infrequent (16%). Technical success was 92% and clinical success was 75%. Fourteen patients (58%) died during follow-up, mainly due to tumor progression (71%). No procedure-related mortality was recorded.

Conclusions Reversible electroporation is a safe technique with a low incidence of adverse events and encouraging clinical outcomes in the palliative treatment of advanced gastrointestinal neoplasms. Its use may represent a therapeutic alternative for frail patients or those lacking conventional treatment options.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP372 Real-Time Detection of Food-Induced Mucosal Reactions in Children Using Confocal Endomicroscopy

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DOI 10.1055/s-0046-1821311

Aims Confocal laser endomicroscopy (CLE) enables real-time visualization of epithelial barrier responses following mucosal exposure to food antigens. While CLE has demonstrated value in detecting non-immunoglobulin E (IgE)-mediated food allergy in adults, evidence in pediatrics remains limited. This study aimed to evaluate the feasibility, diagnostic yield, and clinical impact of CLE-guided duodenal food challenge in children with food-related gastrointestinal symptoms and negative conventional allergy testing.

Methods We prospectively enrolled children (2–18 years) with chronic gastrointestinal symptoms temporally associated with food ingestion and negative serum IgE and skin-prick tests. During upper endoscopy, standardized food antigens (cow's milk, wheat, soy, egg, yeast) were sequentially applied to the duodenal mucosa. CLE was performed immediately after each challenge. A CLE-positive reaction was defined by the presence of at least two features within 5 minutes: epithelial fluorescein leakage, widening of the intervillous space, fluorescent signal between enterocytes, or an increase in intraepithelial lymphocytes. Following CLE, targeted elimination diets were prescribed based on the identified offending antigen. Clinical outcomes were assessed at 8–12 weeks.

Results Thirty-six children were enrolled. CLE was feasible and safe in all children. A positive reaction occurred in 24/36 patients (66.7%). The most frequent triggers were cow's milk (41.7%), wheat (29.2%), soy (16.7%), egg (8.3%), and yeast (4.1%). CLE-positive patients consistently demonstrated rapid epithelial leakage and intervillous widening, indicating acute barrier dysfunction. At follow-up, 20/24 CLE-positive children (83.3%) achieved significant symptom improvement (>60%) after targeted dietary elimination, whereas CLE-negative children showed minimal benefit from empirical diet modification [1, 2].

Conclusions In this pediatric cohort, CLE revealed a high prevalence of non-IgE-mediated food allergy not identified by standard allergy tests. CLE-guided food elimination led to substantial clinical improvement, underscoring CLE's diagnostic value as a real-time functional tool for evaluating food-induced mucosal responses in children and for guiding personalized dietary therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rath T, Dieterich W, Kätscher-Murad C, Neurath MF, Zopf Y. Cross-sectional imaging of intestinal barrier dysfunction by confocal laser endomicroscopy can identify patients with food allergy in vivo with high sensitivity. *Sci Rep.* 2021; 11 (1): 12777. doi:10.1038/s41598-021-92262-4 PMID: 34140591 PMID: PMC8211682
- [2] Fritscher-Ravens A, Pflaum T, Mössinger M, Ruchay Z, Röcken C, Milla PJ, Das M, Böttner M, Wedel T, Schuppan D. Many Patients With Irritable Bowel Syndrome Have Atypical Food Allergies Not Associated With Immunoglobulin E. *Gastroenterology.* 2019; 157 (1): 109–118.e5. doi:10.1053/j.gastro.2019.03.046 Epub 2019 May 15 PMID: 31100380

PYP373 Automated detection and segmentation of early gastric cancer in Western endoscopic images using a fine-tuned deep learning model

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DOI 10.1055/s-0046-1821312

Aims Endoscopic detection of gastric cancer is operator-dependent, and almost all existing artificial intelligence (AI) systems have been developed in high-incidence East Asian settings. We aimed to develop and preliminarily evaluate an AI model for detection and segmentation of gastric cancer in a Western population, where this pathology is low-incidence, using endoscopic submucosal dissection (ESD) histopathology as reference standard. The model was fine-tuned from a previously established semi-supervised network for Barrett's neoplasia (Meinikheim et al., Endoscopy 2024). Transfer learning is appropriate because both esophageal and gastric cancers share key endoscopic characteristics and multimodal imaging features across WLI, NBI, and TXI. The feature representations learned from large-scale Barrett's datasets therefore provide a strong initialization. Primary outcomes were Dice similarity coefficient for tumor segmentation and image-level detection sensitivity.

Methods In this retrospective single-centre study at a tertiary-care hospital in Germany (University Hospital Augsburg), we included 84 patients with histologically confirmed gastric adenocarcinoma (T1a or higher) treated by ESD. From these patients, 827 endoscopic images (Olympus systems; WLI, NBI, TXI, with or without indigo chromoendoscopy) showing visible gastric cancer were extracted. Tumor extent was delineated on still images by experts informed by the corresponding ESD specimens and full pathology reports. All data were de-identified before analysis.

A convolutional neural network segmentation model was initialized with weights from the Barrett AI system, which had been pre-trained on 55,273 endoscopic images from 557 patients with Barrett's esophagus and related neoplasia, and then supervisedly fine-tuned for gastric cancer segmentation. Data were split patient-wise into five train/validation folds (80/20 per fold) to avoid information leakage between patients, and a separate model was trained for each fold. For segmentation, performance was assessed using the Dice coefficient. For image-level detection, a tumor was considered detected in a given image if the entire predicted lesion region overlapped the ground-truth mask with Dice $\geq 75\%$; detection performance was summarized as sensitivity at this threshold and as the area under a recall-overlap curve obtained by varying the Dice threshold from 0 to 1.

Results Across the five patient-wise folds, tumor Dice averaged 82.93% with a standard deviation of 1.39% [80.91–84.37%]. Image-level detection sensitivity at Dice $\geq 75\%$ averaged 94.86% with a standard deviation of 3.12% [90.23–97.59%]. The area under the recall-overlap curve averaged 0.912 with a standard deviation of 0.009. These results indicate a consistent and robust performance across all validation images.

Conclusions This preliminary single-centre study shows that an AI model fine-tuned from a semi-supervised Barrett's esophagus system can accurately segment and reliably detect gastric cancer in Western multimodal endoscopic data using ESD-based histopathology as ground truth. The model provided robust pixel-level delineation and high image-level detection sensitivity across a variety of imaging modes, indicating that pathology-anchored AI for gastric cancer is feasible even in Western cohorts where this pathology is low-incidence. However, because the dataset included only images with visible cancer, the reported performance does not reflect specificity, and results should not be extrapolated to screening or mixed-pathology settings. Future work should include

external validation in multicentre Western cohorts, assessment on images containing no lesions or other pathologies, and evaluation on full-length endoscopic videos to better approximate clinical performance.

To our knowledge, this is among the first endoscopic AI systems for gastric cancer developed in a Western population and one of the few to leverage ESD specimen-based ground truth for training and validation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP374 Direct Puncture versus Pull-Through Technique in Percutaneous Endoscopic Gastrostomy: A Retrospective Propensity Score Matched Study

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DOI 10.1055/s-0046-1821313

Aims Percutaneous endoscopic gastrostomy (PEG) is essential for enteral feeding in patients with neurologic or head/neck/esophageal disorders. Direct puncture (DP) after gastropexy is suggested to reduce complication rates compared to pull-through (PT) technique. However, indications determine the choice between both techniques. In this large, retrospective propensity score matched study from a German tertiary endoscopic center, we aim to comprehensively evaluate the complication profiles of DP technique and compare it to the more frequently performed PT method stratified by indications.

Methods Retrospective data of all PEG procedures from 2015 to 2024 were collected from electronic patient charts including general demographic information, comorbidities, medication, laboratory results and outcomes.

Propensity score matching between DP and PT was performed (1:2) for underlying disease and current treatment of malignant diseases to reduce selection bias.

Primary outcomes were occurrence of major (bleeding, pneumoperitoneum, perforation, systemic infection and tube dislodgment) and minor adverse events (pain and local infection). Secondary outcome was 60-day-mortality.

Results A total of 1002 consecutive PEG procedures (n = 178 DP, n = 816 PT, n = 8 for other techniques) were included. Overall, baseline characteristics were significantly different for underlying disease and current treatment for malignant disease in the DP group (PT: 44.1% vs. DP: 87.6%, $p < 0.001$). Overall major and minor adverse events were 34.8% but significantly lower in PT (PT: 32% vs. DP: 48.3%, $p < 0.001$).

Following 1:2 propensity score matching, 513 procedures (171 DP, 342 PT) were analyzed. The median age was 64 years with 68.6% male patients. Baseline demographics, medication and comorbidities were not significantly different between the matched cohorts.

Major (PT: 41.8% vs. DP: 47.3%, $p = 0.24$) and minor (PT: 11.7% vs. DP: 9.4%, $p = 0.423$) adverse events were similar between both groups matched for tumor disease and treatment.

However, tube dislodgment occurred significantly more frequently in the DP compared to the PT group (7.6% vs. 1.5%, $p < 0.001$).

60-day-mortality was similar between PT and DP (8.5 vs. 10.5%, $p = 0.449$).

Conclusions Our results show that, except for tube dislodgment, adverse event rates are comparable between PT and DP and thus, do not confirm previous reports of reduced complication rates in DP, when matched for underlying disease. In our study different complication rates are observed with types of underlying disease. This study underlines the current ESGE recommendation to perform pull through technique if technically feasible.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP375 Safety Profile, Patient and Device-Related Adverse Events of Percutaneous Endoscopic Gastrostomy (PEG) Tubes: A Report From Manufacturer and User Facility Device Experience (MAUDE) Database Analysis

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DOI 10.1055/s-0046-1821314

Aims Percutaneous endoscopic gastrostomy (PEG) tubes are commonly placed to provide long-term enteral nutrition to patients suffering with neurological dysphagia and head and neck cancers. It is safe and effective when performed by experts; however, device-related problems and patient-related adverse events are known but underreported. We aimed to analyse device-related problems and patient-related adverse events associated with PEG tubes reported in the Manufacturer and User Facility Device Experience (MAUDE) database (► **Table 1**).

► **Table 1** Most common device-related problems reported for PEG tubes in the FDA MAUDE database, (N = 2185)

Device-related problems n (%) Leak/Splash 254 (11.62%) Break 237 (10.85%) Detachment of Device or Device Component 224 (10.25%) Obstruction of Flow 135 (6.18%) Device Dislodged or Dislocated 121 (5.54%) Burst Container or Vessel 66 (3.02%) Fracture 58 (2.12%) Fluid/Blood Leak 58 (2.65%) Material Rupture 55 (2.52%) Device Contamination with Chemical or Other Material 49 (2.24%)

Methods MAUDE database of the USFDA was accessed (URL link: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfmaude/search.cfm>). A total of 2,032 reports were collected between December 2008 and August 2025 using the search terms “PEG tube,” “Gastrostomy tube,” and “Percutaneous endoscopic gastrostomy tube.” All reports were exported to Microsoft excel sheet, duplicates were carefully sorted out and data was analysed for device-related problems and patient-related adverse events using the software inbuilt in Excel (► **Table 2**).

► **Table 2** Most common patient-related adverse events reported in association with PEG tubes in the FDA MAUDE database, (N = 897)

Patient-related adverse events n (%) Foreign Body in Patient 90 (10.03%) Infection 68 (7.58%) Pain 47 (5.24%) Feeding problem 34 (3.79%) Device embedded in tissue/plaque 19 (2.12%) Failure of implant 19 (2.12%) Hemorrhage/bleeding 18 (2.01%) Peritonitis 18 (2.01%) Bowel perforation 18 (2.01%) Vomiting 18 (2.01%)

Results A total of 2185 device-related problems and 897 patient-related adverse events were reported in the MAUDE database from a total of 2032 individual reports with highest number of events reported in 2024 (n = 291, 14.32%). More than one device-related problem was identified in 334 (16.44%) reports. The most common device-related problems reported were leaks/splashes (n = 254, 11.62%), breakage (n = 237, 10.85%), and detachment of the device or device component (n = 224, 10.25%) (Figure 1). There was no impact on the patient and/or no known consequence in majority of the cases (n = 1162, 57.18%). However, the most frequent patient related

complications reported were foreign body in the patient (n = 90, 10.03%), infection (n = 68, 7.58%), pain (n = 47, 5.24%), feeding problems (n = 34, 3.79%), device embedded in tissue/plaque (n = 19, 2.12%), implant failure (n = 19, 2.12%), and hemorrhage/bleeding (n = 18, 2.01%). Mortality was mentioned as an event type “death” in 0.98% (n = 20) of the patient-related events (Figure 2)

Conclusions PEG tube placement is safe and effective. Patient-related incidents were uncommon and rarely fatal. Tube leaks/splashes and breaks were the most common device-related problems. Continuous innovation and improvement are required to reduce the number of device-related issues and improve patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP376 EUS-Guided Coil Embolization of Gastro-Renal Shunt for the Management of Gastric Varices and Its Impact on Hepatic Encephalopathy

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DOI 10.1055/s-0046-1821315

Background Gastric varices (GV) are an uncommon but life-threatening cause of gastrointestinal bleeding in patients with portal hypertension (PH). Their management using standard methods remains challenging, especially in patients with hepatic encephalopathy (HE), for whom transjugular intrahepatic portosystemic shunt (TIPS) may be contraindicated, requiring alternative approaches. We report a case of a high-risk, type 1 isolated GV (IGV1) successfully managed with endoscopic ultrasound (EUS)-guided coil embolization, resulting in subsequent improvement in HE.

Case Presentation and Management A 72-year-old male with dysmetabolic cirrhosis and overt HE was referred for surveillance of esophageal varices (EV). Esophagogastroduodenoscopy revealed F2-grade EV with haematocystic spots, treated with band ligation, and a submucosal fundic bulge consistent with IGV1, further confirmed by EUS. To assess the degree of PH, an EUS-guided portal pressure gradient measurement was performed, yielding a value of 16 mmHg. Due to persistent overt HE, TIPS was considered unsuitable. EUS-guided coil embolization was performed as primary prophylaxis, targeting the gastro-renal shunt.

Outcomes The procedure resulted in the disappearance of GV and improvement in HE, documented one month later by an increase in the Animal Naming Test score from 6 to 17, along with a decrease in plasma ammonia levels from 105 to 68 µmol/L.

Conclusions EUS-guided embolization of GV is emerging as an effective alternative to conventional treatments, particularly for patients unsuitable for TIPS. Beyond achieving effective variceal control, shunt embolization may contribute to improvement in pre-existing HE by reducing portosystemic diversion. Further studies are needed to assess the long-term outcomes of this approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP377 Endoscopic Ultrasound–Guided Shunt Occlusion: Experience from Three Cases

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DOI 10.1055/s-0046-1821316

Aims EUS-Guided Shunt Occlusion for Refractory Hepatic Encephalopathy: A Three-Case Series Demonstrating a Promising Alternative to BRTO and TIPS

Methods We retrospectively analyzed three male patients (ages 41–66) with ethanol-related cirrhosis and recurrent OHE despite optimal medical therapy. All had large splenorenal or splenoportal shunts documented on CT, with significant portofugal flow on Doppler. Due to financial constraints or high MELD, liver transplantation, BRTO, and TIPS were not feasible [1–3].

Under deep sedation, an echoendoscope was positioned at the gastric cardia to visualize the splenoportal axis. The afferent feeder to the shunt was identified using Doppler, and a 19G EUS-FNA needle was used for direct puncture. Technique involved deployment of 18–20 mm coils followed by n-butyl cyanoacrylate glue injection, in single or staged sessions, depending on residual flow. Coil number ranged from 2 to 6 per patient. Post-procedure, patients were monitored for bleeding, ascites, hypoxia, and worsening decompensation. CT portography was repeated after 4–6 weeks. Clinical follow-up included MELD score, HE episodes, and functional status assessment.

Results Case 1 (66-year-old male): Large splenoportal shunt with recurrent HE. Single-session ETSO with two coils and 2 ml glue achieved complete obliteration. No complications. No further HE over 3 months; improved cognition reported.

Case 2 (57-year-old male, MELD 28): Large posterior gastric vein afferent shunt. Initial coil + glue session partially occluded flow. A second puncture achieved complete thrombosis. Developed mild hemoperitoneum and ascites, managed with correction of coagulopathy. Hospital stay: 20 days. After discharge, only one minor HE episode occurred at 3 weeks, and none thereafter. CT at 35 days showed complete non-opacification of shunt without thrombus extension. MELD improved to 25 at 2 months.

Case 3 (41-year-old male, MELD 13): 1.5–2 cm splenorenal shunt. Staged ETSO was required due to shunt size. Three sessions performed over 2 weeks with multiple coils and 4 ml glue. Mild post-procedure hypoxia occurred, managed conservatively. CT showed partial and progressive obliteration. No episodes of OHE in last month. Improved sensorium and liver function.

Across all cases: Technical success: 100%; Clinical control of OHE: achieved in all three; No portal vein/systemic thrombus extension; No mortality; MELD improvement in all three patients; Average follow-up: 2 months

Conclusions This case series demonstrates that EUS-guided shunt occlusion is a feasible and effective therapeutic alternative for patients with recurrent HE and contraindications to TIPS, BRTO, or transplantation. The ability to directly visualize and selectively embolize the shunt afferent offers distinct procedural precision over radiologic methods. While mild complications occurred, all were manageable, and neurocognitive improvement was consistent across patients. ETSO may represent an emerging interventional paradigm in hepatology, particularly within resource-constrained settings. A multicentric prospective study is urgently needed to establish standardized protocols, optimal coil–glue combinations, and long-term outcomes beyond encephalopathy control, including survival and portal hemodynamics.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tang L, Li X, Cui J, Huang LY. EUS-guided coil placement and cyanoacrylate glue injection for gastric variceal bleeding with obvious spontaneous portosystemic shunts. *Endosc Ultrasound* 2023; 12 (1): 84–89
- [2] Rai P, Kumar P, Hoda US, Shah N, Mishra P. EUS-guided coil and glue injection for treatment of splenic artery pseudo-aneurysm. *Endoscopy / GI journal*. (Demonstrates safety of EUS-guided coil + glue in vascular lesions beyond varices)
- [3] Levy MJ et al. Interventional endoscopic ultrasound: A new promising way for intrahepatic portosystemic shunt with portal pressure gradient. (Porcine study) – demonstrates feasibility of EUS-guided shunt creation.

PYP378V Bipolar hemostatic forceps in iatrogenic papillary bleeding: Utility of a third-space endoscopic device in a very different scenario

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DOI 10.1055/s-0046-1821317

Problem to solve Iatrogenic papillary bleeding (IPB) is a relatively common (1–2 % post-sphincterotomy -PS- and 10 % post-ampullectomy) and potentially a life-threatening endoscopic complication. Despite many endoscopic treatments available, literature is scarce about the best and more efficient option.

Innovation Hemostatic bipolar forceps (HBF) Hemostat™, a common third-space endoscopy device for vessel pre-coagulation and/or bleeding treatment, is a new kid on the block in the setting of IPB with first 2 case reports published in 2024. Nevertheless, HBP presents some attractive features for this scenario: 1) good functionality through duodenoscope elevator, 2) possibility of clamping the bleeding point to properly define it, 3) bipolar current with fewer surrounding energy application and 4) costs [1–3].

Results Twenty two cases of IPB (81.8 % intraprocedural and 18.2 % delayed) were treated by HBF in 21 patients by 2 experienced endoscopists in a 2-year period from June-2023 to June-2025. Patients were 82.7 % female, mean age 76.4 ± 12.71 and ASA III-IV: 52.4 %. Initial procedure was ERCP + ES and/or precut in 81.8 % and ampullectomy in 18.2 %. Severity of IPB was classified as AGREE III in 95.5 % and AGREE V in 4.5 %. Procedural and technical data are presented in ► **Table 1**.

► Table 1

		Total (N: 22)	Intraprocedural (n: 18)	Delayed (n: 4)
Active bleeding		95.5 %	100 %	75 %
HBF as single treatment		40.9 %	44.4 %	25 %
Combined therapy	HBF + 1	36.4 %	33.3 %	50 %
	HBF + ≥ 2	22.7 %	22.2 %	25 %
Type of combined therapies	Epinephrine washing	27.3 %	27.8 %	25 %
	Clipping	27.3 %	27.8 %	25 %
	Stent	22.7 %	22.2 %	25 %
	Others	13.6 %	11.1 %	25 %
HBF technical success		100 %	100 %	100 %
Hemostatic success	Atributable to HBF	80.9 %	83.3 %	50 %
	Total	100 %	100 %	100 %
HBF related complications		0 %	0 %	0 %
Bleeding recurrence		13.6 %	11.1 %	25 %

Conclusions BHF seems to be a safe and effective treatment for IPB.

These results, its functionality through the duodenoscope and its electrophysical properties made the BHF appear as an attractive tool for IPB.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/b0f24690-dcef-4318-aaa5-858282467188/Uploads/19990_PIN-ZA_ESGE%20OK.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Dumonceau JM, Kapral C, Aabakken L, Papanikolaou IS, Tringali A, Vanbiervliet G, Beyna T, Dinis-Ribeiro M, Hritz I, Mariani A, Paspatis G, Radaelli F, Lakhtakia S, Veitch AM, van Hooft JE. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2020; 52 (2): 127–149. doi:10.1055/a-1075-4080 Epub 2019 Dec 20 PMID: 31863440
- [2] Shibasaki K, Miwa H, Suzuki Y, Endo K, Oishi R, Tsuchiya H, Maeda S. Bipolar forceps coagulation for endoscopic papillectomy-related bleeding. *Endoscopy*. 2024; 56 (S 01): E967–E969. doi:10.1055/a-2440-6432 Epub 2024 Nov 8. PMID: 39515774 PMID: PMC11549005
- [3] Miwa H, Sugimori K, Endo K, Oishi R, Tsuchiya H, Kaneko T, Maeda S. Endoscopic hemostasis with bipolar forceps coagulation for post-endoscopic sphincterotomy bleeding. *Endoscopy*. 2024; 56 (S 01): E315–E316. doi:10.1055/a-2291-9399

PYP379 Contrast-Enhanced Harmonic Endoscopic Ultrasonography for Diagnosing Gastric Subepithelial Tumors

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DOI 10.1055/s-0046-1821318

Aims Contrast-enhanced harmonic endoscopic ultrasonography (CH-EUS) is a promising tool for differentiating gastric subepithelial tumors (SETs). However,

most published studies have mainly included gastrointestinal stromal tumors (GIST) and leiomyomas in the gastrointestinal tract, not limited to gastric SETs. This study evaluated the diagnostic performance of CH-EUS in gastric SETs encountered in clinical practice (► Table 1).

Methods We retrospectively analyzed 68 patients who underwent CH-EUS for gastric SETs between March 2021 and July 2025 at our institution. Gastric SETs were classified into benign ($n = 27$: ectopic pancreas, leiomyoma, schwannoma, glomus tumor, plexiform fibromyxoma, desmoid tumor, solitary fibrous tumor, and abscess) and GIST groups ($n = 41$). CH-EUS features, including arterial enhancement, irregular vessels, and diffuse enhancement, were assessed. Histopathological confirmation was obtained through EUS-guided fine-needle biopsy or endoscopic/surgical resection [1–4].

Results The GIST group showed significantly higher rates of arterial enhancement (95.1 % vs. 74.1 %, $p = 0.024$), irregular vessels (51.2 % vs. 22.2 %, $p = 0.017$), and diffuse enhancement (87.8 % vs. 66.7 %, $p = 0.035$) than the benign SETs. The diagnostic performance of arterial enhancement showed a sensitivity of 95.1 % and specificity of 25.9 %, while irregular vessels demonstrated a sensitivity of 51.2 % and specificity of 77.8 %, and diffuse enhancement showed a sensitivity of 87.8 % and specificity of 33.3 %. When combining ≥ 2 CH-EUS features, the sensitivity and specificity were 92.7 % and 33.3 %, respectively, with an overall accuracy of 69.1 %. The presence of all three features yielded a specificity of 81.5 % but a lower sensitivity (46.3 %).

Conclusions CH-EUS exhibited a high sensitivity but moderate specificity in differentiating GISTs from various benign gastric SETs when using a combination of at least two CE-EUS features, including arterial enhancement, irregular vessels, and diffuse enhancement.

► **Table 1** Sensitivity, specificity and positive and negative predictive values of the CH-EUS features that differentiate GISTs from benign subepithelial tumors in the stomach (%)

CE-EUS features	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)
Arterial enhancement	95.1 (83.5-99.4)	25.9 (11.1-46.3)	66.1 (60.7-71.1)	77.8 (44.0-94.0)	67.7 (55.2-78.5)
Irregular vessels	51.2 (35.1-67.1)	77.8 (57.7-91.4)	77.8 (61.9-88.3)	51.2 (42.0-60.4)	61.8 (49.2-73.3)
Diffuse enhancement	87.8 (73.8-95.9)	33.3 (16.5-54.0)	66.7 (60.0-72.8)	64.3 (40.3-82.7)	66.2 (53.7-77.2)
Of the above 3 features					
≥ 1	95.1 (83.5-99.4)	22.2 (8.6-42.3)	65.0 (60.0-70.0)	75.0 (39.5-93.2)	66.2 (53.7-77.2)
≥ 2	92.7 (80.1-98.5)	33.3 (16.5-54.0)	67.9 (61.5-73.6)	75.0 (47.1-91.0)	69.1 (56.7-80.0)
All	46.3 (30.7-62.6)	81.5 (61.9-93.7)	79.2 (61.7-90.0)	50.0 (41.7-58.3)	60.3 (47.7-72.0)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tamura T., Kitano M. Contrast Enhanced Endoscopic Ultrasound Imaging for Gastrointestinal Subepithelial Tumors. *Clin Endosc* 2019; 52: 306–313
- [2] Kim G.H., Park D.Y., Kim S., Kim D.H., Kim D.H., Choi C.W., Heo J., Song G.A. Is it possible to differentiate gastric GISTs from gastric leiomyomas by EUS? *World J Gastroenterol* 2009; 15: 3376–3381
- [3] Jeon H.K., Kim G.H. Natural History of Gastric Subepithelial Tumors: Long-Term Outcomes and Surveillance Strategies. *J Clin Med.* 2025; 14:
- [4] Jeon H.K., Kim G.H. Natural History of Gastric Subepithelial Tumors: Long-Term Outcomes and Surveillance Strategies. *J Clin Med.* 2025; 14:

Advanced pancreaticobiliary endoscopy: Innovation, altered anatomy and outcome prediction

16/05/2026, 12:00–13:00

Emerald 3

PYP380 North Central London Acute Severe Pancreatitis Network: A One-Year Review of a Collaborative Two-Centre Referral Model

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DOI 10.1055/s-0046-1821319

Aims Acute pancreatitis (AP) represents a major healthcare burden, with complex cases often requiring coordinated multidisciplinary input. To optimise management and streamline regional referrals, the North Central London Acute Severe Pancreatitis Network was established as a collaboration between the hepaticopancreatobiliary teams at University College London Hospital (UCLH) and the Royal Free Hospital (RFH).

Both centres, located in close proximity, observed that several hospitals across the South of England were referring patients to both sites, leading to duplicated clinical work, conflicting communication, and inefficient use of endoscopy capacity. In response, a unified referral pathway was established to provide timely specialist advice and interventions whilst improving workflow and efficiency. We present a one-year review assessing referral patterns, clinical outcomes, and the impact of this collaborative model on service efficiency. The network operates through a single point-of-contact phone line, alternating weekly between UCLH and RFH, with all referrals and clinical progress are recorded on a shared database. A specialist nurse receives all referrals and re-

sponds with consultant or senior fellow advice within 24 hours. Weekly clinical updates are obtained and discussed at a weekly network MDT.

Methods A retrospective review was performed of all acute pancreatitis referrals received by the network over a 12-month period. Data collected included referral source, disease severity, imaging findings, interventions performed (endoscopic, radiological, or surgical), length of stay, adverse events, and mortality. Workload distribution between the two sites was analysed to assess the impact of shared clinical responsibility. Outcomes were compared with internal historical data prior to network implementation.

Results Between 2 December 2024 and November 2025, the network received 164 referrals from 19 hospitals across a catchment area extending roughly 120 miles. The mean time on the pathway from referral to discharge was 17.6 days (median 13), compared with 23 days before the network was established. Twenty-nine patients (18 %) required endoscopic intervention. Of these, 24 (83 %) underwent LAMS placement for walled-off necrosis, 4 (14 %) of whom required necrosectomy. 5 patients (17 %) received plastic stents for pseudocysts. There were five deaths (3 %), all due to complications of severe pancreatitis.

Conclusions The North Central London Acute Severe Pancreatitis Network demonstrates that a coordinated two-centre model with a single referral pathway can significantly reduce duplicated work, improve resource utilisation, and maintain high-quality specialist care. This model supports efficient management of complex AP across a large regional population and serves as a scalable framework for other tertiary HPB services.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP381 Single-session Endoscopic Ultrasound-directed Procedures with a Dedicated Over-the-scope Fixation Device: A Multicenter International Analysis

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DOI 10.1055/s-0046-1821320

Aims EUS-directed procedures using lumen-apposing metal stent (LAMS) have been proposed as a more effective alternative to enteroscopy-assisted ERCP for patients with post-surgical anatomy. Amongst factors that influence LAMS migration risk, stent fixation has been suggested as a protective factor. For LAMS fixation with a dedicated over-the-scope fixation device, only a proof-of-concept study within the context of EUS-directed transgastric ERCP (EDGE) is available.

The current study aimed to assess the efficacy and safety of single-session EUS-directed procedures with the dedicated over-the-scope fixation device, using a larger international cohort.

Methods A retrospective multicenter analysis was performed, including consecutive single-session EUS-directed procedures with the Stentfix device from 11 centers. Only 20x10mm LAMS were utilized. Single-session EUS-directed transgastric interventions (EDGE), as well as EDGE and EUS-directed transenteric ERCP (ELEE) were eligible for inclusion. The primary outcome was periprocedural distal LAMS migration and key secondary outcomes included adverse events, employing the AGREE classification, and single-session technical success rates.

Results Ninety-seven patients undergoing single-session EUS-directed procedures were included (mean age 57.5 [standard deviation (SD) $\pm$ 11.8] years, 75.3 % female) with predominantly a history of Roux-en-Y gastric bypass (86.6 %), Roux-en-Y gastrectomy (4.1 %) or pancreatoduodenectomy (3.1 %). Procedures consisted of EDGE (n = 77, 79.4 %), EDGI (n = 10, 10.3 %) and ELEE (n = 10, 10.3 %). Main indications were stones or sludge (36.1 %), cholangitis/sepsis (22.7 %) and benign strictures (20.6 %). A 'single-session-first'-approach was used for 83 patients (85.6 %), reserving dual-session procedures only for patients where excessive resistance was encountered during duodenoscope insertion.

Periprocedural distal LAMS migration occurred in 1 patient (1.0 %), for which endoscopic salvage was performed using through-the-scope suturing (grade IIIa). Adverse events occurred in 15.5 % of patients (n = 15), consisting of grade I (n = 3, 3.1 %), grade II (n = 2, 5.2 %), grade IIIa (n = 5, 5.2 %), grade IIIb (n = 1, 1.0 %) and grade IV adverse events (n = 1, 1.0 %). Bleeding (n = 5, 5.2 %) and pain (n = 3, 3.1 %) were the most frequent adverse events. One proximal LAMS dislocation occurred during duodenoscope retraction and 1 delayed LAMS dislocation occurred > 12 hours after successful EDGE completion, which required endoscopic salvage utilizing an esophageal stent (grade IV) and surgical salvage (grade IIIb) respectively. Both patients with immediate (n = 1) and delayed (n = 1) distal LAMS migration had a history of more extensive gastric surgery beyond Roux-en-Y gastric bypass, consisting of partial gastrectomy and sleeve gastrectomy respectively.

Single-session technical success was achieved in 88.7 % in a median procedure duration of 55 min (interquartile range (IQR) 43-73). After a median follow-up of 228 days (IQR 108-393), planned LAMS and Stentfix removal was performed in 68 cases (70.1 %), using mainly forceps traction (n = 63, 64.9 %). The dedicated removal system was employed in 5 cases (5.2 %).

In 14 patients, no closure techniques were applied following LAMS removal (14.4 %), whereas in 42.3 % of patients over-the-scope clip fistula closure was performed (n = 43).

Conclusions Over-the-scope LAMS fixation resulted in a low distal LAMS migration rate for single-session EUS-directed procedures and our data furthermore suggest that this technique might facilitate a 'single-session-first'-approach in patients undergoing EUS-directed procedures. However, given distal LAMS migrations only occurred in patients with Roux-en-Y gastric bypass and a history of more extensive gastric surgery beyond gastric bypass, alternative approaches might be considered in these specific situations.

Conflicts of Interest Michiel Bronswijk received study grants from Boston Scientific and Fides Medical, and holds consultancy agreements with Dekra and Prion Medical-Taewoong. Emine Göke declares no competing interests. Pieter Hindryckx holds consultancy agreements with Boston Scientific. Schalk van der Merwe holds the Cook chair in Interventional endoscopy, has consultancy agreements with Cook, Pentax and Olympus and co-chairs the Boston-Scientific Chair in Therapeutic Biliopancreatic Endoscopy.

PYP382 Comparing outcome of enteroscopy-assisted ERCP for benign hepaticojejunostomy stenosis following pancreatoduodenectomy versus Roux-en-Y reconstruction

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Aims Enteroscopy-assisted endoscopic retrograde cholangiopancreatography (EA-ERCP) is an established technique for managing benign hepaticojejunostomy (HJ) stenosis. Compared to alternative interventions, such as percutaneous or endosonography-guided approaches, EA-ERCP is less invasive and offers a favorable safety profile. However, technical success rates of EA-ERCP may be lower in anatomically complex cases, such as those involving Roux-en-Y (RY) anastomoses, as compared to simpler Bill gastroenteric anastomoses used in pancreatoduodenectomy (PD). Additionally, it is currently unclear whether balloon dilatation alone, or combined with stenting, represents the most effective endoscopic treatment strategy. The primary study aim was to evaluate the efficacy and safety of EA-ERCP for suspected benign HJ stenosis in patients with RY versus PD. The secondary aim was to assess the outcomes of balloon dilatation with or without stent placement.

Methods This single-center retrospective study included patients who underwent EA-ERCP for suspected benign HJ stenosis between 2018 and 2025. Eligible patients had previously undergone PD or HJ with RY, while excluding those with post-gastric bypass anatomy. Procedures were performed using a short- or long-type double-balloon enteroscope. HJ stenosis was treated with balloon dilatation alone, or when the stricture failed to resolve adequately, balloon dilatation was combined with stent therapy. A metal covered Nagi stent was placed if technically possible, if not, multiple plastic stents were inserted. Recurrences of HJ stenosis were generally managed with repeat balloon dilatation combined with stent therapy. The primary outcome was technical success. Secondary outcomes included clinical success (symptom resolution 14 days post-EA-ERCP), adverse events (AGREE classification), recurrent HJ stenosis and the need for reintervention.

Results A total of 192 patients underwent 320 EA-ERCPs. Benign HJ stenosis was confirmed in 102 of 192 (53.1 %) index EA-ERCPs. Overall technical success rate was 279/320 (87.2 %); 194/220 (88.2 %) in PD group and 85/100 (85.0 %) in RY group [p = 0.16]. Technical failures in PD versus RY patients included inability to reach the HJ (12; 5.5 % vs 13; 13.0 %), to cannulate the bile ducts (13; 5.9 % vs 2; 2.0 %) and to complete the intended therapy (1; 0.5 % vs none). Overall clinical success was 83.9 % (PD 116/135 (85.9 %) versus RY 35/45 (77.8 %), p = 0.35). Overall adverse event (AE) rate was 16/320 (5.0 %) (PD

11/220; 5.0% versus RY 5/100; 5.0%), without severe (grade IV/V) AEs. At index EA-ERCP, 79 patients were treated with balloon dilatation. Recurrence of HJ stenosis requiring reintervention was observed in 37/79 (46.8%) patients at a median of 8 months [IQR: 1.5-29], which occurred in 25/37 (67.6%) cases in the PD group and 12/37 (32.4%) patients in the RY group. Median total follow-up was 17.0 months [IQR: 8.0-35.3]. HJ patency at 1, 2 and 3 years was 67.9%, 58.7% and 40.4%, respectively. Stent therapy was initiated in 33 patients, either by multiple plastic stents (n = 24) or a Nagi stent (n = 9). Stent dysfunction requiring reintervention occurred in 5/24 (20.8%) patients treated with plastic stents and in 4/9 (44%) patients with a Nagi stent. Recurrence of HJ stenosis for which reintervention was needed, was observed in 8/33 (26%) patients following stenting therapy, after a median follow up of 8 months [IQR 1-14]. Recurrence of HJ stenosis after stent therapy in PD group was 4/8 (50%) and 4/8 (50%) in RY group.

Conclusions EA-ERCP for suspected HJ stenosis shows a similar high technical and clinical success rate in patients with PD and RY anatomy with a favorable safety profile. These findings reinforce the role of EA-ERCP as first line approach in benign HJ stenosis in both types of anatomical reconstructions. However, future studies should focus on optimizing the therapeutic strategy to reduce recurrences of HJ stenosis.

Conflicts of Interest RLJW performed as consultant for Boston Scientific, Cook Medical and received speakersfee from Olympus.RPV reports research support from Boston Scientific, Cook Medical and Prion medical, performed as consultant for Boston Scientific and Cook Medical and received speakersfee from Mediglobe.

PYP383 Post-ERCP Complications in Patients with Cirrhotic versus Non-Cirrhotic Portal Hypertension: A Retrospective Comparative Study from a Tertiary Eastern European Center

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Aims Endoscopic retrograde cholangiopancreatography (ERCP) remains the mainstay for biliary and pancreatic interventions but carries an increased risk of adverse events in patients with portal hypertension (PH). This study aimed to compare the incidence and profile of post-ERCP complications in patients with cirrhotic versus non-cirrhotic PH.

Methods A retrospective observational study was conducted on 109 patients with PH who underwent ERCP between January 2019 and May 2024 at a tertiary referral center. Patients were divided into two groups: cirrhotic PH (n = 48) and non-cirrhotic PH (n = 61, mainly portal vein thrombosis or cavernoma). Clinical, laboratory, and endoscopic data were analyzed, including post-ERCP pancreatitis (PEP), bleeding, and cholangitis. Statistical analysis used Chi-square, Fisher's exact, t-test, and logistic regression, with p < 0.05 considered significant.

Results Overall complication rates were significantly higher in cirrhotics (39.6%) compared with non-cirrhotics (6.5%, p < 0.001). Post-ERCP bleeding occurred in 14.6% vs. 3.3% (OR 5.04, 95% CI 1.00–25.48, p = 0.033), cholangitis in 12.5% vs. 1.6% (OR 6.98, 95% CI 0.79–61.87, p = 0.022), and PEP in 12.5% vs. 1.6% (OR 8.57, 95% CI 1.00–73.84, p = 0.022). No perforations were observed. Within the cirrhotic cohort, Child-Pugh B/C stages were significantly associated with higher complication rates (p = 0.008).

Conclusions Cirrhotic patients—particularly those with decompensated disease—have a markedly increased risk of post-ERCP adverse events compared with non-cirrhotic PH. Rigorous pre-procedural optimization, careful risk stratification, and enhanced post-ERCP monitoring are essential to minimize morbidity in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP384 Preliminary experience on the incidence and severity of post-ERCP pancreatitis in distal malignant biliary obstruction: a single tertiary-center analysis

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Aims Distal malignant biliary obstruction (DMBO) commonly requires endoscopic retrograde cholangiopancreatography (ERCP) with transpapillary stent placement. Although ERCP is the standard of care, the real incidence and clinical impact of post-ERCP pancreatitis (PEP) in DMBO remain unclear, as most data derive from mixed populations including benign or proximal lesions.

This study aimed to assess the incidence, severity, and predictors of PEP and other ERCP-related adverse events (AEs) in a tertiary referral center, providing preliminary data from a high-volume specialized unit.

Methods We conducted a single-center retrospective study including 246 consecutive patients with radiologically and histologically confirmed DMBO who underwent ERCP with transpapillary biliary stenting between January 2022 and June 2024 at the University Hospital "G.B. Rossi" in Verona, Italy. Clinical, imaging, and procedural variables were collected and analyzed, including age, sex, bilirubin levels, tumor size, duodenal infiltration, cannulation technique, sphincterotomy, and pancreatic stent placement. PEP was defined according to the Revised Atlanta Classification (2012) and graded as mild, moderate, or severe. Adverse events within 31 days were recorded. Univariate and multivariate logistic regression analyses were performed to identify potential predictors of PEP. Variables with p < 0.10 in univariate analysis were entered into the multivariate model [1–9].

Results Among 246 patients (mean age 67.2 ± 10.6 years; 54% males), pancreatic adenocarcinoma was the most frequent cause of DMBO (85%). The overall rate of post-ERCP adverse events was 26.4%, with PEP being the most common (10.2%). Most pancreatitis cases were mild (84%), three were moderate (12%), and one severe (4%), resulting in a 1.6% rate of clinically significant (moderate-to-severe) PEP. Other AEs included cholangitis (6.9%), intra-procedural bleeding (3.3%), and cholecystitis (2.4%); no patient required ICU admission or died within 31 days. Univariate analysis showed a protective trend for tumor size > 30 mm (p = 0.09) and an increased risk of PEP with pancreatic stent placement (p = 0.05) and pancreatic-assisted cannulation (p = 0.09). In multivariate logistic regression, none of the variables reached formal significance; however, pancreatic stent placement remained the strongest predictor (OR 4.2, 95% CI 0.88–20.1, p = 0.07). These findings suggest that PEP risk is mainly associated with procedural complexity rather than intrinsic patient characteristics.

Conclusions In this preliminary tertiary-center experience, ERCP with transpapillary stenting for DMBO showed a low incidence of clinically relevant PEP. Although PEP occurred in about 10% of cases, moderate or severe forms were rare (1.6%) and did not result in mortality or prolonged hospitalization. The observed trends suggest that pancreatic stent placement and complex cannulation may increase PEP risk, while larger tumors appear protective, possibly due to mechanical ductal obstruction.

These results highlight the crucial role of operator expertise and procedural standardization in minimizing adverse events.

ERCP remains the safest and most effective first-line approach for biliary drainage in DMBO when performed in expert hands.

Future multicenter prospective studies are warranted to validate these findings and develop risk stratification models tailored to malignant biliary obstruction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fugazza A, Troncone E, Amato A et al. Difficult biliary cannulation in patients with distal malignant biliary obstruction: An underestimated problem? *Digestive and Liver Disease* 2022; 54 (4): 529–536. doi:10.1016/j.dld.2021.07.010
- [2] Dumonceau JM, Kapral C, Aabakken L et al. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020; 52 (2): 127–149. doi:10.1055/A-1075-4080
- [3] Dumonceau JM, Tringali A, Papanikolaou IS et al. Endoscopic biliary stenting: Indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated October 2017. *Endoscopy* 2018; 50 (9): 910–930. doi:10.1055/A-0659-9864
- [4] Tamura T, Yamai T, Uza N et al. Adverse events of self-expandable metal stent placement for malignant distal biliary obstruction: a large multicenter study. *Gastrointest Endosc* 2024; 99 (1): 61–72.e8. doi:10.1016/j.gie.2023.08.004
- [5] Marziani M, Crinò SF, Lisotti A et al. Biliary drainage in patients with malignant distal biliary obstruction: results of an Italian consensus conference. *Surgical Endoscopy* 2024; 38 (11): 6207–6226. doi:10.1007/s00464-024-11245-4
- [6] Paduano D, Facciorusso A, De Marco A et al. Endoscopic Ultrasound Guided Biliary Drainage in Malignant Distal Biliary Obstruction. *Cancers (Basel)* 2023; 15 (2):.. doi:10.3390/CANCERS15020490
- [7] Wang Y, Wen N, Xiong X, Li B, Lu J. Biliary drainage in malignant biliary obstruction: an umbrella review of randomized controlled trials. *Front Oncol* 2023; 13:.. doi:10.3389/FONC.2023.1235490
- [8] Yamada R, Miwata T, Nakamura Y et al. Advances in Endoscopic Management of Distal Biliary Stricture: Integrating Clinical Evidence into Patient-Specific Decision-Making. *Cancers (Basel)* 2025; 17 (16):.. doi:10.3390/CANCERS17162644
- [9] Lauri G, Archibugi L, Arcidiacono PG et al. Primary drainage of distal malignant biliary obstruction: A comparative network meta-analysis. *Digestive and Liver Disease* 2024; 56 (12): 2004–2010. doi:10.1016/j.dld.2024.08.053

PYP385 Cholecystoenterostomy: A Breakthrough in the Management of Biliary Disease in Patients at Very High Surgical Risk

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DOI 10.1055/s-0046-1821324

Aims Endoscopic ultrasound (EUS)-guided gallbladder drainage using lumen-apposing metal stents (LAMS) has become an important therapeutic option for the management of acute cholecystitis in patients who are not surgical candidates. The aim of our study was to assess the efficacy and safety of creating a cholecystoenteric anastomosis followed by elective stent removal, in order to prevent late adverse events such as stent migration or occlusion in this high-risk population.

Methods This prospective study included all patients with biliary disease who had a contraindication to surgery and were managed with EUS-guided gallbladder drainage. The study began in September 2024 and is currently ongoing. Patients with biliary or pancreatic malignancies were excluded. The protocol consisted of two steps: placement of a 15-mm Axios lumen-apposing metal stent, followed by stent removal two months later. After the second procedure, all patients underwent scheduled follow-up evaluations every three months.

Results A total of 40 patients were included in the study. The mean age was 88.1 years (range 73–99), with a mean Charlson comorbidity index of 5.85. Eighteen patients were receiving anticoagulant therapy, which was systematically discontinued 48 hours before the procedure. Fourteen patients had a history of cholecystitis, including one following percutaneous drainage. Thirty patients presented with acute cholecystitis, associated with pancreatitis in 7 cases and cholangitis in 20 cases. Additionally, 4 patients had isolated pancreatitis and 6 had isolated cholangitis. All patients received antibiotic therapy.

Six patients had a sclerotic-atrophic gallbladder and required intravesicular saline injection using a 19G needle (mean volume: 20 mL) to facilitate drainage. Twenty-two patients had common bile duct stones and underwent ERCP. The mean procedure time was 28.9 minutes (range 11–80). Technical success was achieved in 100 % of cases, and clinical success in 97 %. One patient, an 85-year-old with grade 3 cholecystitis, died during hospitalization. The mean length of stay was 5 days.

Among the included patients, 20 underwent a second procedure with outpatient stent removal (study ongoing; 11 patients still awaiting removal). Complete gallbladder clearance was obtained in 17 patients. Three patients had residual stones: two were removed using a Dormia basket, and one large stone required laser lithotripsy. At the time of stent removal, four patients had duodenal ulcers at the stent contact site, two had stent obstruction due to food debris, and one showed evidence of intravesicular stent migration.

The mean follow-up period was 4.5 months (range 1–12). Three deaths were recorded at 2, 3, and 6 months after the initial procedure, none related to biliary pathology. No long-term complications or recurrent biliary events were observed.

Conclusions According to the preliminary results of our study, cholecystoenteric anastomosis should be considered the procedure of choice for patients at very high surgical risk, given its high technical and clinical success rates, effective gallbladder clearance, and ability to prevent long-term recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

PYP388 Machine Learning versus QNI Score for Predicting Step-Up Therapy After Initial EUS-Guided Drainage of Pancreatic Fluid Collections

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DOI 10.1055/s-0046-1821327

Aims Pancreatic fluid collections (PFCs) are associated with high healthcare utilization and multiple interventions. However, clinicians still lack reliable baseline risk-stratification tools, leading to reactive decision-making rather than proactive risk-adapted care [1]. We therefore developed a machine-learning algorithm to predict step-up therapy requirements at index EUS and compared its performance with established clinical predictors.

Methods Data on EUS-guided drainage of consecutive PFCs performed between 2016 and 2024 across three endoscopy units at Charité Berlin, irrespective of etiology, were retrospectively collected. The primary outcome was need for step-up therapy, defined as endoscopic necrosectomy, percutaneous drainage, or laparoscopic/open surgery performed after the index procedure to achieve clinical success. An extreme gradient boosting (XGBoost) machine learning algorithm was developed and compared with the established QNI score (Quadrant, Necrosis, Infection) to predict need for step-up therapy [2, 3]. The cohort was randomly split into training (70 %) and validation (30 %) sets. Performance was assessed using 10-fold cross-validation, with discrimination quantified by area under the receiver operating characteristic curve. Of 163 evaluated patient-level features, 20 were selected for the final decision-support model based on Gini coefficients, clinical relevance, and practical considerations to preserve predictive performance while minimizing overfitting.

Results Among 674 consecutive patients, 486 were included in the final analysis (mean age 56.1 ± 14.3 years; 68.9 % male). Overall, 199 patients (40.9 %) required step-up therapy, including endoscopic necrosectomy (n = 145; 29.8 %), percutaneous drainage (n = 62; 12.8 %), multigate technique (n = 22; 4.5 %), and laparoscopic or open surgery (n = 35; 7.2 %). Compared with patients managed without step-up therapy, those requiring escalation had significantly larger PFCs (105 ± 46 vs. 67 ± 32 mm; p < 0.001), higher prevalence of > 60 %

necrosis (11.6 % vs. 2.4 %; $p < 0.001$), elevated CRP levels (median 176 mg/L [IQR 111–216] vs. 100 mg/L [IQR 55–173]; $p < 0.001$), increased infection rates (71.3 % vs. 44.3 %; $p = 0.002$), and more organ failure (31.2 % vs. 8.0 %; $p < 0.001$). Patients classified as high-risk by the QNI score ($n = 125$; 25.7 %) were more likely to undergo step-up therapy than low-risk patients (65.6 % vs. 32.4 %; $p < 0.001$). Extent of necrosis was the strongest predictor of step-up therapy (OR 3.9, 95 % CI 2.9–5.3; $p < 0.001$). The XGBoost model showed superior discriminative performance compared to the QNI score (AUC 0.86 vs. 0.77; $p < 0.01$) (► **Table 1**), correctly identifying an additional 12.7 % of patients needing step-up therapy while reducing false-positive predictions by 10.8 %.

► **Table 1**

	XGBoost Model	QNI Score
Discrimination Metrics	Value (95 % CI)	Value (95 % CI)
ROC-AUC	0.86 (0.82–0.89)	0.77 (0.73–0.82)
Accuracy	0.78 (0.75–0.82)	0.73 (0.71–0.75)
Sensitivity	0.79 (0.73–0.84)	0.62 (0.58–0.66)
Specificity	0.80 (0.75–0.83)	0.81 (0.78–0.84)
Top predictive features	Gini	OR (95 % CI); <i>p</i> -value
Necrosis amount [ordinal]	0.133	3.9 (2.9–5.3); $p < 0.0001$
PFC size (mm) [continuous]	0.093	
Gutter extension [categorical]	0.067	
Abdominal quadrants [ordinal]	0.066	2.6 (2.0–3.3); $p < 0.0001$
PFC in corpus [binary]	0.058	
CRP (mg/L) [continuous]	0.049	
Acute kidney injury [binary]	0.044	
Respiratory OF [binary]	0.043	
Infected PFC [binary]	0.035	3.1 (2.1–4.6); $p < 0.0001$

Conclusions The machine learning algorithm demonstrates superior discriminative ability for predicting step-up therapy compared with the QNI score and enhances risk stratification at the index procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Baroud S. et al. Novel classification system for walled-off necrosis: a step toward standardized nomenclature and risk-stratification framework. *Gastrointest Endosc* 2023; 97 (2): p 300–308
- [2] Chen T, Guestrin C. XGBoost: A scalable tree boosting system. In: *Proceedings of the 22nd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD '16)*. 2016; 785–794
- [3] Vanella G. et al. Predicting the need for step-up after EUS-guided drainage of peripancreatic fluid collections, including Quadrant-Necrosis-Infection score validation: a prospective cohort study. *Gastrointest Endosc* 2025; 102 (3): p 362–372 e8

PYP389 Advanced endoscopic techniques for embedded biliary metal stents retrieval: a tertiary referral center retrospective cohort study

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DOI 10.1055/s-0046-1821328

Aims Biliary self-expandable metal stent (SEMS) embedment, defined as incorporation of the stent mesh into the biliary wall or overgrowing tissue that precludes standard removal, is an uncommon but clinically relevant adverse event of biliary stenting. Difficult or “embedded” stent removal is estimated to occur in roughly 1–5 % of biliary SEMS and can lead to cholangitis, bleeding, and the need for complex reinterventions. According to available literature, clinical success of embedded biliary SEMS removal is strongly influenced by stent indwell time, local endoscopic expertise, and stent design, with markedly lower removal rates reported for uncovered and partially covered SEMS compared with fully covered devices. We aimed to describe the endoscopic techniques and outcomes of embedded biliary metal stent retrieval in a tertiary referral center, and to identify baseline and technical factors associated with successful endoscopic removal [1–8].

Methods We performed a retrospective analysis of prospectively collected data on consecutive patients referred between May 2017 and April 2025 for endoscopic treatment of embedded biliary metal stents in a tertiary referral center. Embedded stents were defined as not removable with standard forceps/snare traction and requiring advanced techniques. The primary outcome was complete endoscopic removal of all embedded stents. Secondary outcomes were baseline and technical factors associated with procedural success or failure, assessed applying univariate and multivariate logistic regression models.

Results Fifty-nine patients (61 embedded stents; 77.9 % male; median age 68 years) were included. The underlying indication for index biliary metal stent placement was predominantly benign (over 80 %), mainly post-surgical benign biliary strictures and biliary fistulas, whereas malignant strictures accounted for less than one fifth of cases. Despite this benign case mix, almost half of embedded devices were non-fully covered: most stents were fully covered SEMS (49.1 %), but 30.1 % were uncovered and 15.1 % partially covered SEMS, and three lumen-apposing metal stents were also included, highlighting that uncovered or partially covered SEMS are still used in benign settings where long-term removability is desirable. Advanced techniques at first attempt included multiple coaxial stent-in-stent (31.1 %), loop-and-sheath (previously described only in a single case report – 29.5 %, 61 % with mechanical lithotripter), single stent-in-stent (13.1 %), balloon dilation and argon plasma coagulation. First-attempt success was 50.9 %; a second and third endoscopic procedure were required in 42.6 % and 13.1 % of cases, respectively, yielding an overall clinical success of 85.4 % with a median of 2 procedures per case. Periprocedural and post-procedural adverse events occurred in 29.5 % of procedures, mostly cholangitis and bleeding; most were mild-moderate and managed conservatively, with only one death directly related to unresolved embedment. Longer stent indwell time and the occurrence of peri- or post-procedural adverse events were independently associated with clinical failure (both OR ≈ 2, $p < 0.05$).

Conclusions Endoscopic management of embedded biliary metal stents in a tertiary referral setting achieved high overall clinical success, irrespective of stent type, including uncovered and partially covered devices. Stent indwell time and the occurrence of peri- or post-procedural adverse events were the main independent predictors of clinical failure, underscoring the importance of timely stent retrieval, early referral to expert centers, and careful prevention and management of adverse events. Beyond its initial description in a single case report, the repeated successful use of the loop-and-sheath technique in this series suggests that it represents a valuable addition to the armamentar-

ium for complex embedded biliary SEMS, within a flexible, patient-tailored multimodal strategy rather than a rigid stepwise approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martín Guerrero JM, Ortiz-Moyano C, Serrano-Romero M. «Endoscopic removal of an embedded uncovered biliary self-expandable metal stent with a mechanical lithotripter». *Rev Esp Enferm Dig* 2021; 113 (10): 738–739
- [2] Bernon M, Kloppers C, Lindemann J, Krige JE, Jonas E. «Recalcitrant embedded biliary self-expanding metal stents: a novel technique for endoscopic extraction». *VideoGIE* 2019; 4 (2): 72–75
- [3] Li MK, Sze KK, Tong TY. «Successful retrieval of migrated and embedded fully covered self-expanding metal stent using "snare and lithotripter" technique». *Endoscopy*. 2023; 55 (S 01): E390–E391
- [4] Jain D, Stein A, Hasan MK. «Stepwise Algorithmic Approach to Endoscopic Removal of Biliary Partially Covered and Uncovered SEMS». *Clin Endosc* 2021; 54: 608–612
- [5] Bronswijk M, Reekmans A, van der Merwe S. Balloon Dilation-assisted Extraction of Embedded Self-Expandable Metal Stents (BASE): feasibility and outcomes». *Acta Gastro-Enterol Belg* 2025; 88: 103–108
- [6] De Pretis N, Santaera L, Martinelli L, Conti Bellocchi MC, Bernardoni L, Fino V, Pezua Sanjinez AM, Gasparini E, Gabbrielli A, Frulloni L, Crinó SF. Fully-covered metal stent removal failure in case of non-malignant biliary strictures: Risk factors and resolution technique». *Endosc Int Open* 2025; 5 (13):a26695801
- [7] Dumonceau JM, Kapral C, Aabakken L, Papanikolaou IS, Tringali A, Vanbiervliet G, Beyna T, Dinis-Ribeiro M, Hritz I, Mariani A, Paspatis G, Radaelli F, Lakhtakia S, Veitch AM, van Hooft JE. «ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline». *Endoscopy*. 2020; 52 (2): 127–149
- [8] Dumonceau JM, Tringali A, Blero D, Devière J, Laugier R, Heresbach D, Costamagna G «European Society of Gastrointestinal Endoscopy. Biliary stenting: indications, choice of stents and results: European Society of Gastrointestinal Endoscopy (ESGE) clinical guideline». *Endoscopy*. 2012; 44 (3): 277–98

ePoster

ePosters – Nursing

eP001 Interventions to increase adherence to colorectal cancer screening programs

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Aims To describe interventions that enhance adherence to colorectal cancer screening programs, after mapping the scientific evidence on the fears and emotions experienced by patients undergoing colonoscopy, as well as the associated variables.

Methods To examine which interventions may increase adherence to colonoscopy, a scoping review was conducted according to the Joanna Briggs Institute Protocol, guided by the research question: “What are the fears and emotions associated with undergoing a colonoscopy, and the related variables?” A literature search was carried out in the PubMed, CINAHL, Scopus, and RCAAP databases in June 2025, including articles in Portuguese, English, and Spanish. These findings enabled the identification of targeted interventions and strategies capable of improving patient adherence to colorectal cancer screening programmes.

Results Colonoscopy is considered the gold standard for the diagnosis and treatment of gastrointestinal diseases [1, 2]. It is associated with a significant reduction in CRC mortality and is highly sensitive in detecting tumors, polyps, ulcers, active bleeding, and inflammatory disease [3]. However, achieving widespread adherence to colonoscopy remains a challenge [3], as despite its clinical benefits, it is an uncomfortable procedure in which pain and fear of the unknown generate anxiety and stress in many patients [2, 4]. Studies show that colonoscopy is often perceived negatively by society and commonly viewed as a source of anxiety and fear, which can prevent patients from undergoing the procedure and cause disruptions in the diagnostic and treatment process, contributing to the rejection of CRC screening programs [2]. This premise directly addresses the question: “Anxiety before gastrointestinal endoscopy – is it a significant problem?” [5].

All the circumstances described above justify the need to analyze the frequency and intensity of anxiety caused by colonoscopy, as well as to identify the factors that contribute to this effect and their influence on procedural tolerance⁽¹⁾. Although efforts have been made to improve tolerance through conscious or deep sedation, little attention has been paid to patients' pre-procedural anxiety [1]. According to Cardenal, cited by Olmo-Conesa⁽⁴⁾, undergoing any diagnostic exam such as colonoscopy has emotional consequences for the patient, beginning at the time of scheduling [6] and continuing through the procedure and the delivery of results. It is considered an acute situation that subsides once the triggering stimulus ends [1]. According to the study by Sequeira [7], a moderate level of state anxiety was observed prior to the exam, which significantly decreased after the procedure, with statistical relevance. Reported fears and emotions included concerns about medical complications, diagnosis, and pain. Variables such as information about the procedure, previous experiences, and gender influenced anxiety levels.

Conclusions Living in harmony with technological advancement requires a reinvention of thought, social interaction, empathy, and community, elements that distinguish humans from machines. It is crucial to reflect on empathy as a counterbalance to technology and its role in supporting and complementing the humanization of care.

The dissemination of these results aims to positively influence not only the nursing team but the entire multidisciplinary team involved in clinical endo-

scopic practice. These findings will foster greater awareness among all professionals of what patients experience throughout this process and offer practical applicability in care delivery. They also highlight the need and, above all, the relevance of intensifying and deepening research in such a subjective and vast area, supporting the conditions necessary to transform and improve the foundations and paradigms that underpin digestive endoscopy care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sequeira SR. Qualidade dos cuidados em colonoscopia: ansiedade, dor, conforto e satisfação dos utentes [Internet] [Mestrado]. [Leiria]: Instituto Politécnico de Leiria; 2016. Available from: <http://hdl.handle.net/10400.8/1951>
- [2] Gryz J, Izdebski P. Patient anxiety before invasive diagnostic examinations : coronarography, arteriography, and colonoscopy. *Pol J Radiol [Internet]*. 2005; [cited 2025 Jul 7] 70 (2): 31–36. Available from: <http://archiwum.inforadiologia.pl/download/index/idArt/15804.html>
- [3] Gebbensleben B, Rohde H. Anxiety before gastrointestinal endoscopy – is it a significant problem? *Dtsch med Wochenschr* 2008; 115 (41): 1539–1544. doi:<https://doi.org/10.1055/s-2008-1065188>
- [4] Olmo-Conesa JM, Gómez-Díaz M. La importancia de informar ante la ansiedad y la resiliencia de pacientes que van a ser sometidos a una colonoscopia = The importance of reporting to the anxiety and the resilience of patients will undergo a colonoscopy. *recs* 2019; 10 (1): 42–49. doi:10.20318/revhisto.2019.4553
- [5] Paiji C, Kaye S, Yu AR, Reataza M, Jamal MM, Samarasekera JB. Fears of Having a Colonoscopy: Differences Between Veteran and Non-Veteran Patients: 260. *American Journal of Gastroenterology* 2016; 111: S122–S122. doi:10.14309/00000434-201610001-00260
- [6] Erdal H, Gündoğmuş İ, Sinan Aydın M, Çelik B, Bolu A, Çelebi G, Serdar Sakin Y, Nuri Erçin C, Uygun A, Gülşen M. Is the choice of anesthesia during gastrointestinal endoscopic procedures a result of anxiety? *Arab Journal of Gastroenterology* 2021; 22 (1): 56–60. doi:10.1016/j.ajg.2020.09.006
- [7] Grilo Bensusan I, Herrera Martín P, Aguado Álvarez MV. Prospective study of anxiety in patients undergoing an outpatient colonoscopy. *Rev Esp Enferm Dig* 2016; 108 (12): 765–769. doi:10.17235/reed.2016.4104/2015

eP002 Multidisciplinary approach to treating obesity using endoscopic methods in a tertiary healthcare institution

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DOI 10.1055/s-0046-1821330

Aims Obesity is a chronic metabolic disease characterized by excessive accumulation of adipose tissue in the body. It is associated with more than 200 health complications but the greatest risk factor are cardiovascular diseases. It is assessed by body mass index (BMI) and waist circumference measurement. The approach to treating obesity should be focused on reducing body weight in order to reduce the risk of cardiovascular and metabolic diseases and prevent weight gain. Treatment is primarily focused on changing bad lifestyle habits. Diet should definitely be adjusted and physical activity should be increased. In some cases, this is quite enough to reduce body weight, but for some patients lifestyle changes alone are not enough so pharmacotherapy, behavioral-cognitive approach, endoscopic and surgical treatment methods are combined with it [1–3].

The aim of this paper is to present the treatment procedure for obesity in a tertiary health institution – Clinical Hospital Center Rijeka which is multidisciplinary and to emphasize the newer endoscopic treatment methods that are available.

Methods At the Clinical Hospital Center Rijeka overweight patients report to an endocrinologist on the recommendation of a family doctor who conducts an initial interview with the patient. During the first examination a targeted search is made for the causes of obesity. After taking the patient's history and physical status the diagnostic tests that need to be performed are determined.

Results Motivation is key to treating obesity. When working with patients a sense of trust should be developed, not judgmental and education should be

prioritized which is a fundamental part of treating obesity and treatment begins with it. It is carried out in the Endocrinology Day Hospital over a period of one week and is carried out by nurses specially trained in this area. During the education, the patient is trained to independently create a plan for lifestyle changes, changes in diet and physical activity. In addition to nurses a nutritionist, psychologist and physiotherapist are also involved in the education.

Pharmacotherapy is also useful in treating obesity where the use of medications reduces the feeling of hunger and stimulates satiety which ultimately leads to reduced calorie intake. If we have a patient with morbid obesity or pharmacotherapy alone does not provide satisfactory results a gastroenterologist endoscopist is also involved in the treatment who suggests endoscopic methods of treating obesity. The first method of choice is the placement of intragastric balloon which helps with weight loss by limiting the amount of food that can be eaten and allows for a faster feeling of satiety. A typical loss is about 7 % to 15 % of body weight.

In addition to this method, the endoscopic method of gastric mucosa ablation (GMA) with argon plasma coagulation (APC) is used for the treatment of obesity with which body weight can be further reduced by 13 %. With this method stomach is reduced by ablation of tissue. At the same time, the production of ghrelin so-called hunger hormone is reduced which results in a reduced feeling of hunger.

Conclusions Treatment with these endoscopic methods usually gives very good results. With patient motivation and cooperation it is possible to achieve a weight loss of up to 30 %. Bariatric surgery is a good way to treat people with morbid obesity, with which long-term weight loss can be achieved, but it should only be applied when education and use of pharmacological and endoscopic treatment do not produce the expected results.

Approach to the patient should be individualized and in treatment are involved a multidisciplinary team. A special role is played by nurse educators at the Endocrinology Day Hospital and endoscopic nurses who participate in the preparation, performance and monitoring of patients during endoscopic procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sullivan S, Moore RL, Kroh M. Endoscopic Bariatric Therapy: A Guide to the Intragastric Balloon. *The American Journal of Gastroenterology* 115 (4): p 629 2020
- [2] Štimac D Hrvatske smjernice za liječenje debljine odraslih osoba. *Acta Med Croatica* 78: 2022; 3–18
- [3] Štimac D Hrvatske smjernice za liječenje debljine odraslih osoba. *Acta Med Croatica* 78: 2022; 3–18 2

eP003 The Impact of Deploying Specialized Physicians and Nurses in Rural Areas on the Accessibility and Quality of Health Services (A Case Study from 2024–2025)

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DOI 10.1055/s-0046-1821331

Aims This study aimed to evaluate the impact of introducing a specialized endoscopist and endoscopy nurse into a rural regional hospital in Mongolia on the accessibility, quality, and cost of gastrointestinal endoscopic services. Specific objectives included assessing changes in service availability, procedure volume, cost-effectiveness for patients, and early clinical outcomes following the introduction of the new services in March 2025.

Methods A mixed-methods study was conducted at Kh. Sharav Regional Diagnostic and Treatment Center, Umnugovi Province.

Quantitative component: Procedure volumes for 2024 (before deployment) and January–September 2025 (after deployment) were compared. Cost analyses were performed using patient out-of-pocket expenditures for travel, accommodation, service fees, and additional costs in Ulaanbaatar versus local

service use. Procedure types evaluated included gastroscopy, colonoscopy, bronchoscopy, gastric and colonic polypectomy, hemostasis, esophageal variceal ligation, and foreign-body removal.

Qualitative component: Twenty staff members (12 physicians, 8 nurses) completed a structured satisfaction survey assessing perceived workload changes, usefulness of new services, and overall satisfaction. Additionally, detailed case summaries were reviewed for 20 patients who underwent local therapeutic endoscopic procedures. Ethical approval was obtained at the institutional level, and no identifiable patient data were included.

Results Service accessibility and procedure volume: Introduction of specialized staff resulted in significant expansion of services. Gastroscopy increased from 945 (2024) to 1,315 (2025). Colonoscopy rose from 3 to 117, bronchoscopy from 0 to 17, and several therapeutic procedures (e.g., gastric/colonic polypectomy, hemostasis, variceal ligation) were performed locally for the first time. A total of 37 patients received therapeutic care locally instead of referral to Ulaanbaatar [1–4].

Cost reduction: Local service provision reduced average patient expenditure by 3–8 times depending on the procedure. For example: • *Esophageal variceal ligation*: 1,900,650 MNT locally vs. 6,694,200 MNT in Ulaanbaatar • *Hemostasis for gastric bleeding*: 3,151,500 MNT vs. 7,771,500 MNT • *Foreign-body removal (esophagus/stomach)*: 0 MNT vs. 2,640,000 MNT Total patient cost savings for 37 cases amounted to 22,073,550 MNT.

No patients required referral to Ulaanbaatar for gastrointestinal bleeding management after March 2025. No deaths due to GI hemorrhage were recorded during the study period.

Clinical outcomes: All 20 documented therapeutic cases—including gastric ulcer bleeding managed by clipping, gastric polypectomies, variceal ligation, and foreign-body removals—showed complete recovery with no complications or technical difficulties.

Staff perceptions: All staff (100 %) agreed that the newly introduced endoscopic procedures were beneficial for patients. Overall satisfaction was 100 % (“satisfied” or “very satisfied”). Only 30 % reported increased workload, while 60 % perceived improved capacity.

Conclusions Deploying specialized endoscopy personnel to a rural regional hospital significantly improved service accessibility, enabled provision of advanced diagnostic and therapeutic procedures, and substantially reduced patient costs. The elimination of referrals for endoscopic management of gastrointestinal bleeding and the absence of mortality during the study period demonstrate early clinical benefit. The initiative also contributed to capacity building among local healthcare providers and serves as a scalable model for strengthening specialized services in rural Mongolia. Expanding deployment of specialized professionals has strong potential to enhance equity, quality, and continuity of care in low-resource settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rural surgical and obstetric facility-level outcomes for index procedures: a retrospective cohort study (2016–2021). British Columbia, Canada. PubMed
- [2] Regional and patient-level determinants of endoscopic utilization in rural healthcare: a multi-level analysis. PMC, PubMed
- [3] Upper gastrointestinal endoscopy in rural setting: an experience of a trained General Practitioner in Himalayan region of Nepal. JGPEMN
- [4] “Upper gastrointestinal endoscopy in rural setting: an experience of a trained General Practitioner in Himalayan region of Nepal” jgpepmn.org.np

eP004 Nursing Contributions to the Safety and Efficacy of Rectal Endo-Sponge Therapy – Case Report

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DOI 10.1055/s-0046-1821332

Aims Rectal Endo-Sponge therapy represents an advanced form of endoluminal negative-pressure wound therapy used in the management of anastomotic leaks and presacral abscesses following low anterior resection. By enabling continuous drainage, reducing bacterial burden and stimulating granulation tissue formation, this technique has increasingly become an integral part of postoperative management in colorectal surgery. Despite the central role of the endoscopist, optimal therapeutic outcomes depend heavily on the structured and highly skilled involvement of nursing staff within the endoscopy unit.

Methods This case report presents the successful use of Rectal Endo-Sponge on 71 year old male patient who was admitted for surgical removal of a rectal adenoma, followed by creation of a TT colorectal anastomosis. In the postoperative course, the patient developed rectal bleeding, prompting referral for colonoscopy. Endoscopic evaluation revealed a 2 cm defect of the colorectal wall with communication into a 3 cm cavity. Rectal Endo-Sponge therapy was initiated, and throughout the treatment course the sponge was exchanged nine times, leading to progressive collapse of the cavity and favourable clinical healing.

Results The abstract synthesizes current nurse competencies procedural standards across all procedural stages for Endo-Sponge placement and exchange: pre-procedural assessment of patient and tools, intraprocedural equipment assistance, patient monitoring, and post-procedural care. Nurses play a pivotal role in preparing specialized equipment, verifying patient preparation and ensuring adherence to aseptic protocols. During the procedure, the endoscopy nurse provides operational support—optimizing instrument flow, maintaining visualization conditions, coordinating suction systems and continuously monitoring hemodynamic and respiratory parameters, particularly in sedated patients. Documentation of cavity characteristics, sponge dimensions and applied negative pressure contributes to consistent therapeutic evaluation. Post-procedurally, nursing responsibilities extend to patient education, symptom surveillance and coordination of scheduled sponge exchanges, typically required every 48–72 hours.

Conclusions Rectal Endo-Sponge therapy is a highly effective, minimally invasive strategy for managing complex anastomotic complications. The expertise of endoscopy nurses is indispensable, enhancing procedural efficacy, reducing risk and ensuring high-quality, patient-centered care throughout the entire therapeutic course. Nurses' responsibilities in this procedure, together with effective coordination and collaboration with the endoscopic team, significantly influences the overall safety profile and clinical success of therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP005 Evaluation of patient satisfaction and compliance during digestive endoscopy

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DOI 10.1055/s-0046-1821333

Aims Aim of the study was to evaluate the satisfaction and compliance of patients undergoing endoscopy at the Gastroenterology Clinic of the General Hospital "Konstantopoulou – Patision" regarding adherence to instructions to avoid driving for 24 hours after sedation and the need for assistance following the procedure.

Methods Telephone interviews were conducted 24 hours after endoscopy with outpatients who underwent diagnostic or therapeutic digestive endoscopy at our department as part of their participation in a prospective randomized study. During the interview, patients were asked about their level of satisfaction and their and compliance with instructions regarding abstaining from driving for 24 hours after sedated endoscopy and their need for assistance upon returning to daily activities.

Results All study participants (n = 1300, 100 %) completed the telephone interview. Of these, 709 (54.5 %) were women with a mean age of 62.5 ± 10.3 years. The majority underwent colonoscopy (n = 712, 54.8 %), followed by gastroscopy (n = 298, 22.9 %). Additionally, 671 (51.6 %) subjects underwent digestive endoscopy for the first time. Most participants complied with the given instruction to avoid driving for 24 hours after sedated endoscopy n = 1129 (86.8 %), while only 3/1300 (0.02 %) reported needing assistance from another person afterward. All examinees (100 %) reported feeling very or very safe upon leaving the recovery area, and 99.5 % stated they were very or very satisfied with the examination process.

Conclusions Patient satisfaction with endoscopy in our unit is high. However, a small proportion of patients still fail to comply with the recommendation to avoid driving for 24 hours after sedation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP006 Nurse-Led Identification of High-Risk Patients for Post-ERCP Symptom Burden to Guide Targeted Post-Procedure Nursing Education

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DOI 10.1055/s-0046-1821334

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is frequently associated with transient post-procedural symptoms such as abdominal pain, bloating, nausea, and throat discomfort, which can generate considerable anxiety for patients and families. Little is known about which patients are most likely to experience early post-ERCP symptom burden, and how nursing teams can proactively tailor education and reassurance for these individuals.

Methods We conducted a retrospective observational cohort study of 8,357 ERCP procedures performed between 2010 and 2024 at a tertiary academic centre. Adult patients who developed post-recovery symptom burden (abdominal pain, bloating, nausea, or generalized pain) were identified from recovery and nursing documentation. Patients who experienced in-hospital cardiac arrest or code events, or admitted to the inpatient ward were excluded. This yielded a cohort of 88 symptomatic patients for detailed analysis (► **Table 1**).

► Table 1

	N = 88	P value
Age	58.8 (16.0)	0.026
Sex		0.001
Female	40 (74.1 %)	
Male	14 (25.9 %)	
Comorbidities		
Renal Disease	1 (1.14 %)	0.186
Liver Disease	3 (3.41 %)	0.260
Hypertension	20 (22.7 %)	0.045
Diabetes Mellitus Type 2	13 (14.8 %)	0.241
Congestive Heart Failure	13 (14.8 %)	0.010
Any Malignancy	8 (9.09 %)	0.117
Adverse Events		
Immediate Bleeding	3 (3.45 %)	1.000
Delayed Bleeding	0 (0.00 %)	1.000
Pancreatitis	8 (9.41 %)	<0.001
Post Procedural Perforation	3 (3.53 %)	<0.001
Procedural Characteristics		
Sphincterotomy	35 (47.3 %)	0.031
Pancreatic Duct Cannulation	3 (4.55 %)	0.012
Dilation	27 (35.1 %)	0.031
Stone Extraction	26 (36.1 %)	0.152
Stent Placement or Removal	20 (31.2 %)	0.735

Results Patients exhibiting post-procedural symptoms had a mean age of 58.8 years ($p = 0.026$) and were predominantly female (74.1 %, $p = 0.001$). Significant comorbid predictors included hypertension (22.7 %, $p = 0.045$) and congestive heart failure (14.8 %, $p = 0.010$), indicating a physiologic vulnerability to post-sedation or post-procedural stress. Overall clinical success remained high (85.2 %), with procedural factors associated with increased symptom reporting included sphincterotomy (47.3 %, $p = 0.031$), duct dilation (35.1 %, $p = 0.031$), and pancreatic duct cannulation ($p = 0.012$). Symptomatic patients were overwhelmingly managed under conscious sedation (92 %, $p = 0.001$). Adverse outcomes in this cohort included post-ERCP pancreatitis (9.4 %, $p < 0.001$) and post-procedural perforation (3.5 %, $p < 0.001$), underscoring that early subjective symptoms may reflect evolving complications.

Conclusions Older female patients with cardiovascular comorbidities undergoing more complex therapeutic ERCP appear more likely to experience early post-procedural symptom burden and stress. Embedding a structured, nurse-led education pathway for these patients by normalising expected transient symptoms, clearly explaining red-flag warning signs, and providing tailored written discharge instructions may reduce post-procedure anxiety, unnecessary emergency visits, and overall stress for patients and families, while supporting safer, more patient-centred ERCP care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP007 Novel methods of endoscopic submucosal dissection – case report

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DOI 10.1055/s-0046-1821335

Aims development of biomedical technology has led to an increase in the possibilities of endoscopic treatment of patients with growths in the digestive

tract. Today's techniques pose increasing challenges for the endoscopic team to perform endoscopic procedures for the removal of growths in the safest possible conditions for patients, which will reduce the patient's stay in the hospital and allow faster recovery after the procedure. The endoscopic submucosal dissection method that is available to us today uses a combination of bipolar radiofrequency (RF) cutting and microwave coagulation for hemostasis, making it suitable for various endoscopic procedures. The device consists of a needle for submucosal injection and tissue irrigation, and an insulated body which prevents thermal injuries. Although it seems like a simple technique, it requires teamwork and coordination between the endoscopist and the nurse/technician in order to successfully perform the procedure, given the long duration of the procedure itself [1, 2].

Methods in this abstract we will present case report of endoscopic submucosal dissection technique in 65 years old female patient by new endoscopic device.

Results the patient presented to the gastroenterology clinic on the recommendation of general practitioner due to weight loss, abdominal pain and aversion to certain foods. We performed gastroscopy which was normal, and a colonoscopy was recommended. The colonoscopy revealed a laterally spreading lesion in the rectum approximately 8 centimeters from the anocutaneous border, measuring approximately 40 x 30 millimeters in diameter, LST-G (Paris IIa + Is), predominantly JNET 2a superficial vascular pattern, with a lesser extent JNET 2b. A pelvic magnetic resonance imaging scan was recommended to assess invasion of the rectal wall and surrounding structures, where it was determined that there was a possible shallow infiltration of the muscular layer of the wall without penetration into the serosa. By decision of the council consisting of a gastroenterologist, digestive surgeon, oncologist, pathologist and radiologist, an endoscopic submucosal dissection was performed using a *Speed boat knife*. The procedure lasted 4.5 hours. It proceeded without complications. Two endoscopic clips were implemented in the distal rectum because there was a lesion of the muscle layer. Visible blood vessels were coagulated and a preventive hemostatic clip was placed on lumen of one blood vessel. The resected area was removed with forceps and stretched on cork. The dimensions were 47 x 35 mm. The patient was admitted to the hospital for observation and was discharged home the next day with the recommendation of rest and a lighter diet. Six months after the procedure, a control rectoscopy was performed, which showed a neat scar without residue as well as a neat vascular drawing under WLE and NBI. It was recommended endoscopic follow-up in one year.

Conclusions during the procedure the coordination of the endoscopist and the nurse/technician stands out and is necessary for the success of the procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Saunders BP, Tsiamoulos ZP, Baurikas L, Sibbons PD, Hancock CP. The "Speedboat": a New Multi-Modality Instrument for Endoscopic Resection in the Gastrointestinal Tract. *GIE Volume 77: Issue 5 Supplement AB1–AB612*
- [2] Nabi Z, Reddy DN. New Kid on the Block: "Speedboat". *Digest Endosc* 2022; 13: 89–95

ePosters 01

eP008V Cholangioscopy Revealing Extensive Macronodular Recurrence of Intraductal Papillary Neoplasm of the Bile Duct After Left Hepatectomy: A Case Report

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DOI 10.1055/s-0046-1821336

Abstract Text

We present a 65-year-old woman with prior left hepatectomy for Intraductal Papillary Neoplasm of the Bile Duct (IPNB), who developed recurrent febrile cholangitis one year later. ERCP revealed an elongated intraductal lesion involving the right hepatic duct and mid-common bile duct. Cholangioscopy was performed for direct visualization and targeted biopsies, showing a papillary lesion extending through the right hepatic duct, common hepatic duct, and upper mid-common bile duct, with a macroscopically visible obstructive nodule. Histology confirmed recurrence of IPNB with high-grade dysplasia. This case highlights the role of cholangioscopy in mapping complex post-hepatectomy biliary lesions, allowing direct visualization, precise tissue sampling, and guiding further therapeutic decisions. Cholangioscopy is increasingly essential in evaluating suspected biliary neoplasms, particularly after prior surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8f26c13d-bd58-4700-8540-4f0816b7ee7d/Uploads/19978_Cholangioscopy_Revealing%20Extensive%20and%20Macronodular%20Recurrence%20....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP009 An innovative endoscopic treatment of difficult collections of walled-off pancreatic necrosis using an extraperitoneal approach.

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DOI 10.1055/s-0046-1821337

Aims In recent decades, constant development of minimally invasive techniques for the treatment of the consequences of acute necrotizing pancreatitis can be observed. The choice of access to the necrotic collection should mainly depend on the location of necrotic changes and experience of the medical center. Endoscopic transmural drainage of extensive necrotic collections may require the use of an additional route of access to the necrosis. In this article, an attempt was made to clarify the role of percutaneous endoscopic necrosectomy (PEN) in the interventional treatment of pancreatic necrosis [1–40].

Methods 513 consecutive patients with symptomatic walled-off pancreatic and peripancreatic necrosis treated in the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń, Poland between 2018 and 2025 were included. The analyzed patients were treated with using the novel method of endoscopic percutaneous necrosectomy, in which percutaneous access to the necrotic collection was achieved with use of by retroperitoneal route; consequently, the access was then widened, and a self-expanding metal stent was placed percutaneously, which allowed to introduce the endoscope percutaneously into the necrotic area and to perform endoscopic necrosectomy.

Results In 39/513 (7.60%) patients with symptomatic walled-off pancreatic and peripancreatic necrosis an, additional percutaneous drainage was performed during the endotherapy. Within this group, In 9/39 (23.07%) patients (2 females and 7 males; average age 46.72 [31–65] years) were qualified to percutaneous endoscopic necrosectomy. The average size of the necrotic collection was 25.96 (15.24–32.5) cm. An active percutaneous drainage during transmural endoscopic drainage lasted was continued for 15 (11–31) days. The average number of procedures of percutaneous endoscopic necrosectomy procedures was 3.12 (1–7). Complications of treatment were stated observed in 2/9 (22%) patients. Clinical success was achieved acknowledged in 8/9 (88.8%) patients. Long-term success was stated achieved in 8/9 (88.8%) patients.

Conclusions Percutaneous endoscopic necrosectomy during in the course of transmural endoscopic drainage of walled-off pancreatic and peripancreatic necrosis is an effective method of minimally invasive treatment, especially in cases of spreading necrotic changes spreading within the pelvic area.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zheng X, Li L, Li J et al. Risk factors for bleeding in patients with acute necrotizing pancreatitis undergoing endoscopic necrosectomy. *HPB (Oxford)* 2021; 23 (12): 1856–1864. doi:10.1016/j.hpb.2021.04.024
- [2] Oshiro K, Hara K, Ogata T et al. Percutaneous endoscopic necrosectomy for extensive walled-off necrosis using two endoscopes simultaneously: a report of two cases. *Clin J Gastroenterol* 2025. doi:10.1007/s12328-025-02179-y
- [3] Li DL, Zhang H, Lv J et al. Percutaneous endoscopic necrosectomy with the assistance of implanted stent to manage walled-off necrosis: first clinical experience. *Endoscopy* 2024; 56 (S01): E162–E163. doi:10.1055/a-2248-0376
- [4] Feng L, Guo J, Wang S et al. Endoscopic transmural drainage and necrosectomy in acute necrotizing pancreatitis: A review. *J Transl Intern Med* 2021; 9 (3): 168–176. doi:10.2478/jtim-2021-0031
- [5] Trikudanathan G, Hashmi H, Dirweesh A et al. Rendezvous transgastric and percutaneous sinus tract endoscopy (STE) for debridement of necrotic collections with deep retroperitoneal extension: a case series. *Endosc Int Open* 2020; 8 (5): E668–E672. doi:10.1055/a-1134-4786
- [6] Carter CR, McKay CJ, Imrie CW. Percutaneous necrosectomy and sinus tract endoscopy in the management of infected pancreatic necrosis: an initial experience. *Ann Surg* 2000; 232 (2): 175–80. doi:10.1097/00000658-200008000-00004
- [7] Binda C, Sbrancia M, La Marca M et al. EUS-guided drainage using lumen apposing metal stent and percutaneous endoscopic necrosectomy as dual approach for the management of complex walled-off necrosis: a case report and a review of the literature. *World J Emerg Surg* 2021; 16 (1): 28. doi:10.1186/s13017-021-00367-y
- [8] Gjeorgjievski M, Bhurwal A, Chouthai AA et al. Percutaneous endoscopic necrosectomy (PEN) for treatment of necrotizing pancreatitis: a systematic review and meta-analysis. *Endosc Int Open* 2023; 11 (3): E258–E267. doi:10.1055/a-1935-4738
- [9] Binda C, Perini B, Coluccio C et al. Metal stent and percutaneous endoscopic necrosectomy as dual approach for the management of complex walled-off pancreatic necrosis. *Minerva Surg* 2024; 79 (2): 183–196. doi:10.23736/S2724-5691.23.10132-8
- [10] Binda C, Perini B, Coluccio C et al. Metal stent and percutaneous endoscopic necrosectomy as dual approach for the management of complex walled-off pancreatic necrosis. *Minerva Surg* 2024; 79 (2): 183–196. doi:10.23736/S2724-5691.23.10132-8
- [11] Vyawahare MA, Gulghane S, Titarmare R et al. Percutaneous direct endoscopic pancreatic necrosectomy. *World J Gastrointest Surg* 2022; 14 (8): 731–742. doi:10.4240/wjgs.v14.i8.731
- [12] Saumoy M, Kumta NA, Tyberg A et al. Transcutaneous Endoscopic Necrosectomy for Walled-off Pancreatic Necrosis in the Paracolic Gutter. *J Clin Gastroenterol* 2018; 52 (5): 458–463. doi:10.1097/MCG.0000000000000895
- [13] Ramesh S, Verma Y, Perera Molligoda Arachchige AS. Early vs. late percutaneous catheter drainage of acute necrotic collections in patients with necrotizing pancreatitis. *Abdom Radiol (NY)*. 2023; 48 (8): 2759. doi:10.1007/s00261-023-03950-w
- [14] Jagielski M, Piątkowski J, Jackowski M. Early endoscopic treatment of symptomatic pancreatic necrotic collections. *Sci Rep* 2022; 12 (1): 308. doi:10.1038/s41598-021-03924-2
- [15] Bommam S, Sanders D, Coy D et al. Safety and clinical outcomes of early dual modality drainage (<28 days) compared to later drainage of pancreatic necrotic fluid collections: a propensity score-matched study. *Surg Endosc* 2023; 37 (2): 902–911. doi:10.1007/s00464-022-09561-8
- [16] Ross AS, Irani S, Gan SI et al. Dual-modality drainage of infected and symptomatic walled-off pancreatic necrosis: long-term clinical outcomes. *Gastrointest Endosc* 2014; 79 (6): 929–35. doi:10.1016/j.gie.2013.10.014
- [17] Gluck M, Ross A, Irani S et al. Dual modality drainage for symptomatic walled-off pancreatic necrosis reduces length of hospitalization, radiological procedures, and number of endoscopies compared to standard percutane-

- ous drainage. *J Gastrointest Surg*. 2012; 16 (2): 248–56. discussion 256–7. doi:10.1007/s11605-011-1759-4
- [18] Mukai S, Sofuni A, Tsuchiya T et al. Endoscopic Step-up Approach for Walled-off Necrosis After Acute Pancreatitis. *DEN Open* 2025; 6 (1): e70188. doi: 10.1002/deo2.70188
- [19] Büchler MW, Gloor B, Müller CA et al. Acute necrotizing pancreatitis: treatment strategy according to the status of infection. *Ann Surg* 2000; 232 (5): 619–26. doi:10.1097/00000658-200011000-00001
- [20] Jain S, Mahapatra SJ, Gupta S et al. Infected Pancreatic Necrosis due to Multidrug-Resistant Organisms and Persistent Organ failure Predict Mortality in Acute Pancreatitis. *Clin Transl Gastroenterol* 2018; 9 (10): 190. doi:10.1038/s41424-018-0056-x
- [21] Leonard-Murali S, Lezotte J, Kalu R et al. Necrotizing pancreatitis: A review for the acute care surgeon. *Am J Surg* 2021; 221 (5): 927–934. doi:10.1016/j.amjsurg.2020.08.027
- [22] Jagielski M, Chwarscianek A, Piątkowski J, Jackowski M. Percutaneous Endoscopic Necrosectomy-A Review of the Literature. *J Clin Med* 2022; 11 (14): 3932. doi:10.3390/jcm11143932
- [23] Valentin C, Le Cosquer G, Tuyeras G et al. Step-up approach for the treatment of infected necrotising pancreatitis: real life data from a single-centre experience with long-term follow-up. *BMC Gastroenterol* 2024; 24: 213. doi:10.1186/s12876-024-03289-6
- [24] Bang JY, Lakhtakia S, Thakkar S et al. Upfront endoscopic necrosectomy or step-up endoscopic approach for infected necrotising pancreatitis (DES-TIN): a single-blinded, multicentre, randomised trial. *Lancet Gastroenterol Hepatol* 2024; 9 (1): 22–33. doi:10.1016/S2468-1253(23)00331-X
- [25] Szeliga J, Jackowski M. Minimally invasive procedures in severe acute pancreatitis treatment – assessment of benefits and possibilities of use. *Wideochir Inne Tech Maloinwazyjne* 2014; 9 (2): 170–8. doi:10.5114/wiitm.2014.41628
- [26] Horvath K, Freeny P, Escallon J et al. Safety and efficacy of video-assisted retroperitoneal debridement for infected pancreatic collections: a multicenter, prospective, single-arm phase 2 study. *Arch Surg* 2010; 145 (9): 817–825. doi:10.1001/archsurg.2010.178
- [27] van Santvoort HC, Besselink MG, Horvath KD et al. Videoscopic assisted retroperitoneal debridement in infected necrotizing pancreatitis. *HPB (Oxford)* 2007; 9 (2): 156–9. doi:10.1080/13651820701225688
- [28] Goenka MK, Goenka U, Mujoo MY et al. Pancreatic Necrosectomy through Sinus Tract Endoscopy. *Clin Endosc* 2018; 51 (3): 279–284. doi:10.5946/ce.2017.066
- [29] Carter CR, McKay CJ, Imrie CW. Percutaneous necrosectomy and sinus tract endoscopy in the management of infected pancreatic necrosis: an initial experience. *Ann Surg* 2000; 232 (2): 175–80. doi:10.1097/00000658-200008000-00004
- [30] Horvath K, Freeny P, Escallon J et al. Safety and efficacy of video-assisted retroperitoneal debridement for infected pancreatic collections: a multicenter, prospective, single-arm phase 2 study. *Arch Surg* 2010; 145 (9): 817–25. doi:10.1001/archsurg.2010.178
- [31] Wu CC, Martin DT, Bauman BD et al. Video-assisted retroperitoneal debridement for infected pancreatic necrosis: A single center series. *Int J Surg Case Rep* 2022; 95: 107254. doi:10.1016/j.ijscr.2022.107254
- [32] Puri R, Thandassery RB, Alfadda AA, Kaabi SA. Endoscopic ultrasound guided drainage of pancreatic fluid collections: Assessment of the procedure, technical details and review of the literature. *World J Gastrointest Endosc* 2015; 7 (4): 354–63. doi:10.4253/wjge.v7.i4.354
- [33] Jagielski M, Jackowski M. The Role of Lumen-Apposing Metal Stents in Transmural Endoscopic Drainage of Postinflammatory Pancreatic and Peripancreatic Fluid Collections. *Gastroenterol Res Pract* 2021; 2021:4351151. doi:10.1155/2021/4351151
- [34] Mohamadnejad M, Anushiravani A, Kasaeian A et al. Endoscopic or surgical treatment for necrotizing pancreatitis: Comprehensive systematic review and meta-analysis. *Endosc Int Open* 2022; 10 (4): E420–E428. doi:10.1055/a-1783-9229
- [35] Bang JY, Wilcox CM, Arnoletti JP, Varadarajulu S. Superiority of endoscopic interventions over minimally invasive surgery for infected necrotizing pancreatitis: meta-analysis of randomized trials. *Dig Endosc* 2020; 32 (3): 298–308. doi: 10.1111/den.13470

[36] Yang Y, Zhang Y, Wen S et al. The optimal timing and intervention to reduce mortality for necrotizing pancreatitis: a systematic review and network meta-analysis. *World J Emerg Surg* 2023; 18: 9. doi:10.1186/s13017-023-00479-7

[37] van Santvoort HC, Besselink MG, Bakker OJ et al. A step-up approach or open necrosectomy for necrotizing pancreatitis. *N Engl J Med* 2010; 362 (16): 1491–502. doi:10.1056/NEJMoa0908821

[38] van Brunschot S, van Grinsven J, van Santvoort HC et al. Endoscopic or surgical step-up approach for infected necrotising pancreatitis: a multicentre randomised trial. *Lancet*. 2018; 391 (10115): 51–58. doi:10.1016/S0140-6736(17)32404-2

[39] Copelin E, Widmer J. Management of severe acute pancreatitis in 2019. *Transl Gastroenterol Hepatol* 2022; 7: 16. doi:10.21037/tgh-2020-08

[40] Werge M, Novovic S, Schmidt PN, Gluud LL. Infection increases mortality in necrotizing pancreatitis: A systematic review and meta-analysis. *Pancreatol* 2016; 16 (5): 698–707. doi:10.1016/j.pan.2016.07.004

eP010 Assessment of internist competency for Upper- and Lower-GI Endoscopy: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821338

Aims Endoscopy competency—technical, cognitive, and integrative—has well-established metrics for gastroenterology trainees, but the evidence base specifically addressing competency among internists (internal-medicine trained physicians who perform endoscopy) is scattered. The aim of this systematic review and meta-analysis is to synthesize the literature on internist competency for upper GI endoscopy (EGD) and lower GI endoscopy (colonoscopy), evaluate assessment tools and performance benchmarks, and identify knowledge gaps.

Methods We performed a systematic search of PubMed/Medline, Embase, Scopus and Web of Science (inferred search window: inception–May 2025) for studies reporting objective competency outcomes (e.g., cecal intubation rate [CIR], adenoma detection rate [ADR], complication rates, validated observation tools such as ACE, DOPS, GAGES) and/or validated assessment scores for endoscopists trained in internal medicine. We included observational studies, training evaluations, and trials that reported outcomes for internists (alone or compared to other specialties). Risk of bias was assessed using standard tools for observational studies. Where comparable numeric outcomes were reported, random-effects meta-analysis was planned [1–6].

Results High-quality validated assessment tools exist (ASGE's ACE for colonoscopy/EGD; other tools include DOPS, GAGES and several direct-observation tools). Competency frameworks emphasize objective metrics (CIR, ADR, withdrawal time, procedure time) and structured observation with feedback. For colonoscopy, professional guidance indicates ADR benchmarks ($\geq 25\%$ overall screening ADR) and CIR targets ($> 90\%$) as key quality indicators. Training literature reports minimum procedural volumes and structured assessment before declaring competence (for colonoscopy, major societies have suggested thresholds and objective assessment tools rather than sole procedure counts). However, direct comparative evidence specifically isolating internists (vs GI specialists or surgeons) is limited, heterogeneous, and often confounded by setting and case-mix. Where internists are included in multidisciplinary cohorts, overall performance (CIR, ADR when reported) is generally within published quality thresholds when structured training, supervision, and assessment are applied. Assessment-tool validation studies show acceptable validity evidence for several tools but highlight variable interrater reliability and limited data specifically in internal-medicine populations.

Conclusions Internists can achieve recommended endoscopy competency metrics when training follows accepted curricula, uses validated assessment tools (ACE/DOPS/GAGES), and measures quality indicators (ADR, CIR). High-quality, specialty-stratified studies are lacking—future research should

prospectively compare internist vs GI-fellow training outcomes using standard assessment tools and report core quality metrics (ADR, CIR, complication rates, and validated global skills scores).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ASGE. Assessment of Competency in Endoscopy (ACE) — evaluation tools for colonoscopy and EGD (ACE). ASGE white paper / tools.
- [2] Siau K et al. JAG consensus statements for training and certification in endoscopy. 2023; (Joint Advisory Group recommendations emphasize structured assessment and quality metrics).
- [3] Han S. Achieving Competence in Endoscopy. 2019; editorial—discussion of thresholds and objective assessment).
- [4] Systematic review: Colonoscopy competence assessment tools — validity evidence (2021 review) — assessed DOPS/ACE/GAGES and other tools' evidence.
- [5] Song YM et al. 2024; Analysis of adenoma detection rate—summary of ADR benchmarks (ASGE recommended screening ADR ≥ 25 %).
- [6] Wani S. et al. 2025; Development of ASGE endoscopy training initiatives (recent discussions on competency frameworks and prerequisites).

eP011 Mimicry in the Bile Ducts: Sarcoidosis Presenting as Sclerosing Cholangitis

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DOI 10.1055/s-0046-1821339

Abstract Text

Sarcoidosis-induced sclerosing cholangitis is an exceptionally rare manifestation of multisystem sarcoidosis, often mimicking primary sclerosing cholangitis (PSC). Hepatic involvement occurs in 50–70 % of patients, though only 10–15 % develop symptoms. Biliary tract involvement is exceedingly uncommon, with fewer than 30 cases reported. A 28-year-old female presented with insidious cholestatic symptoms progressive pruritus, dark urine, and 10 kg weight loss over six months. Laboratory evaluation revealed markedly elevated alkaline phosphatase (1143 U/L) and γ -glutamyl transferase (757 U/L), with total bilirubin 3.8 mg/dL and direct 2.0 mg/dL. Mild normocytic anemia was present. The pattern reflected a cholestatic injury with an ALP-to-ALT ratio of 15:1. Ultrasound demonstrated proximal common bile duct stricturing with intrahepatic biliary dilatation. MRCP showed multifocal biliary strictures with loss of flow enhancement and splenic lesions. PET-CT revealed hypermetabolic lymphadenopathy (cervical, hilar, abdominal), pulmonary ground-glass opacities, and splenic involvement—suggestive of multisystem granulomatous disease. Histopathology from splenic FNAC and cervical lymph node biopsy revealed non-caseating granulomas with multinucleated giant cells, no necrosis. Serum ACE levels were markedly elevated, supporting sarcoidosis. The collective findings confirmed **sarcoidosis-induced secondary sclerosing cholangitis** after exclusion of infectious and autoimmune causes. Systemic corticosteroid therapy was initiated, resulting in rapid improvement: bilirubin reduced to 1.3 mg/dL, ALP to 471 U/L, with symptomatic relief and partial resolution of biliary strictures on follow-up MRCP. Pathophysiologically, granulomatous infiltration of portal tracts causes inflammatory bile duct stricturing. Unlike PSC, these lesions are potentially reversible with immunosuppression. Diagnostic clues favoring sarcoidosis include multisystem involvement, elevated ACE, absence of p-ANCA/AMA, and steroid responsiveness.

Conclusion Sarcoidosis-induced sclerosing cholangitis, though rare, is a treatable cause of cholestatic liver disease. Comprehensive evaluation for systemic sarcoidosis should be performed in all patients with atypical sclerosing cholangitis. Prompt corticosteroid therapy can yield substantial clinical, biochemical, and radiological improvement.

Key Messages Evaluate for extrahepatic granulomatous disease in sclerosing cholangitis. Elevated ACE and multisystem involvement suggest sarcoidosis.

Exclude infectious and autoimmune causes before diagnosing PSC. Early immunosuppressive therapy offers favorable, reversible outcomes [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Chen Y, Ciobanu C, Mohrmann L. Hepatic sarcoidosis resembling primary sclerosing cholangitis. *BMJ Case Reports* CP 2021; 14 (9):e243492
- [2] Blich M, Edoute Y. Clinical manifestations of sarcoid liver disease. *Journal of gastroenterology and hepatology* 2004; 19 (7): 732–7
- [3] Alsayid M, Taftaf A, Harmouch KM, Alabkaa A, Pappas SG, Singh A. Sarcoidosis of the Bile Duct. *ACG Case Reports Journal*. 2023; 10 (1): e00964

eP012 Cholangioscopy Revealing Extensive Macronodular Recurrence of Intraductal Papillary Neoplasm of the Bile Duct After Left Hepatectomy, A Case Report

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DOI 10.1055/s-0046-1821340

Abstract Text

Intraductal Papillary Neoplasm of the Bile Duct (IPNB) is a rare biliary tumor with malignant potential. Recurrence may occur as extensive intraductal lesions after hepatectomy.

A 65-year-old woman with prior left hepatectomy presented one year later with recurrent cholangitis. Biological tests showed cholestasis. ERCP revealed an elongated intraductal defect in the right hepatic duct and mid-common bile duct. Cholangioscopy showed a continuous, macronodular papillary lesion with an obstructive nodule. Targeted biopsies confirmed high-grade dysplasia.

This case highlights cholangioscopy's role in post-surgical biliary neoplasms, allowing accurate lesion mapping, differentiation from postoperative changes, and safe guidance of management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP013 Intraductal papillary neoplasm of the bile duct in a patient with familial adenomatous polyposis: expanding the extracolonic spectrum

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DOI 10.1055/s-0046-1821341

Abstract Text

Familial adenomatous polyposis (FAP) is associated with extracolonic manifestations such as duodenal and ampullary neoplastic lesions, but biliary tract tumours have rarely been described. We present a unique case of intraductal papillary neoplasm of the bile duct (IPNB) in a patient with FAP, supported by molecular confirmation of APC-driven tumorigenesis.

A 57-year-old female with a pathogenic germline APC variant (exon 15 c.1960C>T, p.Q654X) and prior pancreas-preserving duodenectomy presented with acute cholangitis. MRCP and ERCP revealed intraductal masses causing intra- and extrahepatic bile duct dilatation. Cholangioscopy showed villous mucosal lesions rather than mobile stones or debris. Targeted biopsies demonstrated tubulovillous adenomas with low-grade dysplasia. Following multidisciplinary discussion, the patient underwent liver transplantation combined with a Whipple procedure with curative intent. Surgical pathology confirmed IPNB with focal high-grade dysplasia, as well as a synchronous intraductal papillary mucinous neoplasm of the pancreas with low-grade dysplasia. Molecular

analysis of the biliary lesion demonstrated a second somatic APC pathogenic variant, providing evidence for a two-hit carcinogenic mechanism similar to colorectal and duodenal FAP-associated neoplasms. Six months post-operatively, the patient remains clinically well. This case highlights IPN-B as a potential, under-recognized extracolonic manifestation of FAP. Awareness of this rare manifestation may aid timely recognition in FAP patients presenting with unexplained cholangitis.

Conflicts of Interest Evlien Dekker: Honoraria for consultancy from Olympus, Fujifilm, Ambu, InterVenn, Norgine and Exact Sciences. Speakers' fees from Olympus, Norgine, IPSEN/Mayoly, FujiFilm, Steris and Pentax. Endoscopic equipment on loan of FujiFilm.

eP014 Assessment of bowel preparation quality and predictors of inadequate bowel preparation for colonoscopy in Rwanda: a cross-sectional study

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DOI 10.1055/s-0046-1821342

Aims General objective

To assess the overall quality of bowel preparation in patients undergoing colonoscopy at Tertiary level Hospitals in Rwanda.

Specific objectives

- To determine the proportion of inadequate bowel preparation in patients undergoing colonoscopy.
- To identify factors associated with inadequate bowel preparation in the Rwandan population.

Methods Study design

This was a multi-center cross-sectional study

Study Site

The study was conducted at four tertiary level hospitals in Rwanda namely Kigali University Teaching Hospital, Butare University Teaching Hospital, Rwanda Military Hospital and King Faisal Hospital.

Study Population and duration

The study was conducted in adult population (age ≥ 18 years)

The study was conducted from August, 2023 to August, 2024

Inclusion criteria

Referred patient in endoscopy unit for colonoscopy

Able to provide informed consent

Exclusion criteria

Age less than 18 years old

Patients requiring urgent colonoscopy

Data collection process and analysis

Demographics, clinical characteristics and information related to the procedure were collected

Collected data were entered in Epidata version 3.1 and exported to Stata version 13 for statistical analysis

Results We enrolled 429 participants. The mean age was 50 ± 15.7 years and 54.1 % were male. Inadequate bowel preparation (total Boston Bowel Preparation Scale <6) was observed in 24.9% of cases. The most common indications for colonoscopy was constipation (48.3 %), abdominal pain (27.5 %) and lower gastrointestinal bleeding (23.5 %). With regards to colonoscopy findings, normal results were observed in 34 % of cases, hemorrhoids were detected in 16.5 % of patients, while polyps were found in 16.3 %. On multivariate analysis, advanced age (> 65 years), lower levels of education, inpatient status, constipation and incomplete dosage of purgative solution were predictors of inadequate bowel preparation [1–3].

Conclusions The inadequate bowel preparation rate was 24.9 %. Risk factors for inadequate bowel preparation included chronic constipation, elderly age, low educational attainment, incomplete dosage of purgative agents and inpatients status. Our findings suggest that an individualized approach is required for patients with risk factors of inadequate bowel preparation, including patient comprehensive educational program about bowel preparation before colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Romero R.V "Factors influencing quality of bowel preparation for colonoscopy," World J. Gastrointest. Endosc. vol. 5 (no. 2): p 39 2013
- [2] Guo X. et al. "Enhanced instructions improve the quality of bowel preparation for colonoscopy: a meta-analysis of randomized controlled trials," Gastrointest. Endosc. vol. 85 (no. 1): pp 90–97.e6 2017
- [3] Feng L. et al. "Risk factors for inadequate bowel preparation before colonoscopy: A meta-analysis," J. Evid. Based. Med. vol. 17 (no. 2): pp. 341–350 2024

eP015 Is it worth performing a duodenal biopsies during gastroscopy in patients with bloating to exclude coeliac disease?

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DOI 10.1055/s-0046-1821343

Aims Coeliac disease is a long-term autoimmune disorder affecting the small intestine. Patients develop intolerance to gluten. Symptoms of Coeliac disease can range from mild to severe and be intermittent. Common symptoms include diarrhoea, abdominal pain, bloating, dyspepsia, along with fatigue, weight loss and a rash to name a few. It may also present with vitamin deficiencies and osteoporosis. Coeliac antibody testing along with biopsy of the duodenum at endoscopy are the standard ways to confirm a diagnosis of coeliac disease. Patients attending for upper gastrointestinal with symptoms of bloating as an indication often have a duodenal biopsy to exclude coeliac disease.

We aimed to assess the findings at duodenal biopsy on patient endoscoped with the indication of abdominal bloating to assess presence of coeliac disease

Methods A single centre, retrospective analysis 100 consecutive patients with bloating as an indication for gastroscopy from April 2024 at a hospital in North London was undertaken. A review of whether duodenal biopsies and its findings were scrutinized with data collected using the Medilogic endoscopy reporting tool, and the electronic patients record.

Results 60 of 100 patients with indication of bloating having a gastroscopy had duodenal biopsies performed. 2/60 (3 %) had evidence of coeliac disease on histology. One of the patients had a positive tissue transglutaminase antibody as an indication for duodenal biopsy. The second patient had anaemia with bloating as an indication to biopsy the duodenum. 58/60 (97 %) patients with bloating as an indication of duodenal biopsies had no evidence of coeliac disease.

Conclusions From this study we do not advocate routine duodenal biopsy at gastroscopy for the sole indication of bloating unless accompanied by anaemia or a positive TTG antibody. This will help reduce cost per endoscopic procedure along with making the procedure more 'greener'.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP017 CAP Polyposis: A case report

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DOI 10.1055/s-0046-1821344

Introduction: Cap polyposis is a rare benign inflammatory condition characterized by inflammatory polyps covered with a fibrinopurulent exudate. It is more commonly observed in women and the elderly, although it can present

at any age. The disease typically affects the rectum and sigmoid colon. The most frequent symptoms include mucous diarrhea and rectal bleeding. It has been associated with mucosal prolapse due to altered intestinal motility, *Helicobacter pylori* infection, and even intestinal dysbiosis [1–4].

Endoscopy A 46-year-old male with no relevant personal or family medical history presented with altered bowel habits, characterized by increased stool frequency, decreased consistency, and the presence of mucus and blood, along with tenesmus and urgency. *H. pylori* testing was negative. Colonoscopy revealed numerous sessile and pedunculated polyps with an inflammatory appearance distributed throughout the colon, predominantly in the sigmoid and rectum. Most polyps were covered at their apex by a fibrinopurulent exudate. The colonic mucosa adjacent to the polyps appeared normal. Multiple biopsies were taken, confirming inflammatory polyps. A first therapeutic colonoscopy was performed, during which multiple polyps consistent with cap polyps were resected. Additional sessions were scheduled to complete polyp resection. Furthermore, a molecular study was performed using next-generation sequencing (NGS) with a multigene panel with negative results.

Conclusions The clinical course of cap polyposis remains unclear. The need for and timing of colonoscopy should be individualized based on the number of polyps and symptom severity. Initial treatment should be conservative, focusing on resolving constipation and eradicating *H. pylori*. In cases with persistent symptoms, endoscopic resection of the lesions should be considered.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Monsalve Alonso S, Miranda García P, Santander Vaquero C. Endoscopic mucosal resection for cap poliposis treatment. *Rev Esp Enferm Dig* 2020; 112 (2): 155. doi:10.17235/reed.2020.6537/2019
- [2] Ng KH, Mathur P, Kumarasinghe MP, Eu KW, Seow-Choen F. Cap polyposis: further experience and review. *Dis Colon Rectum* 2004; 47 (7): 1208–1215. doi:10.1007/s10350-004-0561-8
- [3] Domingues Â, Araújo R, Dias N, Silva A. Cap Polyposis-A Rare Cause of Rectal Bleeding in a Young Woman. *ACG Case Rep J* 2024; 11 (7): e01423. doi:10.14309/crj.0000000000001423
- [4] Khadka T, Giri GK, Sherpa P, Shrestha N, Poudyal S. Cap Polyposis: A Case Report. *JNMA J Nepal Med Assoc* 2023; 61 (262): 555–558. doi:10.31729/jnma.8177

eP018 When it looks like cancer... but isn't. A case report

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DOI 10.1055/s-0046-1821345

Abstract Text

Lymphogranuloma venereum (LGV) is a sexually transmitted infection caused by *Chlamydia trachomatis* serotypes L1–L3. Its incidence has been increasing in recent years, particularly among men who have sex with men with concomitant HIV infection, often associated with high-risk practices such as chemsex. Clinical presentation frequently involves proctitis and can mimic neoplastic disease, leading to diagnostic challenges [1, 2].

We report the case of a 45-year-old HIV-positive male on antiretroviral therapy with undetectable viral load and CD4 count of 270. He presented with a 20-day history of diffuse abdominal pain, predominantly in the left hemiabdomen, hyporexia, abrupt constipation, 5 kg weight loss, and self-limiting rectal bleeding. Abdominopelvic CT revealed heterogeneous rectal wall thickening highly suggestive of malignancy. Colonoscopy showed findings compatible with infectious proctitis, without suspicious neoplastic lesions. Biopsies and microbiological studies were obtained, and PCR testing confirmed *C. trachomatis* serotype L2b, consistent with LGV.

In conclusion, LGV is an underdiagnosed re-emerging infection whose presentation may simulate malignancy. Clinician awareness, early colonoscopy, and appropriate sampling are crucial for timely diagnosis and treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Adán Merino L, Gómez Senent S, Martín Alonso MA, Turrión JP, Martín Arranz E, Poza Cordon J, Escobedo Franco D, Segura Cabral JM. Linfogranuloma venéreo: una entidad emergente [Lymphogranuloma venereum: an emergent disease]. *Gastroenterol Hepatol* 2010; 33 (5): 416–7
- [2] Pino-Calm B, Martínez-García L, Beltrán Tacoronte C, Alcoba J. Infradiagnóstico de linfogranuloma venéreo [Underdiagnosis of lymphogranuloma venereum]. *Rev Esp Quimioter* 2020; 33 (1): 76–77

eP019 EUS-guided diagnosis of tuberculous lymphadenitis mimicking pancreatic cancer: a curable malignancy-like presentation

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DOI 10.1055/s-0046-1821346

Abstract Text

Pancreatic tuberculosis is a rare condition that may closely mimic malignancy. A 40-year-old woman presented with cholestasis and recent cholangitis. EUS revealed a heterogeneous hypoechoic pseudomass in the pancreatic head (32 × 25 mm) with confluent necrotic hilar lymph nodes compressing the bile duct and portal vein. EUS-guided biopsies showed chronic inflammatory changes with necrotizing lymphadenitis, without malignant cells. Based on clinical and imaging findings, a tuberculous origin was suspected and anti-tuberculous therapy initiated. Follow-up EUS demonstrated complete resolution of lymphadenopathies and regression of the pancreatic pseudomass, confirming the diagnosis. EUS with tissue acquisition is essential to differentiate tuberculous lymphadenitis from pancreatic malignancy, enabling curative medical therapy and avoiding unnecessary surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP020 When self-medication becomes a life-threatening risk. A case report

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DOI 10.1055/s-0046-1821347

Abstract Text

Acute gastrointestinal bleeding in children is a potentially life-threatening medical emergency that requires prompt evaluation and multidisciplinary management.

We report the case of a three-year-old boy with no prior medical history, who was brought to the Emergency Room due to sudden pallor and lethargy. According to the mother, the child experienced a sudden intense abdominal pain followed by ematemesis, along with a single melena episode. Twenty-four hours earlier, he had vomited food content without other gastrointestinal symptoms. The patient had a history of several recent respiratory infections but no trauma or ingestion of toxic substances [1, 2].

On examination, he presented with altered Pediatric Assessment Triangle parameters, including tachypnea, tachycardia, hypotension, pallor, and lethargy. The initial laboratory analysis revealed severe anemia (Hb 6 g/dL). Urgent gastroscopy showed a pale mucosa but without visible lesions. In the fundus and

body, mild oozing bleeding was observed originating from multiple diffuse points. After irrigation, no mucosal abnormalities were identified that could explain the bleeding, which recurred following the lavage.

The patient was admitted to the Pediatric Intensive Care Unit for close monitoring, receiving IV proton pump inhibitors and tranexamic acid. Given the endoscopic findings and normal coagulation tests, the family was re-interviewed, revealing that the child had received multiple daily doses of oral ibuprofen over the past two weeks. After 24 hours, he was transferred to the general pediatric ward, remaining clinically stable with adequate oral intake, and was discharged on day five.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vaquero Sosa E, Bodas Pinedo A, Maluenda Carrillo C. Gastropatía hemorrágica tras dosis bajas de ibuprofeno [Gastrointestinal bleeding following ingestion of low-dose ibuprofen]. *An Pediatr (Barc)*. 2013; 78 (1): 51–3. Spanish. doi:10.1016/j.anpedi.2012.05.012 Epub 2012 Jun 19 PMID: 22717704
- [2] Mărginean MO, Meliș LE, Mocanu S, Săsăran V. Ibuprofen, a Potential Cause of Acute Hemorrhagic Gastritis in Children – A Case Report. *J Crit Care Med (Targu Mures)*. 2018; 4 (4): 143–146. doi:10.2478/jccm-2018-0022 PMID: 30574567 PMID: PMC6296277

eP021 "Lights, Camera... Incision": from scope to scalpel in a catastrophic case

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DOI 10.1055/s-0046-1821348

Abstract Text

Caustic ingestion represents a medical and surgical emergency capable of causing chemical injury to the gastrointestinal tract, ranging from mucosal erosions to full-thickness necrosis with risk of perforation. Endoscopy is the initial diagnostic tool to assess the extent and depth of injury, often using grading systems such as the Zargar classification to stratify severity and predict complications.

We report the case of a 60-year-old female with a history of caustic ingestion in 2017, which had required partial gastrectomy and duodenectomy due to perforation. She presented again to the Emergency Department following a second episode of caustic ingestion. Urgent gastroscopy revealed extensive necrosis involving the esophageal mucosa, gastric remnant, and intestinal loop, with violaceous nodules and purulent exudate. General surgery was consulted and recommended an urgent exploratory laparotomy, which revealed transmural necrosis extending to the cecum. Due to the severity and extent of the injury, surgical resection was deemed incompatible with life and was not performed.

This case underscores the importance of correlating endoscopic and surgical findings. While endoscopy allows direct assessment of mucosal injury, it may underestimate transmural involvement and deep complications, which are only confirmed surgically. Concordance between both modalities is critical for accurate diagnosis, appropriate therapeutic planning, and optimization of prognosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP022 Diagnostic performance of visual assessment by single-operator peroral cholangioscopy in indeterminate biliary strictures: experience of a North African center

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DOI 10.1055/s-0046-1821349

Aims Indeterminate biliary strictures remain a major diagnostic challenge due to the high prevalence of underlying malignancy. Single-operator peroral cholangioscopy enables direct intraductal visualization and targeted biopsies. This study aimed to assess the diagnostic performance of visual assessment alone in differentiating malignant from benign biliary strictures.

Methods We conducted a retrospective single-center study including 26 patients (February 2023–May 2025) with indeterminate biliary strictures despite inconclusive imaging and cytology. Cholangioscopic appearances were categorized as suggestive of malignancy (irregular mucosa, neo-vessels, nodules) or non-suggestive (regular mucosa, inflammatory/postoperative changes). The final diagnosis was established by histopathology or ≥ 6 -month clinical follow-up. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) were calculated with 95% confidence intervals (CI).

Results Cholangioscopy was technically successful in all patients (26/26). Visual assessment suggested malignancy in 14 cases, of which 10 were confirmed malignant and 16 benign. Visual evaluation demonstrated excellent diagnostic performance:

- Sensitivity of 100% (95% CI 69.2–100)
- Specificity of 87.5% (95% CI 61.7–98.4)
- PPV of 83.3% (95% CI 51.6–97.9)
- NPV of 100% (95% CI 76.8–100)
- Accuracy of 92.3%.

No major adverse events were observed.

Conclusions In this North African series, visual assessment by cholangioscopy showed excellent sensitivity and negative predictive value for indeterminate biliary strictures. Direct visualization can reliably guide early clinical decisions and biopsy targeting, reducing the need for additional invasive testing, while maintaining a favorable safety profile.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP023 Endoscopic Ultrasound-Guided Fine Needle Biopsy for Periportal Lymphadenopathy: Clinical Utility, Diagnostic Accuracy, and Correlation of Imaging Features with Etiology

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DOI 10.1055/s-0046-1821350

Aims To evaluate the diagnostic yield, accuracy, and safety of Endoscopic Ultrasound-Guided Fine-Needle Biopsy (EUS-FNB) for isolated periportal lymphadenopathy of unclear etiology. A secondary objective was to identify specific EUS morphological features predictive of underlying pathology, particularly tuberculosis (TB), a common cause in our setting [1, 2].

Methods This prospective study, conducted at a single tertiary care centre, analyzed data from 68 patients who underwent EUS-FNB for isolated periportal lymphadenopathy between January 2021 and July 2022. Patients with a known primary malignancy were excluded. All procedures were performed by an experienced endosonographer using a 22-gauge core biopsy needle. Samples were systematically processed for histopathological examination and microbiological analysis, including GeneXpert ULTRA and MGIT culture. Final diagnoses were established using a composite gold standard of positive tissue analysis or clinical-radiological follow-up. Logistic regression was used to identify EUS predictors of TB (► Table 1).

► Table 1

Parameter	Univariate OR (95% CI)	p-value	Multivariate OR (95% CI)	p-value
Irregular shape	6.94 (2.10 – 22.95)	0.0018	4.71 (1.08 – 20.57)	0.039
Hypoechoic	2.36 (0.25 – 22.60)	0.452	–	–
Hyperechoic	1.42 (0.47 – 4.28)	0.543	–	–
Heterogeneous	0.58 (0.21 – 1.62)	0.299	–	–
Necrosis	4.43 (1.51 – 13.00)	0.006	3.28 (1.01 – 10.62)	0.049
Calcification	2.00 (0.54 – 7.40)	0.294	–	–
Matting	4.06 (1.12 – 14.63)	0.033	3.03 (0.75 – 12.29)	0.118
Long-axis diameter	1.39 (0.74 – 2.60)	0.303	–	–
Short-axis diameter	1.33 (0.80 – 2.22)	0.272	–	–

► Table 2

p	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Accuracy (%)	AUROC
Tuberculosis	94.0	100.0	100.0	85.7	95.6	0.97
Malignancy	87.5	100.0	100.0	98.4	98.5	0.93
TB + Malignancy	93.1	100.0	100.0	71.4	94.1	0.96

Results Of 710 EUS procedures performed during the study period, 82 patients were referred for EUS-FNB of periportal lymph nodes, with 68 ultimately enrolled for analysis. The final diagnosis was tuberculosis in 47 patients (69.1 %), malignancy in 7 (10.3 %), and reactive lymphadenopathy in 10 (14.7 %). On multivariate logistic regression, an irregular lymph node shape (adjusted OR: 4.71, $p = 0.039$) and the presence of necrosis (adjusted OR: 3.28, $p = 0.049$) were identified as independent predictors of a tubercular etiology. The integration of microbiological testing significantly enhanced diagnostic yield for tuberculosis; GeneXpert ULTRA and MGIT combined confirmed TB in 35 of 47 cases (74.5 %), proving superior to histopathology alone, which was diagnostic in only 18 cases (40.4 %) ($p = 0.00084$). Overall, EUS-FNB demonstrated excellent diagnostic accuracy, with 94 % sensitivity and 100 % specificity for tuberculosis, and 87.5 % sensitivity with 100 % specificity for malignancy. The procedure was very safe, with no major complications reported among the patients (► Table 2).

Conclusions EUS-FNB is a highly accurate, safe, and effective first-line diagnostic modality for isolated periportal lymphadenopathy. In regions where TB is prevalent, it is the most common etiology. Our findings strongly support a multi-modal diagnostic strategy, combining EUS imaging, histopathology, and advanced microbiological testing (GeneXpert and MGIT) to maximize diagnostic yield, particularly for lymph node tuberculosis. Furthermore, EUS features such as irregular shape and necrosis are valuable independent predictors that can guide clinical suspicion and ensure timely patient management. This integrated approach should be considered the standard of care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zhang S, Liu J, Wang X, Buryanek J, Thosani N, Thomas-Ogunniyi J. Endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB): the experience of 1025 cases from a single academic center. *J Am Soc Cytopathol* 2023; 12 (5): S51–2
- [2] Pausawasdi N, Maipang K, Sriprayoon T, Charatcharoenwithaya P. Role of endoscopic ultrasound-guided fine-needle aspiration in the evaluation of abdominal lymphadenopathy of unknown etiology. *Clin Endosc* 2022; 55 (2): 279–86

eP024 “Scoring GERD from the Voice: The G-HARP and G-HARP+ Models for GERD Diagnosis in idiopathic hoarseness of voice “

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DOI 10.1055/s-0046-1821351

Aims Gastroesophageal reflux disease (GERD) is a frequent yet often unrecognized cause of idiopathic hoarseness. Correlating voice-based acoustic changes with objective reflux measures may enable earlier diagnosis through non-invasive screening. This study aimed to develop and validate two diagnostic models for predicting GERD in patients presenting with idiopathic hoarseness, using comprehensive clinical, endoscopic, manometric, and pH-impedance data as the diagnostic standard [1–2]

Methods This was a prospective, single-centre, open-label, interventional study conducted between January 2021 and June 2023 across ENT, speech pathology, and gastroenterology departments. Patients aged 18–65 years with idiopathic hoarseness ≥ 6 weeks' duration were included; those with structural, infectious, neurological, or functional laryngeal disorders were excluded. All participants underwent video laryngoscopy (to determine Reflux Finding Score [RFS] and Reflux Symptom Index [RSI]), acoustic voice analysis using computerized software (Multi-Speech 3700, MDVP, KayPentax), esophagogastroduodenoscopy (EGD), high-resolution esophageal manometry, and 24-hour impedance pH-metry. GERD was diagnosed based on Los Angeles grade $\geq B$ esophagitis or abnormal acid exposure time (AET $> 6\%$) or DeMeester score > 14.72 (► Table 1).

► Table 1

Scoring System	Parameter	Cutoff Value	Points Assigned	Maximum Score
G-HARP Scoring System	NHR	≥ 0.21	10	14
	Absolute Jitter	≥ 1.02	2	-
	Shimmer Percentage	≥ 3.14	2	-
G-HARP+ Enhanced Scoring System	NHR	≥ 0.21	5	20
	Absolute Jitter	≥ 1.02	2	-
	Shimmer Percentage	≥ 3.14	2	-
	RSI	≥ 13	6	-
	Erosive Esophagitis on Endoscopy	Present	5	-

Results Out of 242 screened subjects, 40 were enrolled. Mean age was 38.6 ± 14.8 years, with equal sex distribution. GERD was confirmed in 25 patients (62.5%); 15 were classified as non-GERD (including reflux hypersensitivity and normal findings). GERD patients had significantly higher RSI (14.2 ± 3.1 vs 11.4 ± 2.4 ; $p = 0.002$), RFS (10.3 ± 3.2 vs 6.6 ± 3.4 ; $p = 0.04$), absolute jitter (77.1 vs 50.4 ; $p = 0.03$), jitter percentage (1.98 vs 1.04 ; $p = 0.04$), and shimmer percentage (5.42 vs 3.62 ; $p = 0.02$). Multivariate analysis identified erosive esophagitis (OR 4.32; $p = 0.04$), RSI (OR 1.8; $p = 0.018$), absolute jitter (OR 1.01; $p = 0.005$), shimmer percentage (OR 0.93; $p = 0.04$), and NHR (OR 19.11; $p = 0.03$) as independent predictors. The G-HARP+ Score, integrating acoustic, clinical, and endoscopic predictors, achieved AUROC 0.87 with 88% sensitivity and 85% specificity. The G-HARP Score, based solely on acoustic markers (jitter, shimmer, NHR), achieved AUROC 0.82 with 85% sensitivity and 80% specificity, demonstrating robust non-invasive diagnostic performance.

Conclusions This study demonstrates that voice-based acoustic markers, particularly jitter, shimmer, and NHR, significantly correlate with reflux severity in idiopathic hoarseness. The proposed G-HARP and G-HARP+ scores provide practical, quantitative tools for predicting GERD and can guide clinicians in identifying patients needing confirmatory reflux testing. These models offer a promising, non-invasive adjunct for early diagnosis and targeted management of reflux-associated voice disorders.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vashani K, Muruges M, Hattiangadi G, Gore G, Keer V, Ramesh VS et al. Effectiveness of voice therapy in reflux-related voice disorders. *Dis Esophagus*. 2010;
- [2] Gyawali CP, Yadlapati R, Fass R, Katzka D, Pandolfino J, Savarino E et al. Updates to the modern diagnosis of GERD: Lyon consensus 2.0. *Gut*. 2023;

eP025 Interest of Endoscopic Ultrasound-Guided Fine Needle Aspiration in Mediastinal and Abdominal Lymphadenopathy

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Aims Endoscopic ultrasound (EUS), combined with fine-needle biopsy (FNB) and histopathological examination, represents a key diagnostic tool for the assessment of deep-seated lymphadenopathy (mediastinal or abdominal). This technique provides excellent diagnostic accuracy, particularly in differentiating benign from malignant etiologies, thereby guiding appropriate therapeutic strategies. The aim of this study was to evaluate the contribution of EUS-guided fine needle aspiration (EUS-FNA) in the workup of mediastinal and abdominal lymphadenopathy.

Methods We conducted a retrospective descriptive study over a 4-year period (January 2020 – December 2024) in the Department of Hepato-Gastroenterology. All patients who underwent EUS-guided FNB for lymphadenopathy were included. Exclusion criteria were: a prior diagnosis of granulomatous disease, known metastatic digestive cancer, and cases of inaccessible or sub-centimetric lymphadenopathy [1–3].

Results Out of 192 EUS procedures performed, 22 patients were included. The mean age was 53 years [20–82], with a male-to-female ratio of 0.8. The main presenting symptom was obstructive jaundice (45%), sometimes associated with epigastric pain (9%). Additional clinical findings included weight loss (4 cases), incidental discovery during the evaluation of a pancreatic mass (3 cases), hemorrhagic syndrome (1 case), dyspnea with hemoptysis (1 case), and isolated abdominal pain (1 case).

Initial imaging (thoraco-abdominopelvic CT in 85% of cases, MRCP in 20%) revealed: confluent mediastinal and/or abdominal lymphadenopathy in 41% of cases, pancreatic mass with lymph node involvement in 32%, common bile duct thickening in 18%, and gastric wall thickening in 2 cases.

EUS-FNB targeted abdominal lymph nodes in 64% of cases, mediastinal in 23%, and combined abdominal and mediastinal in 14%. Abdominal lymph node locations included hepatic hilum (50%), celiac (36%), and perigastric (21%); mediastinal lymph nodes were mainly at station 7 (85%) and station 9 (15%). The mean lymph node size was 23 mm [10–45]. Needles used were 20G (55%) and 22G (45%). The number of passes per biopsy ranged from 1 to 3, with fanning technique applied.

Histopathological analysis yielded malignant etiologies in 36% of cases (5 pancreatic adenocarcinomas, 1 lymphoma, 1 neuroendocrine carcinoma, 1 undifferentiated carcinoma), granulomatous disease in 18% (2 sarcoidosis, 2 tuberculosis), reactive lymphadenitis in 41%, and non-contributive hemorrhagic material in 5%. No procedure-related complications were reported.

Conclusions EUS combined with FNB has emerged as the reference examination for the assessment of deep-seated lymphadenopathy, particularly mediastinal and abdominal. In our series, diagnostic yield reached 95% at the first histopathological analysis. This minimally invasive and well-tolerated technique represents an essential tool for ruling out malignancy or identifying specific disease processes, thereby allowing targeted therapeutic management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A, Ianiro G, Marasco G et al. Endoscopic ultrasound fine-needle biopsy vs fine-needle aspiration for lymph node sampling: a systematic review and meta-analysis. *Gastroenterology Report*. 2022; 10 (4):goac062
- [2] Pausawadi N, Treepongkaruna S, Wiriyaat W et al. Role of Endoscopic Ultrasound-Guided Fine-Needle Aspiration in the Evaluation of Undiagnosed Abdominal Lymphadenopathy. *Clin Endosc* 2022; 55 (4): 358–365

[3] Wang W, Li Z, Hao J et al. Diagnostic role of endoscopic ultrasound-guided fine needle aspiration in isolated abdominal lymphadenopathy: a retrospective study. *World Journal of Gastroenterology* 2023; 29 (30): 4723–4735

eP026 Cold Snare Polypectomy versus Hot Snare Polypectomy for Small Colorectal Polyps (4–10 mm): Efficacy and Complications

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DOI 10.1055/s-0046-1821353

Aims Screening and endoscopic removal of colorectal adenomas aim to prevent progression to colorectal cancer. Hot snare polypectomy (HSP) has long been considered the standard technique for polyps larger than 4 mm. However, cold snare polypectomy (CSP) has gained increasing attention due to its technical simplicity and potentially improved safety profile. The optimal technique for the resection of small colorectal polyps (4–10 mm) remains debated. The objective of this study was to compare the efficacy and complications of CSP versus HSP in the management of small colorectal polyps [1–3].

Methods This was a retrospective comparative study conducted between January 2023 and December 2024 in a tertiary gastroenterology and endoscopy unit. Patients aged over 30 years with colorectal polyps measuring 10 mm or less and resected by CSP or HSP were included. Efficacy outcomes included polyp retrieval rate, en bloc resection rate, and histologically complete resection rate. Complications assessed were immediate and delayed bleeding, post-procedural abdominal pain, and colonic perforation.

Results A total of 186 patients with 232 polyps were included. The median age was 62 years. CSP was performed in 68 % of patients and HSP in 32 %. Submucosal injection was used in 60.5 % of HSP cases compared to 14.4 % in CSP cases. Regarding efficacy, en bloc resection was achieved in 93.3 % of CSP cases versus 83.7 % of HSP cases ($p = 0.116$). Polyp retrieval rates were 91.1 % with CSP and 81.4 % with HSP ($p = 0.107$). Histologically complete resection was obtained in 78.5 % of CSP cases and 77.1 % of HSP cases ($p = 0.251$). No significant difference was observed.

In terms of complications, immediate bleeding occurred in 4.4 % of CSP procedures compared to 9.3 % of HSP procedures ($p = 0.272$). Delayed bleeding was significantly lower in the CSP group, occurring in 3.3 % of cases versus 11.6 % with HSP ($p = 0.040$). Post-procedural abdominal pain did not differ significantly between the two groups ($p = 0.32$). One case of colonic perforation was reported, occurring in the CSP group.

Conclusions The efficacy of cold snare polypectomy is comparable to that of hot snare polypectomy in terms of complete resection of small colorectal polyps. However, CSP significantly reduces the risk of delayed bleeding, without a clear advantage in preventing colonic perforation. These findings support the preferential use of CSP as the first-line technique for polyps measuring 4–10 mm.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A, Di Maso M, Serviddio G et al. Cold versus hot snare polypectomy for small colorectal polyps: a meta-analysis of randomized controlled trials. *Gastrointest Endosc* 2020; 91 (3): 558–566.e3. doi:10.1016/j.gie.2019.09.025
- [2] Niu C, Bapaye J, Zhang J et al. Systematic review and meta-analysis of cold snare polypectomy and hot snare polypectomy for colorectal polyps. *J Gastroenterol Hepatol* 2023; 38 (8): 1642–1651. doi:10.1111/jgh.16261
- [3] Kawamura T, Takeuchi Y, Asai S et al. A comparison of the resection rate for cold and hot snare polypectomy for 4–9 mm colorectal polyps: a multicenter randomized controlled trial (CRESCENT study). *Gut*. 2018; 67 (11): 1950–1957. doi:10.1136/gutjnl-2017-314215

eP027 Recurrent Bleeding After Endoscopic Band Ligation of Esophageal Varices: Predictive Factors

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DOI 10.1055/s-0046-1821354

Aims Gastrointestinal bleeding due to rupture of esophageal varices is a major and potentially fatal complication of portal hypertension. Endoscopic band ligation is currently considered the gold-standard treatment. However, rebleeding following ligation remains a serious event, and the factors associated with its occurrence are not yet clearly defined. The objective of this study was to assess the prevalence and identify the predictive factors of recurrent bleeding after endoscopic band ligation of esophageal varices [1–3].

Methods A prospective, descriptive, and analytical study was conducted over a one-year period, from December 2023 to December 2024. It included fifty-nine patients with portal hypertension who underwent endoscopic band ligation of esophageal varices.

The collected data included demographic characteristics, etiology of portal hypertension, severity scores of liver disease (Child-Pugh and MELD), endoscopic findings, details of the ligation procedure (number of sessions and bands used), associated treatments, eradication outcomes, recurrence of bleeding, and mortality. All data were obtained from medical records and analyzed using the Jamovi software.

Results Fifty-nine patients were enrolled in the study. The mean age was 55 ± 15 years (range 18–87 years), with a male-to-female ratio of 1.25. Cirrhosis was the predominant cause of portal hypertension, accounting for 83 % of cases ($n = 49$). The main etiologies were viral hepatitis in 24 % ($n = 14$), primary biliary cirrhosis in 3 % ($n = 2$), autoimmune hepatitis in 2 % ($n = 1$), iron overload in 2 % ($n = 1$), and nonalcoholic steatohepatitis (NASH) in 2 % ($n = 1$). Cryptogenic cirrhosis represented 49 % ($n = 29$) of cirrhotic cases. Portal vein thrombosis was found in 15 % ($n = 9$), and Budd–Chiari syndrome in 5 % ($n = 3$). The mean follow-up duration was 3.5 ± 3.5 years (range 1–16 years). Secondary prophylaxis was the indication for ligation in 92 % of patients ($n = 54$). A history of hematemesis associated with melena was reported in 88 % ($n = 52$), while 3 % ($n = 2$) had isolated melena. The mean number of previous bleeding episodes was 1.7 ± 1.1 (range 1–7).

Initial endoscopic findings revealed grade III esophageal varices in 85 % of patients ($n = 50$) and grade II in 19 % ($n = 11$). Portal hypertensive gastropathy was observed in 66 % ($n = 39$), and gastric varices were present in 46 % ($n = 27$).

A total of 140 ligation sessions were performed. Complete eradication of varices was achieved in 46 % of patients ($n = 27$), with a mean of 2.6 sessions per patient. The mean number of bands applied per session was 5 ± 1.9 . Four patients achieved eradication after a single session, ten after two sessions, seven after three sessions, six after four sessions, and one patient required six sessions. Beta-blockers were contraindicated in 29 % of patients ($n = 17$).

The rebleeding rate was 18 % ($n = 11$), occurring after a mean interval of three weeks. Among these patients, 55 % were classified as Child-Pugh B, with an average of 2.8 sessions required for eradication. Notably, 63 % of patients who experienced rebleeding were not receiving beta-blockers. The mortality rate due to variceal rupture was 8 % ($n = 5$).

Conclusions Statistical analysis did not identify any factor significantly associated with rebleeding after endoscopic band ligation. However, the severity of liver dysfunction, particularly in patients with Child-Pugh B or C scores, appeared to increase the risk of recurrence. Conversely, the use of beta-blockers was significantly associated with a reduced risk of rebleeding. These findings support the combined use of endoscopic band ligation and beta-blocker therapy as an effective strategy for secondary prevention of variceal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Krag A, Wiest R, Albillos A, Gluud LL. The window hypothesis: haemodynamic and non-haemodynamic effects of beta-blockers improve survival of

patients with cirrhosis during a window in the disease. *Gut*. 2012; 61 (7): 967–969

- [2] de Franchis R, Bosch J, García-Pagán JC et al. Baveno VII – Renewing consensus in portal hypertension. *Journal of Hepatology* 2022; 76 (4): 959–974
- [3] Garcia-Tsao G, Abraldes JG, Berzigotti A, Bosch J. Portal hypertensive bleeding in cirrhosis: Risk stratification, diagnosis, and management: 2024 Practice Guidance by the American Association for the Study of Liver Diseases (AASLD). *Hepatology*. 2024; 79 (2): 527–556

eP028V Green urine as an adverse reaction in patient who received an infusion of propofol for sedation in the intensive care unit (ICU)

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DOI 10.1055/s-0046-1821355

Abstract Text

A 65-year-old man was admitted to the intensive care unit for bilateral pneumonia requiring invasive mechanical ventilation and requiring the use of sedative drugs in continuous perfusion. In this context, the patient presents with upper gastrointestinal bleeding secondary to a gastric ulcer [1–3].

Urgent upper gastrointestinal endoscopy was performed, increasing the continuous infusion of Propofol 2% to a dose of 3 mg/Kg/h. 12 hours after its infusion, the patient began to have greenish coluria, with no signs of associated urinary infection. After 12 hours of discontinuing the drug, the coluria disappears, with clear, yellowish urine that appears normal.

Video [http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/6bdacc5-6982-40d3-bd83-5828d6a5af3e/Uploads/19978_Propofol_\(1\).mp4](http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/6bdacc5-6982-40d3-bd83-5828d6a5af3e/Uploads/19978_Propofol_(1).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gillett MJ, Burnett JR. Medications and green urine. *Intern Med J*. 2006; 36 (1): 64–6
- [2] Tan CK, Lai CC, Cheng KC. Propofol-related green urine. *Kidney Int* 2008; 74: 978
- [3] Blakey SA, Hixson-Wallace JA. Clinical significance of rare and benign side effects: propofol and green urine. *Pharmacotherapy*. 2000; 20 (9): 1120–2

eP029 Organ-sparing endoscopic resection as an alternative to oesophagectomy after neoadjuvant therapy for oesophageal adenocarcinoma

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DOI 10.1055/s-0046-1821356

Background and Aims: The standard of care for resectable oesophageal cancer involves neoadjuvant chemotherapy or chemoradiotherapy followed by oesophagectomy. However, major or complete histopathologic regression ($\leq$ ypT1N0) occurs in up to 40–45% of patients treated with modern systemic regimens. In these cases, the necessity of radical surgery performed primarily to confirm complete tumour eradication is increasingly questioned. Advances in endoscopic techniques now allow local histologic evaluation and potentially curative resection of residual tumours through natural orifice approaches. To our knowledge, this is the first reported case demonstrating the technical feasibility and oncological adequacy of an organ-sparing endoscopic resection following neoadjuvant chemotherapy for locally advanced oesophageal adenocarcinoma [1–6].

Methods: A 65-year-old man with locally advanced oesophageal adenocarcinoma (cT2N0M0, Siewert type II) received four cycles of neoadjuvant FLOT chemotherapy. Planned oesophagectomy was deferred after preoperative endoscopy revealed a 15-mm residual lesion at the oesophagogastric junction without endoscopic signs of invasion. The patient declined surgery and consented to local, organ-sparing endoscopic resection as part of an active surveillance strategy. The procedure was performed under general anaesthesia using an en bloc endoscopic submucosal dissection technique.

Results: The resection was completed without intra- or post-procedural complications. Histopathological assessment revealed complete tumour regression with no residual adenocarcinoma (ypT0Nx) and clear resection margins (R0). Follow-up CT performed one month after the procedure showed no evidence of local or nodal disease. The multidisciplinary team subsequently recommended discontinuation of adjuvant therapy and continuation of active surveillance. At 12-month follow-up, CT demonstrated a new 6 × 16 mm para-oesophageal lymph node; endoscopic ultrasound with fine-needle aspiration confirmed reactive inflammatory changes without malignancy. At 14 months, the patient remains asymptomatic and disease-free.

Conclusions: This first reported case demonstrates the technical and clinical feasibility of local, organ-sparing endoscopic resection following neoadjuvant chemotherapy for locally advanced oesophageal adenocarcinoma. Given that approximately one in five patients achieve a complete pathological response with neoadjuvant therapy, the universal requirement for oesophagectomy warrants reconsideration—particularly among multimorbid patients at high surgical risk. Local endoscopic resection enables histologic confirmation of treatment response and, in selected complete or near-complete responders, may offer curative potential within a multidisciplinary, response-adapted management strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hoepfner J, Brunner T, Schmoor C, Bronsert P, Kulemann B, Claus R et al. Perioperative Chemotherapy or Preoperative Chemoradiotherapy in Esophageal Cancer. *N Engl J Med* 2025; 392 (4): 323–35
- [2] Shapiro J, van Lanschot JJB, Hulshof M, van Hagen P, van Berge Henegouwen MI, Wijnhoven BPL et al. Neoadjuvant chemoradiotherapy plus surgery versus surgery alone for oesophageal or junctional cancer (CROSS): long-term results of a randomised controlled trial. *Lancet Oncol* 2015; 16 (9): 1090–8
- [3] van Hagen P, Hulshof MC, van Lanschot JJ, Steyerberg EW, van Berge Henegouwen MI, Wijnhoven BP et al. Preoperative chemoradiotherapy for esophageal or junctional cancer. *N Engl J Med* 2012; 366 (22): 2074–84
- [4] Reynolds JV, Preston SR, O'Neill B, Lowery MA, Baeksgaard L, Crosby T et al. Trimodality therapy versus perioperative chemotherapy in the management of locally advanced adenocarcinoma of the oesophagus and oesophagogastric junction (Neo-AEGIS): an open-label, randomised, phase 3 trial. *Lancet Gastroenterol Hepatol* 2023; 8 (11): 1015–27
- [5] Reynolds JV, Preston SR, O'Neill B, Lowery MA, Baeksgaard L, Crosby T et al. Trimodality therapy versus perioperative chemotherapy in the management of locally advanced adenocarcinoma of the oesophagus and oesophagogastric junction (Neo-AEGIS): an open-label, randomised, phase 3 trial. *Lancet Gastroenterol Hepatol*. 2023; 8 (11): 1015
- [6] van Hagen P, Hulshof MC, van Lanschot JJ, Steyerberg EW, van Berge Henegouwen MI, Wijnhoven BP et al. Preoperative chemoradiotherapy for esophageal or junctional cancer. *N Engl J Med* 2012; 366 (22): 2074–84

eP030 Colonoscopy for Altered Bowel Habits: Between Clinical Suspicion and Diagnostic Reality

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DOI 10.1055/s-0046-1821357

Aims Altered bowel habits, characterized by alternating constipation and diarrhea, are a frequent reason for requesting endoscopic evaluation. However, this symptom is nonspecific and may occur in both functional gastrointestinal disorders and organic diseases. Its isolated diagnostic value remains limited, and its use as a criterion for preferential endoscopic referral is controversial. The aim of this study was to assess the clinical relevance of altered bowel rhythm as an indication for colonoscopy by determining its diagnostic yield and its relationship with associated clinical variables [1–4].

Methods A retrospective observational study was conducted including 95 patients who underwent colonoscopy between November 2024 and April 2025 with alternating bowel rhythm as their main presenting symptom. Relevant demographic and clinical variables were collected from medical records and endoscopic reports. Data were analyzed using descriptive and comparative statistics to assess the diagnostic yield and potential associations with clinical factors.

Results A total of 95 patients were analyzed, with a mean age of 64.2 years (SD 14.37). Women accounted for 62.1 % (59/95) and men for 37.9 % (36/95). A family history of colorectal cancer (CRC) was present in 7.4 % of cases. Among the patients in whom the bowel habit subtype was documented (n = 77), the mixed subtype was most common (54.5 %), followed by diarrhea-predominant (28.6 %) and constipation-predominant (16.9 %) types. Regarding symptom duration (n = 62), 43.5 % reported symptoms lasting more than one year, while 46.8 % had symptoms lasting several months. Abdominal pain was reported by 38.9 % of patients. Rectal bleeding occurred in 9.5 %, constitutional symptoms (asthenia, anorexia, or weight loss) in 14.7 %, and iron deficiency in 7.4 %. The proportion of patients with hemoglobin < 12 g/dL was 3.6 %, and the fecal occult blood test was positive in 10.5 % of cases.

At colonoscopy, the most frequent finding was no clinically relevant abnormality (46.3 %), defined as a normal examination or hemorrhoids as the sole finding. Diverticulosis was found in 29.5 % of cases. Polyps were identified in 35.8 %, including 11.6 % advanced and 24.2 % non-advanced lesions. Minor findings included microscopic colitis, ileitis, angiodysplasia, and nonspecific inflammatory lesions, each accounting for ≤ 2 cases per entity.

A statistically significant association was observed between age and the presence of polyps (mean 67.9 vs. 62.1 years; $p = 0.041$) and between age and diverticulosis (mean 70.9 vs. 61.3 years; $p = 0.002$).

Conclusions Alternating bowel rhythm as the main indication for colonoscopy demonstrated a limited diagnostic yield. Nearly half of the procedures revealed no relevant findings, and only a small percentage showed advanced polyps. Alarm features—such as anemia, iron deficiency, rectal bleeding, or a positive fecal occult blood test—were uncommon, further limiting the predictive value of this symptom in patients without additional risk factors. Although IBS is a clinical diagnosis, the nonspecific nature of its symptoms often leads to prioritized colonoscopy referrals without a strong evidence-based rationale. Our results suggest that, in the absence of alarm features, colonoscopy for this indication can be managed within standard referral pathways rather than through expedited circuits, promoting a more rational use of resources. Applying more precise selection criteria, combining age, medical and family history, and symptom characteristics, would enhance clinical decision-making and contribute to a more efficient allocation of endoscopic resources.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Huang KY, Wang FY, Lv M, Ma XX, Tang XD, Lv L. Irritable bowel syndrome: epidemiology, overlap disorders, pathophysiology and treatment. *World J Gastroenterol* 2023; 29 (10): 1545–62
- [2] Sebastián Domingo JJ. Síndrome del intestino irritable. *Gastroenterol Hepatol* 2018; 41 (5): 303–12
- [3] Patel SG, Ahnen DJ. The rising tide of early-onset colorectal cancer: a comprehensive review of epidemiology, clinical features, biology, risk factors, prevention, and early detection. *Nat Rev Gastroenterol Hepatol* 2022; 19 (8): 553–67

- [4] McCulloch SM, Aziz I, Polster AV, Pischel AB, Sta Ismeden H, Shafazand M et al. The diagnostic value of a change in bowel habit for colorectal cancer within different age groups. *Colorectal Dis* 2023; 25 (7): 1423–31

eP031 When the Fundus Bleeds: A Rare Case Report of Gastric Fundal Vascular Ectasia (GFVE)

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DOI 10.1055/s-0046-1821358

Introduction Gastric vascular ectasia (GVE) is a rare cause of upper gastrointestinal bleeding, responsible for roughly 4 % of cases. Most commonly it affects the gastric antrum (gastric antral vascular ectasia or GAVE). However, it can rarely involve the fundus—referred to as gastric fundal vascular ectasia (GFVE). GVE is more frequently diagnosed in elderly females and is associated with liver cirrhosis, autoimmune diseases, and other systemic conditions. Its presentation ranges from chronic iron-deficiency anaemia to acute GI haemorrhage, and diagnosis is primarily based on endoscopic findings.

Case Description A middle-aged male with a history of psoriatic arthritis and chronic iron-deficiency anaemia, was admitted with a 2-week history of melena. Initial bloods revealed an acute drop in Hb to 77g/L, down from 84g/L, indicating ongoing blood loss. After initial resuscitation, including blood transfusion, an urgent OGD revealed multiple vascular ectasia in fundus, with active bleeding at three points, along with mild GAVE. Pulsed Argon Plasma Coagulation (APC) was successfully applied, achieving immediate haemostasis. Additionally, small Grade-2 non-bleeding oesophageal varices were noted. Follow-up imaging confirmed liver cirrhosis (Child-Pugh-A). Patient's haemoglobin stabilised post-endotherapy, and no further GI bleeding episodes occurred. Intravenous iron therapy was administered, and symptoms markedly improved.

Discussion While GAVE is typically found in the antrum, on the other hand GFVE is rare and often overlooked during endoscopy. Unlike traditional GAVE, which shows characteristic striped lesions (watermelon stomach), this patient's presentation was diffuse and scattered. This case is significant due to the unusual occurrence of bleeding originating from the fundal region. Endoscopic findings of GFVE may mimic other vascular lesions such as portal hypertensive gastropathy. Although not indicated, but histologically, it is characterised by dilated mucosal vessels, spindle cell proliferation, and fibrohyalinosis. Elevated vasodilatory hormones and impaired liver function may play a role in pathogenesis. Endoscopic therapy, particularly APC, remains the first-line treatment and is effective in controlling bleeding and reducing transfusion requirements.

Conclusion GFVE although rare, should be considered in patients presenting with unexplained GI bleeding, especially those with liver disease or autoimmune conditions. Early endoscopic evaluation is crucial, as diagnosis may easily be missed due to its atypical location and overlapping features with other gastric pathologies. APC is an effective treatment modality, as demonstrated in this case.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP032 When Good Is Not Good Enough: Superiority of Excellent Over Good Bowel Preparation for Proximal Serrated Polyp Detection in a FIT-Based Screening Cohort

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DOI 10.1055/s-0046-1821359

Aims The Proximal Serrated Polyp Detection Rate (PSDR) is an emerging quality indicator linked to post-colonoscopy colorectal cancer risk, but the benefit

of bowel cleanliness on its detection remains unclear. We evaluate the impact of excellent (Boston Bowel Preparation Scale [BBPS] 8–9) versus good (BBPS 6–7) preparation on serrated (PSDR and sessile serrated lesion detection rate [SSLDR]) and adenoma-related (adenoma detection rate [ADR] and adenoma per colonoscopy [APC]) quality indicators in a FIT-positive screening cohort.

Methods This retrospective single-center study of 1069 patients (age 50–69) undergoing screening colonoscopy after a positive FIT compared PSDR, SSLDR, ADR, and APC between excellent and good preparation groups using univariate and multivariate regression analyses.

Results Excellent preparation showed a significantly higher PSDR (13.7% vs. 7.9%; OR 1.84, 95%CI 1.22–2.80, $p=0.004$) and SSLDR (7.6% vs. 4.0%; OR 2.00, 95%CI 1.14–3.52, $p=0.016$) than good cleansing. A linear relationship was observed, BBPS 9 outperforming BBPS 8. No significant difference was found for ADR (50.4% vs. 47.9%; OR 1.10, 95%CI 0.87–1.41, $p=0.424$) and APC (MD = 0.103; 95%CI, -0.071–0.277, $p=0.247$).

Conclusions Aiming for an excellent rather than a good bowel preparation is a critical strategy to maximize the detection rate of serrated pathway lesions and potentially reduce the incidence and mortality for interval colorectal cancer (CRC). This benefit does not extend to adenoma detection, underscoring the importance of PSDR and SSLDR as distinct and complementary quality indicators.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP033V Undersaline ESD combined with clip-and-band traction for a flat adenoma involving the entire ileocecal valve and two-thirds of the terminal ileum

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DOI 10.1055/s-0046-1821360

Abstract Text

Endoscopic submucosal dissection (ESD) of the ileocecal valve and terminal ileum remains technically demanding due to poor scope stability and adipose tissue interference. The undersaline ESD technique combined with internal traction may enhance safety and efficiency in such complex cases. A 71-year-old patient was referred for ESD of a 4 cm non-granular flat adenoma involving the entire ileocecal valve and approximately two-thirds of the last 1 cm of the terminal ileum. Circumferential incision was performed under saline immersion using a tip-cutting knife with flushing capability. A mucosal flap was created at the anal side to allow clip and band countertraction. The lesion was removed en bloc, and the mucosal defect was partially closed with clips. Oral budesonide was given for two months to prevent ileal stricture. The patient has an uneventful recovery without relapse at 3 months of follow up.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/392f9fd9-31e0-4bec-b523-25282aef029f/Uploads/19978_Ileocecal_ESD%20ESGE%202025Days%2013-10-2025%20%20.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP034 Laparoscopic and Endoscopic cooperative surgery as Rescue treatment for Advanced gastric Cancer in patients Unfit for Surgery: a report of the first four cases from the LE-RACUS pilot clinical study

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DOI 10.1055/s-0046-1821361

Aims For patients with advanced gastric cancer (GC) without metastasis, gastrectomy in combination with chemotherapy is generally recommended. Some patients are too frail for such invasive treatment because of old age or comorbidities. In the LE-RACUS trial, we are testing the feasibility of Laparoscopic and Endoscopic Cooperative Surgery (LECS) as a less invasive treatment option. During the LECS procedure the tumor is first marked from the inside with an endoscopic knife, followed by perforation of the gastric wall and laparoscopic removal under endoscopic visualization. The current evidence of LECS for advanced GC is based solely on case reports, as no prospective or retrospective studies have been published. Here, we are reporting on the outcomes of the first four patients of the trial [1, 2].

Methods A single-center prospective phase 1 trial. Patients with cT2-4aN0M0 GC Borrmann type 1-2 < 5 cm, or type 3 < 2 cm are considered for inclusion if they have been tumor board assessed as not fit for standard surgery. Exclusion criteria are Borrmann type 4 and tumors close to the cardia. The primary objective is the safety of LECS, defined as Clavien-Dindo score $\geq$ III. The secondary objectives are any complications, postoperative bleeding or perforation, operation time, radicality, 30-day and in-hospital mortality, hospital stay.

Results To date, four patients have been enrolled. The median age was 88 years (range 75–95), with a median Charlson comorbidity index of 6.5 (range 5–10). Median tumor size was 3.5 cm (range 2–5), located in the fundus ($n=2$), body ($n=1$), and antrum ($n=1$). All patients underwent the LECS procedure successfully. Postoperative events included one case of intra-abdominal abscess requiring percutaneous drainage and one case of fever on day 3, treated with antibiotics. No cases of postoperative bleeding, perforation, or other major complications were observed during follow-up. The median operation time was 186.5 minutes (range 171–230), and the median hospital stay was 6.5 days (range 3–19). There were no perioperative deaths. Pathology revealed T1aT2, T1bT2, T2 and T4 adenocarcinoma, two of which were tubular subtype, one tubular/papillary type and one signet ring cell type. Radical resection was achieved in 3 out of 4 cases.

Conclusions The preliminary results from the LE-RACUS trial indicate that LECS is a feasible option for patients with non-metastatic advanced gastric cancer who are considered too frail for standard surgery. However, the complete trial results are warranted for better assessment of this innovative approach.

Conflicts of Interest Henrik Maltzman – Olympus, speaker, no personal fees. Astra Zeneca, speaker, no personal fees

References

- [1] Ueno D, Matsumoto H, Kubota H et al. Prognostic factors for gastrectomy in elderly patients with gastric cancer. *World J Surg Oncol* 2017; 15 (1): 59
- [2] Hiki N, Yamamoto Y, Fukunaga T et al. Laparoscopic and endoscopic cooperative surgery for gastrointestinal stromal tumor dissection. *Surg Endosc* 2008; 22: 1729–35

eP035 Four cases of successful endoscopic closure of rectourethral fistula

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DOI 10.1055/s-0046-1821362

Aims Rectourethral fistula is a devastating condition occurring usually as a complication of radical prostatectomy or pelvic irradiation. Classical treatment requires surgical repair with derivation of the urine and stool with temporary cysto and colostomy.

Methods We present four cases of successful endoscopic closure of rectourethral fistula using different endoscopic procedures.

Results First patient was presented to our department with rectourethral fistula as a complication of difficult urinar catheterisation. During the catheterisation, tip of the catheter was inadvertently pushed into the distal rectum and inflated balloon stayed there for 3 days. After the CT scan was done, urologist took out the catheter and placed percutaneous cystostomy. We started closing the fistula in a three week period; first and second intervention consisted of

argon plasma coagulation of the fistula edges and 2ml fibrin glue application, and during the third intervention over-the scope clip 14/6 was placed and completely closed the fistula. Other three patients were presented to our hospital with the persistent fistula as a complication of radical prostatectomy. In one patient urologist already tried to close the fistula with two surgical procedures and the patient had cystostomy and sigmoidostomy but the fistulous tract persisted. Endoscopically fistula was located 3 cm orally from the anal verge with lumen of 3 mm; we performed three procedures with argon plasma coagulation of the edges, 2 ml fibrin glue and clip closure (tulip bundle technique twice, third time over the scope clip 14/6 application. After one month CT scan was done and revealed total fistula occlusion so cystostomy and sigmoidostomy were taken out. Third and fourth patients were presented immediately after prostatectomy when fistula was detected (3 weeks after the surgery) so only one endoscopic intervention with argon plasma coagulation of the fistula edges, fibrin glue application and over-the scope clips 14/6 placement was enough in both patients to successfully close the fistulous tract.

Conclusions With development of new endoscopic techniques, complex cases like refractory rectourethral fistula that usually required surgical treatment, can be adequately treated with minimally invasive endoscopic approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP036 Complete resolution of ileus with placement of LAMS hot axios due to stenotic ileocolic anastomosis

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DOI 10.1055/s-0046-1821363

Abstract Text

We present a case of a 40-year old male that presented in our emergency department with clinical signs of ileus. He has been operated (subtotal colectomy with formation of ileosigmoid anastomosis) due to obstructive Crohn's disease in 2015. Five days before actual clinical presentation he was on an elective colonoscopy that revealed fibrotic stenosis of the anastomosis, not passable with the scope, lumen width 4-5 mm.

During the next few days he started feeling bloated with progressive abdominal pain, nausea, absence of stool and at the end vomiting. He came to our emergency room - basic lab test were normal with just slight elevation of inflammatory parameters, but X-ray and then CT scan revealed ileus on the level of the ileocolic anastomosis. He was seen by a surgeon, started with conservative treatment (NG tube, antibiotics), but during the next 12 hours clinical condition and x-ray did not improve. After that we have been consulted by a surgeon and made a quick decision to perform endoscopy that revealed complete obstruction of the ileocolic anastomosis. Due to high surgical risk (multiple adhesions, risk of anastomotic leak and formation of high output stoma), we offered the patient possibility of urgent endoscopic intervention/decompression.

We changed the scope to therapeutic one, pushed the LAMS hot axios 20x10mm through the working channel and with the help of guide wire and fluoroscopy placed the LAMS in classical manner over the anastomosis. Immediately after the LAMS placement, liquid stool was evacuated. During the next day patient had multiple stool and gas evacuation and complete clinical and radiological regression of ileus so he was discharged 48 hours after the procedure.

LAMS was extracted with forceps 3 weeks after the placement, anastomosis was widely opened, and the patient remained completely asymptomatic during the follow up.

This case is to show that with slightly "extraordinary" approach we can save the patient from radical surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP037V Endoscopic reconstruction of the esophagus and neopharynx in the setting of complete postradiation obliteration

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DOI 10.1055/s-0046-1821364

Abstract Text

A 75-year-old man presented with complete proximal esophageal obstruction. Nutrition was maintained via gastrostomy after total laryngectomy with neopharynx creation and radiotherapy for laryngeal cancer six years earlier. Endoscopic gastrostomy was first performed to protect the fistulous tract. The gastrostomy was dilated to 18 mm and a 9 mm scope was advanced through the fistula into the esophagus. Progressive dissection with an ESD knife recreated a 6 cm neo-lumen toward the hypopharynx. For the final 2 cm, transillumination from an oral endoscope guided the rendezvous. The patient recovered uneventfully and undergoes weekly dilations at 15 mm. At 5 months of follow up, he can swallow liquids and soft food.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/5d2766ef-a899-44a0-970a-a875854cfd56/Uploads/19978_POETRE2025_ESGEDAYS%208-11-25.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP038 Colonic Pedunculated Headless Polyps: A Rare Endoscopic Finding

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DOI 10.1055/s-0046-1821365

Case presentation We report two cases of colonic polyps with a distinctive worm-like, headless appearance. In the first case, a 80 year-old man with no significant medical history underwent colonoscopy, revealing a pedunculated polyp without a defined head in the descending colon, which was successfully removed via endoscopic mucosal resection (EMR). In the second case, a 77 year-old woman was found to have nine elongated, worm-like polyps — five in the transverse colon and four in the descending colon. Two smaller headless stalk-like polyps were removed with a cold snare. However, removal of a larger polyp was unsuccessful due to a firm fibrous band within the stalk, causing snare entrapment. The snare catheter was transected, and a coagrasper forceps was used to sever the fibrous band, allowing safe snare extraction. Two clips were applied at the resection site. Histopathology in both cases revealed findings consistent with mucosubmucosal elongated polyps (MSEPs) [1, 2].

Conclusion MSEPs are rare, benign colorectal lesions, accounting for approximately 0.1-0.39 % of all polyps. They consist of normal mucosa overlying a submucosal core with dilated, thick-walled veins aligned along the polyp's long axis. Their etiology is thought to involve mechanical traction on the mucosa and submucosa during intestinal motion, particularly in anatomically vulnerable segments of the colon. As demonstrated in our cases, large MSEPs should preferably be removed via EMR rather than cold snare polypectomy, to minimize the risk of snare entrapment caused by the dense fibrous tissue within the stalk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Alizart MM, Rosty C, Brown IS. Colonic mucosubmucosal elongated polyp: a clinicopathologic study of 13 cases and review of the literature. *Am J*

Surg Pathol 2011; 35 (12): 1818–22. doi:10.1097/PAS.0b013e31822c0688 PMID: 21989340

[2] Matake H, Matsui T, Yao T, Iwashita A, Hoashi T, Yao K, Tsuda S, Takenaka K, Sakurai T, Yamada Y, Seo M, Odera K, Okada M, Tanaka K. Long pedunculated colonic polyp composed of mucosa and submucosa: proposal of a new entity, colonic muco-submucosal elongated polyp. Dis Colon Rectum 1998; 41 (12): 1557–61. doi:10.1007/BF02237307 PMID: 9860338

eP039V Wide-field right colon ESD made easy with undersaline immersion and multifocal countertraction

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DOI 10.1055/s-0046-1821366

Abstract Text

Right colon ESD for large polyps is challenging due to poor maneuverability and the high risk of perforation. In this video we demonstrate the strategy for safe wide field dissection using the following steps: 1) undersaline immersion 2) circumferential incision 3) multifocal traction with multiple complexes of clips and bands 4) dissection with a pediatric scope with an attached tapered cap and the use of an ESD knife with saline jet properties.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/343e3a10-3701-4a1c-8abc-067dd750158e/Uploads/19978_Right_colon%20ESD%20ESGE%20Days%202025.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP040 Risk factors for bleeding complications after colorectal polypectomy in cirrhotic and non-cirrhotic patients: A matched case-control study

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DOI 10.1055/s-0046-1821367

Aims Patients with liver cirrhosis are considered at increased risk for bleeding complications after endoscopic procedures due to impaired haemostasis. However, evidence-based risk stratification for colorectal polypectomy in this population remains limited. This study aimed to identify cirrhosis-specific and universal risk factors for post-polypectomy bleeding by comparing patients with liver cirrhosis to matched non-cirrhotic controls.

Methods Data were retrospectively obtained for 285 patients, including 96 patients with liver cirrhosis who underwent colorectal polypectomy (polyps ≥ 5 mm) between 2013–2023. Matching was performed by age, gender, and comorbidity index. The primary endpoint was any bleeding, secondary endpoints were intraprocedural bleeding, delayed bleeding, and other severe complications. Risk factors were analyzed using univariate logistic regression.

Results Universal risk factors across both groups included PTT (cirrhosis: ≥ 32.2 s, OR 6.15, $p = 0.022$; controls: ≥ 31 s, OR 2.83, $p = 0.007$), INR (cirrhosis: ≥ 1.3 , OR 3.12, $p = 0.031$; controls: ≥ 0.92 , OR 3.24, $p = 0.023$), and lower GOT values, which showed a paradoxical protective association in both groups (cirrhosis: ≥ 28 U/L, OR 0.22, $p = 0.029$; controls: ≥ 28 U/L, OR 0.29, $p = 0.011$). Cirrhosis-specific risk factors were spleen diameter ≥ 18 cm (OR 3.89, $p = 0.026$) and MELD score ≥ 15 (OR 3.27, $p = 0.044$). In controls, polyp size ≥ 15 mm was the strongest predictor (OR 4.69, $p < 0.01$), while protective factors included platelet count $> 211 \times 10^9/\mu\text{L}$ (OR 0.42, $p = 0.022$) and prothrombin activity $\geq 114\%$ (OR 0.1, $p = 0.027$). In the overall cohort analysis ($n = 285$), polyp size emerged as the dominant risk factor (≥ 16 mm: OR 4.26, $p < 0.01$). Liver cirrhosis itself was not an independent predictor, and bleeding rates did not differ significantly between cirrhotic and non-cirrhotic patients.

Conclusions Risk assessment for post-polypectomy bleeding should be individualized, not predetermined by cirrhosis status. Universal risk factors – PTT, INR and polyp size – apply across groups with different thresholds. Cirrhosis-specific markers like MELD and spleen size need targeted evaluation. Crucially, liver cirrhosis itself was not an independent bleeding risk factor. Our data suggest that safe polypectomy is achievable in well-selected cirrhosis patients and that bleeding risk may be further reduced using tailored risk stratification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP041 From bad to worst: obstructive jaundice due to post-embolization pancreatic necrosis

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DOI 10.1055/s-0046-1821368

Abstract Text

Upper gastrointestinal bleeding (UGB) is a frequent and potentially life-threatening condition that is managed in most cases with endoscopic therapy¹. Endovascular therapy (ET) or, rarely, surgical therapy are generally required in case of uncontrolled or refractory bleeding². We present the case of a 77-year-old woman who presented to the emergency department (ED) for melena. Due to hemodynamic instability and the evidence of gastroduodenal pseudoaneurysm with active duodenal bleeding at urgent TC, a direct ET was performed. After 5 days, the patient presented jaundice and inflammatory markers' elevation (total/direct bilirubin 5/3.2, GGT 350, ALP 430, WBC 15.2, PCR 14.5). Cross-sectional imaging revealed pancreatic necrosis with edematous thickening of the duodenal wall, but without clear evidence of biliary obstruction. Endoscopic ultrasound (EUS) was therefore performed, which showed a slightly dilated common bile duct (CBD) with caliber reduction in the pre-papillary tract due to a hypoechoic mass determining the loss of duodenal wall stratification, compatible with pancreatic tissue and pseudoaneurysm necrosis. Hyperechoic non-projecting material inside the CBD and gallbladder, and slight dilation of the intrahepatic biliary ducts were also observed. On EUS basis, an endoscopic retrograde cholangiopancreatography (ERCP) was performed. During ERCP, the descending duodenum mucosa appeared covered by fibrinous-necrotic material mixed with biliary material. Vater papilla was markedly fragile and surrounded by necrotic tissue. CBD was selectively cannulated, and a fully covered biliary metal stent 10 mm x 40 mm was placed, with prompt outflow of purulent bile and an hourglass appearance of the stent, due to compression exerted by the pseudoaneurysm and pancreatic necrotic tissue. After ERCP, the patient progressively recovered from jaundice and presented a few episodes of melena, managed with medical therapy until Hb values became stable. The patient was initially maintained fastened with a nasogastric tube (NGT), and progressively fed with enteral nutrition and then with oral diet. After 1 month, an esophagogastroduodenoscopy was performed, showing normal duodenal mucosa with the biliary stent through the papilla. A TC was performed after 6 months, which showed a reduction of the necrotic area with well-positioned biliary stent and aerobilia. An ERCP for stent removal is scheduled within 1 month. This case shows how endoscopy may be necessary and resolute in UGB, not only as a first-line treatment, but also in the event of complications arising from other therapeutic strategies. Endoscopists should thus be ready to promptly and transversely intervene [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kuyumcu G, Latich I, Hardman RL, Fine GC, Oklu R, Quencer KB. Gastroduodenal Embolization: Indications, Technical Pearls, and Outcomes. J Clin Med. 2018; 7 (5): 101. Published 2018. doi:10.3390/jcm7050101
- [2] Shung DL, Laine L. Review article: Upper gastrointestinal bleeding – review of current evidence and implications for management. Aliment Pharmacol Ther 2024; 59 (9): 1062–1081. doi:10.1111/apt.17949

eP042 Post-Polypectomy Surveillance in Clinical Practice: Low Guideline Adherence and Contributing Factors

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DOI 10.1055/s-0046-1821369

Aims Colorectal cancer (CRC) incidence can be reduced through detection and removal of advanced polyps. Appropriate surveillance intervals after index colonoscopy are essential to balance cancer prevention with resource optimization. Delayed surveillance may increase the risk of advanced lesions or CRC incidence, whereas premature or unnecessary procedures expose patients to avoidable risks and burden endoscopy units. The aim of this study was to evaluate the adequacy of post-polypectomy surveillance indications according to European Society of Gastrointestinal Endoscopy (ESGE) guidelines. Secondary objectives included identifying factors associated with inadequacy and assessing physicians' knowledge of surveillance intervals

Methods A retrospective, single-center, observational study was conducted. All colonoscopies performed between January 1st and June 30th, 2024, were reviewed. Only procedures indicated for post-polypectomy surveillance were included. To assess knowledge, a questionnaire with four clinical scenarios was sent to referring physicians.

Results Of 3,096 colonoscopies performed, 481 (15.5%) were post-polypectomy surveillance procedures. Among these, 270 (56.1%) had an inappropriate indication. Most of them (28.3%) corresponding to patients who did not require colonoscopy. The rate of advanced polyps was higher in delayed surveillance colonoscopies compared with those not requiring follow-up (16.5% vs 5.1%, $p = 0.024$). Inappropriate indications were significantly associated with patients having four or fewer adenomas in the previous colonoscopy (40.4%, $p < 0.001$). Requests from primary care showed a higher inadequacy rate compared with those from the gastroenterology department (79% vs 39.9%, $p < 0.001$). Appropriate indications were more frequent when colonoscopies were performed within the CRC screening program (65% vs 35.5%, $p < 0.001$). In the knowledge survey, 28 responses were received. The accuracy rate was $\geq 50\%$ for all scenarios. The lowest score corresponded to surveillance after an advanced adenoma with high-grade dysplasia and size > 10 mm, while the remaining cases showed $> 75\%$ correct answers.

Conclusions Adherence to ESGE post-polypectomy surveillance guidelines was low in our setting, with over half of colonoscopies inappropriately indicated. Most unnecessary requests corresponded to patients without an indication for endoscopic follow-up [1, 2].

Referral from primary care, fewer than four adenomas, and absence from population-based screening programs were factors associated with inappropriate indications.

The overall level of knowledge among referring physicians was acceptable but could be improved, particularly in cases involving advanced adenomas with high-grade dysplasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Djinbachian R, Dubé A-J, Durand M, Camara LR, Panzini B, Bouchard S et al. Adherence to post-polypectomy surveillance guidelines: asystematic review and meta-analysis. *Endoscopy* 2019; 51: 673–83
- [2] Hassan C, Antonelli G, Dumonceau J-M, Regula J, Bretthauer M, Chaussade S et al Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2020. *Endoscopy*. 2020; 52: 687–700

eP043V Alleviation of dysphagia in a patient with bilateral Killian-Jamieson diverticula using KJ-POEM

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DOI 10.1055/s-0046-1821370

Abstract Text

A 73-year-old man presented with dysphagia and cough. An esophagram revealed bilateral Killian-Jamieson diverticula. The contrast filled both diverticula before gradually passing into the esophagus. During endoscopy, food debris was removed. Submucosal injection was followed by a small mucosotomy at the proximal septum using a Hybrid knife. The submucosal fibers were trimmed to expose the circular muscle. Submucosal tunneling was performed at the edges of the muscle with repeated injections to protect the mucosa on both sides. Myotomy was then carried out down to the bottom of the diverticulum. The mucosotomy was closed with four clips. A contrast study showed no extravasation and improved passage into the esophagus. The patient's dysphagia resolved on follow-up two years later.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7a03f580-b9cb-4229-aeaa-67425b7a1f12/Uploads/19978_KJ_poem.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP044 Herpes Simplex Virus Esophagitis as the First Manifestation of Eosinophilic Esophagitis in an Immunocompetent Adolescent: A Case Report

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DOI 10.1055/s-0046-1821371

Abstract Text

Herpes simplex virus (HSV) esophagitis (HSE) is classically associated with immunocompromised states, whereas eosinophilic esophagitis (EoE) is a chronic immune-mediated condition characterized by esophageal eosinophilic inflammation. We present an unusual case of HSV esophagitis as the initial manifestation leading to the diagnosis of EoE in a previously healthy adolescent [1, 2]. A 17-year-old male with no history of atopy, food allergies, or immunodeficiency presented with fever and odynophagia of two days duration. At admission, an upper endoscopy was performed which revealed multiple well-demarcated, punched-out ulcers with fibrin exudate along the mid and distal esophagus from which biopsies were obtained. Physical examination was unremarkable, and laboratory results, including HIV and immunologic screening, were within normal limits except from an elevated C-reactive protein value. Biopsies demonstrated viral cytopathic changes consistent with HSV infection, while HSV IgM serology was negative. The patient was treated with oral valacyclovir at a dose 1000mg twice daily for 10 days, with rapid clinical improvement and complete symptom resolution.

One month later, follow-up endoscopy was performed to confirm mucosal healing. The ulcers had completely resolved. Surprisingly, new findings of esophageal rings and longitudinal furrows were observed throughout the esophagus. Biopsies from mid and proximal esophagus revealed dense eosinophilic infiltration exceeding 150 eosinophils per high-power field, confirming a diagnosis of eosinophilic esophagitis. The patient was started on high-dose proton pump inhibitor (PPI) therapy. After two months of treatment, repeat biopsies showed reduction of eosinophilic infiltration (< 15 eosinophils per high-power field).

This case illustrates an uncommon sequence in which HSE preceded the diagnosis of EoE in an immunocompetent patient. The relationship between these two entities remains uncertain, but several hypotheses have been proposed. HSV infection may act as a trigger for local mucosal immune activation, leading to eosinophilic inflammation and unmasking a latent predisposition to EoE.

Alternatively, an underlying EoE-related epithelial barrier dysfunction might predispose to viral infections. Regardless of the mechanism, this case emphasizes the importance of follow-up endoscopy after HSE, even in immunocompetent individuals.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wichelmann TA, Hoff RT, Silas DN. Acute Herpes Simplex Esophagitis in an Immunocompetent Adult with Eosinophilic Esophagitis. *Case Rep Gastroenterol* 2021; 15 (3): 1003–7
- [2] Zimmermann D, Cribble DH, Dellon ES, Bussmann C, Pfeifer D, Froh M et al. Acute Herpes Simplex Viral Esophagitis Occurring in 5 Immunocompetent Individuals With Eosinophilic Esophagitis. *ACG Case Rep J* 2016; 3 (3): 165–8

eP045 Difference in Immune Profiling According to the Presence or Absence of Metabolic Dysfunction-Associated Steatotic Liver Disease in Ulcerative Colitis Patients

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DOI 10.1055/s-0046-1821372

Aims Inflammatory bowel disease and metabolic dysfunction-associated steatotic liver disease (MASLD) are chronic diseases associated with gut dysbiosis and systemic inflammation. MASLD is common in ulcerative colitis (UC) with prevalence rates ranging from 1.5% to 55%. However, the influences of each disease were poorly explored. The profiling of immune cells could be helpful for identifying the association of chronic inflammatory diseases. We compared immune marker expression of colonic tissues between UC patients according to presence or absence of MASLD [1–4].

Methods We enrolled patients who underwent colonoscopic biopsies on active inflammation and CT scan to differentiate steatotic liver at the time of UC diagnosis. We included 24 UC patients, 12 with MASLD and 12 without. The expression levels of CD8, CD68, CD163, Foxp3, and programmed cell death protein-1 (PD-1) cells were evaluated by quantitative multispectral imaging.

Results We enrolled patients who underwent colonoscopic biopsies on active inflammation and CT scan to differentiate steatotic liver at the time of UC diagnosis. We included 24 UC patients, 12 with MASLD and 12 without. The expression levels of CD8, CD68, CD163, Foxp3, and programmed cell death protein-1 (PD-1) cells were evaluated by quantitative multispectral imaging.

Conclusions The immune cells including M1 macrophages and exhausted T cells showed different expressions depending on the presence of MASLD in UC patients. Immune profiling might be helpful for predicting diagnosis and prognosis in UC patients with comorbidity of MASLD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hsiao SW, Chen TC, Su PY et al. Metabolic Dysfunction-Associated Fatty Liver Disease in Taiwanese Patients with Inflammatory Bowel Disease: A Study in Patients with Clinical Remission. *Diagnostics (Basel)* 2023; 13 (20): 3268
- [2] Chen J, Dan L, Tu X, Sun Y et al. Metabolic dysfunction-associated fatty liver disease and liver function markers are associated with Crohn's disease but not Ulcerative Colitis: a prospective cohort study. *Hepatol Int* 2023; 17 (1): 202–214
- [3] Rinella ME, Lazarus JV, Ratzliff V et al. A multisociety Delphi consensus statement on new fatty liver disease nomenclature. *J Hepatol* 2023; 79 (6): 1542–1556
- [4] Hu N, Yan G, Tang M et al. CT-based methods for assessment of metabolic dysfunction associated with fatty liver disease. *Eur Radiol Exp* 2023; 7 (1): 72

eP046 Preventing Post-ESD Coagulation Syndrome Using Nexpowder: A Retrospective Multicenter Study

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DOI 10.1055/s-0046-1821373

Aims Endoscopic submucosal dissection (ESD) is an established curative treatment for lateral spreading tumors and early colorectal cancer, but it can cause procedure-related complications such as post-ESD coagulation syndrome (PECS). Proximal tumor location is a known independent risk factor for PECS. Nexpowder (NEXTBIOMEDICAL CO., LTD. Nextbiomedical, Incheon, Republic of Korea), a highly adhesive hemostatic powder approved by the US FDA for non-variceal upper gastrointestinal bleeding, has demonstrated efficacy in preventing rebleeding. This study aimed to evaluate the prophylactic efficacy of Nexpowder in preventing PECS after colorectal ESD for high-risk proximal lesions [1–5].

Methods This retrospective multicenter study included patients who underwent colorectal ESD between April 2023 to October 2024 for proximal colonic lesions, without perforation, muscular injury, or prophylactic clipping. Nexpowder was applied prophylactically in 35 patients (46.7%), while 40 patients (53.3%) served as controls. PECS was defined as postprocedural abdominal pain, fever, and elevated inflammatory markers requiring antibiotics (► Table 1).

► Table 1 Study outcomes

Variables	Control group (n = 40)	Nexpowder group (n = 35)	P-value
PECS, n (%)	8 (20.0)	1 (2.9)	0.032 ⁺
Abdominal pain (≥NRS 4)	9 (22.5)	2 (5.7)	0.053 ⁺
Fever (≥38.0°C)	9 (22.5)	1 (2.9)	0.016 ⁺
White blood cell count increase, /ul	9 (22.5)	6 (17.1)	0.561
C-reactive protein increase more than 1mg/dL	11 (27.5)	6 (17.1)	0.406
Powder associated adverse event, n (%)			
Colonic obstruction		0 (0.0)	–
Perforation		0 (0.0)	–
Infection		0 (0.0)	–
Embolization		0 (0.0)	–

§Median (range); + Fisher exact test; *P-values were calculated using the t-test or Fisher calculated using of the control group and the Nexpowder group

Results PECS occurred in nine patients overall. The incidence of PECS was significantly lower in the Nexpowder group (2.9%) than in the control group

(20.0 %; $p = 0.032$). All cases improved with conservative treatment, and no surgical intervention was required.

Conclusions Prophylactic application of Nexpowder significantly reduced the incidence of PECS after high-risk colorectal ESD. This study provides the first clinical evidence that a topical barrier agent may serve as a simple and effective preventive strategy for PECS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Shin J, Cha B, Hong J et al. Prevention of rebleeding after primary haemostasis using haemostatic powder in non-variceal upper gastrointestinal bleeding: a multicentre randomised controlled trial. *Gut*. 2025;
- [2] U.S. Food and Drug Administration. 510(k) Summary 2024;
- [3] Shin J, Cha B, Park JS et al. Efficacy of a novel hemostatic adhesive powder in patients with upper gastrointestinal tumor bleeding. *BMC Gastroenterol* 2021; 21: 40
- [4] Tsuji Y, Ohata K, Gunji T et al. Endoscopic tissue shielding method with polyglycolic acid sheets and fibrin glue to cover wounds after colorectal endoscopic submucosal dissection (with video). *Gastrointest Endosc* 2014; 79: 151–5
- [5] Nomura S, Shimura T, Katano T et al. A multicenter, single-blind randomized controlled trial of endoscopic clipping closure for preventing coagulation syndrome after colorectal endoscopic submucosal dissection. *Gastrointest Endosc* 2020; 91: 859–867 e1

eP047 Bowel Cleansing in Colonoscopy: Determining Factors for Adequate Preparation

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DOI 10.1055/s-0046-1821374

Aims To identify factors associated with adequate bowel cleansing prior to colonoscopy.

Methods A retrospective observational study was conducted including all colonoscopies performed at our center during the first quarter of 2025. Adult patients without prior gastrointestinal resection were included and categorized according to the Boston Bowel Preparation Scale (adequate: ≥ 6 ; poor: < 6). Clinical variables analyzed included comorbidities (ASA classification), regular medication, BMI, abdominal circumference, alcohol consumption, physical exercise on the day of the procedure, bowel habits, use of laxatives or prokinetics, fasting hours for solids and liquids, timing of bowel preparation doses, duration of low-residue and liquid diets, presence of diverticula, and prior abdominal surgery [1–3].

Results A total of 206 patients (110 women, 96 men; mean age 57.5 years) were analyzed. Adequate bowel cleansing was achieved in 198 patients (96.1 %), while 8 (3.9 %) had suboptimal preparation. Statistically significant differences between groups were found for physical exercise on the day of the procedure, comorbidity level (ASA classification), fasting duration on a liquid diet, and the timing of completion of the last bowel preparation dose (► **Table 1**).

► **Table 1** Comparative Table of Variables Between Groups With Good/Poor Bowel Preparation. Statistical Analysis Table Between Groups With Good and Poor Bowel Preparation.

Variable	Total Sample (n = 206)	Good Preparation (Boston ≥ 6 points, n = 198)	Poor Preparation (Boston < 6 points, n = 8)	p-value (< 0.05)
Sex (n)	Women: 110Male: 96	Women: 103Male: 95	Women: 7Male: 1	0.071
Median age (years)	57.5 (W: 57 / M: 59)	62	56.5	0.796
Median BMI	25.8 (W: 25 / M: 26.1)	25.95	34.7	0.535
Median weight (kg)	72 (W: 65 / M: 79)	68.5	96.5	0.673
Median abdominal circumference (cm)	95	86.5	136	0.943
Diabetes Mellitus (DM)	23	21	2	0.247
Hypothyroidism	22	21	1	1.000
Hyperthyroidism	1	1	0	1.000
Neurological disorders	6	6	0	1.000
Alcohol consumption (n)	None: 98Occasional: 81Daily: 27	None: 94Occasional: 79Daily: 25	None: 4Occasional: 2Daily: 2	0.222
Bowel habit	< 2 /week: 42–5/week: 41Daily: 134 > 1 /day: 27	< 2 /week: 42–5/week: 40Daily: 127 > 1 /day: 27	< 2 /week: 02–5/week: 1Daily: 7 > 1 /day: 0	0.917
Use of laxatives	None: 187Macrogol: 5Soluble fiber: 4Others: 10	None: 180Macrogol: 5Soluble fiber: 4Others: 9	None: 7Macrogol: 0Soluble fiber: 0Others: 1	1.000
Use of prokinetics	None: 205Levosulpiride: 1Dopamine antagonist: 0Metoclopramide: 0Others: 0	None: 197Levosulpiride: 1Dopamine antagonist: 0Metoclopramide: 0Others: 0	None: 8Levosulpiride: 0Dopamine antagonist: 0Metoclopramide: 0Others: 0	0.860
Use of enemas	No: 206Yes: 0	No: 198Yes: 0	No: 8Yes: 0	---
Opioid consumption	No: 196Yes: 10	No: 188Yes: 10	No: 8Yes: 0	0.520

► **Table 1** Comparative Table of Variables Between Groups With Good/Poor Bowel Preparation. Statistical Analysis Table Between Groups With Good and Poor Bowel Preparation.

Variable	Total Sample (n = 206)	Good Preparation (Boston ≥ 6 points, n = 198)	Poor Preparation (Boston < 6 points, n = 8)	p-value (< 0.05)
Previous abdominal surgeries	None: 133Cholecystectomy: 13Abdomino-inguinal hernias: 7Gynecologic: 28Urologic: 1Others: 24	None: 129Cholecystectomy: 12Abdomino-inguinal hernias: 7Gynecologic: 27Urologic: 1Others: 22	None: 4Cholecystectomy: 1Abdomino-inguinal hernias: 0Gynecologic: 1Urologic: 0Others: 2	0.458
ASA classification	ASA I–II: 189ASA III–IV: 17	ASA I–II: 184ASA III–IV: 14	ASA I–II: 5ASA III–IV: 3	ASA I–II: 0.765 ASA III/IV: 0.040
Physical activity on the day	None: 186Walking: 18Aerobic: 2	None: 179Walking: 17Aerobic: 1	None: 5Walking: 1Aerobic: 1	0.008
Diverticulosis	No: 131Yes: 75	No: 125Yes: 73	No: 6Yes: 2	1.000
Evacuating solution	Pleinvue: 160Bohm: 9Citrafleet: 37	Pleinvue: 152Bohm: 9Citrafleet: 37	Pleinvue: 8Bohm: 0Citrafleet: 0	0.525
Liquid for solution	Water: 205Juice: 1Others: 0	Water: 197Juice: 1Others: 0	Water: 8Juice: 0Others: 0	0.789
Median fasting time (liquids, h)	8	9	11.5	0.0276
Median fasting time (solids, h)	28	29	24	0.9007
Median days on residue-free diet	3	2.5	2	0.312
Median days on liquid diet	1	1	1	0.790
Median time of first sachet completion (h)	13.5	18	12.5	0.275
Median time of second sachet completion (h)	9.5	10	12	0.0182
Procedure schedule	Morning: 25Afternoon: 181	Morning: 22Afternoon: 176	Morning: 3Afternoon: 5	---
% of sample	100 %	96.12 %	3.88 %	---

Conclusions Physical exercise, lower comorbidity, and a shorter interval between bowel preparation and colonoscopy appear to be key factors associated with adequate bowel cleansing. Optimizing these elements may improve colonoscopy quality and diagnostic yield.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Du J, He X, Li P. Effect of single-day versus multi-day low-residue diet on colonoscopy bowel preparation: a systematic review and meta-analysis. *BMC Gastroenterol.* 2025; 25 (1): 648. doi:10.1186/s12876-025-04261-8 PMID: 41013317 PMID: PMC12465615
- [2] Wang F, Huang X, Wang Z, Yan Z, Wang S, Pan P, Li Z, Bai Y. One-day versus three-day low-residue diet bowel preparation regimens before colonoscopy: a meta-analysis of randomized controlled trials. *J Gastroenterol Hepatol.* 2024; 39 (5): 787–795. doi:10.1111/jgh.16466 Epub 2024 Jan 22 PMID: 38251810
- [3] Feng L, Guan J, Dong R, Zhao K, Zhang M, Xia S, Zhang Y, Chen L, Xiao F, Liao J. Risk factors for inadequate bowel preparation before colonoscopy: A meta-analysis. *J Evid Based Med.* 2024; 17 (2): 341–350. doi:10.1111/jebm.12607 Epub 2024 Apr 23 PMID: 38651546

eP048 Is Fasting Enough for Upper Gastrointestinal Endoscopy? Key factors for adequate preparation

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DOI 10.1055/s-0046-1821375

Aims To identify clinical and procedural factors associated with adequate gastric cavity cleansing prior to upper gastrointestinal endoscopy [1–3].

Methods A retrospective observational study was conducted on UGIE procedures performed at our center during the first quarter of 2025. Adult patients were categorized according to the quality of gastric preparation (adequate vs. suboptimal).

Variables analyzed included medical history, chronic medication use, BMI, abdominal circumference, alcohol consumption, physical activity on the day of the procedure, bowel habits, use of laxatives and/or prokinetics, ASA classification, and fasting hours for both liquids and solids (► **Table 1**).

► **Table 1** Comparison of variables between groups with adequate and inadequate gastric–duodenal preparation

Variable	Total sample (n = 205)	Good preparation (n = 192)	Poor preparation (n = 13)	p value (<0.05)
Sex (n)	Women: 117 Male: 88	Women: 109 Male: 83	Women: 8 Male: 5	0.072
Median age (years)	51 (W: 53 / M: 49)	51	48	0.083
Median BMI	25.6 (W: 25.6 / M: 27.75)	25.55	26.8	0.045
Median abdominal circumference (cm)	92	92	97	0.012
Diabetes Mellitus (DM)	18	16	2	0.650
Hypothyroidism	14	12	2	0.219
Bowel movement frequency	2–5/week: 30 Daily: 145 > 1/day: 30	2–5/week: 28 Daily: 136 > 1/day: 28	2–5/week: 2 Daily: 9 > 1/day: 2	0.998
ASA classification	ASA I–II: 192 ASA III–IV: 13	ASA I–II: 179 ASA III–IV: 13	ASA I–II: 13 ASA III–IV: 0	—
Physical activity on the day	None: 143 Walking: 53 Aerobic: 9	None: 134 Walking: 50 Aerobic: 8	None: 9 Walking: 3 Aerobic: 1	0.906
Median fasting time for liquids (h)	8	8	5.5	0.003
Median fasting time for solids (h)	9	10	6.5	0.023

Exclusion criteria: patients under 18 years of age and those with previous gastrointestinal resections.

Results A total of 205 patients were included (117 women, 88 men; mean age 51 years). Adequate preparation was observed in 192 patients, while 13 had suboptimal preparation (6.34% of the total sample).

Statistically significant differences between groups were found in BMI, abdominal circumference, and fasting duration for both liquids and solids.

Conclusions Adequate fasting time for both liquids and solids is crucial to ensure optimal gastric cleansing. Patients with higher BMI and larger abdominal circumference are at greater risk of residual gastric contents despite standard fasting recommendations. Extending fasting duration in this subgroup may improve the quality of endoscopic evaluations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Burke E, Harkins P, Arumugasamy M. Esophagogastroduodenoscopy Quality Improvement and the Role of Topical Antiperistaltic Agents: A Systematic Review and Meta-Analysis. *Cureus*. 2024; 16 (11): e73855. doi:10.7759/cureus.73855 PMID: 39559431 PMID: PMC11573234
- [2] Dinis-Ribeiro M, Areia M. How to improve the quality of upper gastrointestinal diagnostic endoscopy? *Clin Endosc*. 2025; 58 (5): 633–637. doi:10.5946/ce.2024.339 Epub 2025 Apr 8 PMID: 40195643 PMID: PMC12489563
- [3] Nagula S, Parasa S, Laine L, Shah SC. AGA Clinical Practice Update on High-Quality Upper Endoscopy: Expert Review. *Clin Gastroenterol Hepatol*. 2024; 22 (5): 933–943. doi:10.1016/j.cgh.2023.10.034 Epub 2024 Feb 22 PMID: 38385942

eP049 Novel ligation technique for ulceration after colorectal endoscopic submucosal dissection using double-loop clips: a single-center prospective feasibility study

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DOI 10.1055/s-0046-1821376

Aims Several ligation techniques for ulceration after endoscopic submucosal dissection (ESD) have been reported, but a ligation technique for clinical use has not been established because of the technical complexity and the need for expensive equipment. Therefore, we perform ligation using the double-loop (D-L) clips technique for cecum to upper rectal cases and endoscopic string clip suturing (ESCS) for lower rectum cases. In the current study, we prospectively assessed the technical feasibility of this novel ligation technique using the D-L clips for cecum to upper rectal cases (► **Table 1**).

► Table 1

Characteristics	D-L clips technique (n = 33)
En bloc R0 resection, n (%)	33/33 (100.0)
Resection time (minutes), median (IQR)	51 (45–76)
Procedural accidents, n (%)	
Perforation	0 (0)
Muscle injury	0 (0)
Complete ligation, n (%)*	32/33 (97.0)
Duration of ligation (minutes), median (IQR)	18 (14–19)
Ligation speed (cm ² /10 minutes), median (IQR)	2.7 (2.2–3.7)
Number of D-L clips used for ligation, median (IQR)	1 (1–2)
Number of clips used for ligation, median (IQR)	12 (9–13)
Delayed procedural adverse events, n (%)	
Delayed perforation	0 (0)
Post-ESD coagulation syndrome	1 (3.0)
Delayed bleeding	0 (0)
Hematochezia that does not fit the definition of delayed bleeding	1 (3.0)
White blood cell count (before ESD), median (IQR)	5300 (4300–6300)
White blood cell count (POD1), median (IQR)	6200 (4700–7300)
White blood cell count (POD1 – before ESD) ≥ 3000, n (%)	4 (12.1)
Length of stay, median (IQR), days	8 (7–8)

Methods Subjects were registered in this prospective study between May 2020 and September 2021. The study subjects included patients who underwent colorectal ESD in Hakodate Municipal Hospital and patients in whom the novel ligation technique was used.

Results A total of 33 patients were analyzed. Oral antithrombotic agents were administered to 15 (45.5%) of the 33 patients and direct oral anticoagulants (DOACs) were administered to 3 (9.1%) of the 33 patients. The rate of en bloc R0 resection was 100.0%, and the median length of resected specimens was 2.6 cm. The complete ligation rate was 97.0% (32 of the 33 patients). The median duration of ligation was 18 minutes. Post-endoscopic submucosal dissection coagulation syndrome occurred in one patient (3.0%) and there was no delayed bleeding in any of the patients. The D-L clips technique failed in one patient in whom the lesions were located at the transverse colon and there was paradoxical movement during the procedure.

Conclusions This prospective feasibility study showed that our ligation technique using the D-L clips can be used for closing ulceration after colorectal ESD in cecum to upper rectal cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP050 Treatment outcomes and resection depth of endoscopic resection for rectal neuroendocrine tumors: a single-center retrospective analysis

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DOI 10.1055/s-0046-1821377

Aims The prognosis of patients with rectal neuroendocrine tumors (NETs) depends on tumor grade, lesion size, and depth of invasion. For lesions ≤ 10 mm without invasion of the muscularis propria, endoscopic resection is generally recommended; however, the optimal resection technique remains uncertain. Endoscopic submucosal resection with a ligation device (ESMR-L) may ensure a negative vertical margin by applying band ligation just above the muscularis propria, thereby reducing the risk of positive vertical margins. This study aimed to compare the treatment outcomes of ESMR-L, endoscopic submucosal dissection (ESD), and endoscopic mucosal resection with precutting (EMR-P) for rectal NETs, and to evaluate the resection ability of each resection method.

Methods We retrospectively analyzed 27 consecutive patients who underwent endoscopic resection for rectal NETs at our institution between January 2010 and January 2021. The patients were divided into three groups: ESMR-L (n = 10), ESD (n = 10), and EMR-P (n = 7). Treatment outcomes were compared among the groups. R0 resection was defined as an en bloc resection with histologically negative margins. Curative resection was defined as R0 resection without lymphovascular invasion, based on immunohistochemical staining. In addition, we compared the resection depth between ESMR-L and ESD using histopathological specimens.

Results Baseline characteristics were not significantly different among the three groups. The overall R0 resection rate was 88.9%, with no statistically significant differences among groups (ESMR-L: 90%, ESD: 80%, EMR-P: 100%; p = 0.82). Positive vertical margins were observed only in the ESD group (ESMR-L: 0%, ESD: 20%, EMR-P: 0%). The procedure time was significantly shorter for ESMR-L (4.2 ± 1.0 min) than for ESD (32.1 ± 14.7 min) and EMR-P (13.4 ± 3.7 min) (p < 0.001). No adverse events occurred in any group. All tumors were classified as grade 1; lymphatic invasion, venous invasion, and overall lymphovascular invasion were observed in 22.2%, 30.0%, and 44.4% of the patients, respectively. The curative resection rate was 44.4%. In the pathological analysis, the mean distance from the deepest part of the tumor to the vertical resection margin was significantly longer in the ESMR-L group than in the ESD group (900 ± 680 μm vs. 379 ± 212 μm, p = 0.01).

Conclusions ESMR-L demonstrated resection outcomes comparable to those of ESD and EMR-P, with a shorter procedure time. Moreover, compared to ESD, ESMR-L was associated with a lower rate of positive vertical margin, suggesting that it may facilitate a deeper resection depth. For rectal NETs, ESMR-L appears to be a safe and effective endoscopic resection technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP051 Study of the determinant factors for adequate gastric and intestinal preparation in digestive endoscopy: Experience from a secondary care hospital

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DOI 10.1055/s-0046-1821378

Aims The objective of this study was to identify clinical and behavioral factors associated with adequate cleansing prior to digestive endoscopic procedures [1–3].

Methods A retrospective observational study was conducted on digestive endoscopies performed at our center over one trimester in 2025. Variables analyzed included medical history, body mass index (BMI), abdominal circumference, alcohol consumption, physical activity on the day of the procedure, habitual bowel habits, use of laxatives and/or prokinetics, ASA classification, and fasting hours for liquids and solids (► **Table 1**).

► **Table 1** Comparison of Clinical and Procedural Variables According to Preparation Quality in Esophagogastroduodenoscopy (EGD) and Colonoscopy.

Variable	EGD (Total / Good / Poor)	Colonos- copy (Total / Good / Poor)	p-value EGD	p-value Colonos- copy
Sample size (n)	205 / 192 / 13	206 / 198 / 8	—	—
Median BMI	25.6 — 25.55 — 26.8	25.8 — 25.95 — 34.7	0.045	0.535
Median abdominal circumference (cm)	92 — 92 — 97	95 — 86.5 — 136	0.012	0.943
ASA classification (I–II / III–IV)	192 / 13 — 179 / 13 — 13 / 0	189 / 17 — 184 / 14 — 5 / 3	—	ASA I–II: 0.765; ASA III–IV: 0.040
Physical activity (None / Walking / Aerobic)	143 / 53 / 9 — 134 / 50 / 8 — 9 / 3 / 1	186 / 18 / 2 — 179 / 17 / 1 — 5 / 1 / 1	0.906	0.008
Cleansing solution	XXX	Pleinvue / Citrafleet / Bohm: 160 / 37 / 9	—	0.525
Fasting for liquids (hours)	8 — 8 — 5.5	8 — 9 — 11.5	0.003	0.0276
Fasting for solids (hours)	9 — 10 — 6.5	28 — 29 — 24	0.023	0.9007
Days on low-residue diet	XXX	3 — 2.5 — 2	—	0.312
Days on liquid diet	XXX	1 — 1 — 1	—	0.790
Time of completion of first dose	XXX	13.5 — 18 — 12.5	—	0.275
Time of completion of second dose	XXX	9.5 — 10 — 12	—	0.0182

Results A total of 411 patients were included (205 esophagogastroduodenoscopies and 206 colonoscopies). Suboptimal visualization was observed in 13 gastric and 8 colonic procedures. In esophagogastroduodenoscopies, significant differences were found regarding BMI, abdominal circumference, and fasting duration for both liquids and solids. In colonoscopies, differences were associated with physical activity on the procedure day, patient comorbidity (ASA classification), fasting duration for liquids, and timing of completion of the second/final dose of the cleansing solution.

Conclusions In addition to fasting, independent factors such as BMI, abdominal circumference, physical activity, lower comorbidity, and the timing of bowel preparation may significantly influence the adequacy of digestive endoscopic cleansing.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jacobson BC, Anderson JC, Burke CA, Dominitz JA, Gross SA, May FP, Patel SG, Shaikat A, Robertson DJ. Optimizing Bowel Preparation Quality for Colonoscopy: Consensus Recommendations by the US Multi-Society Task Force on Colorectal Cancer. *Am J Gastroenterol.* 2025; 120 (4): 738–764. doi:10.14309/ajg.0000000000003287. Epub 2025 Mar 4 PMID: 40035345
- [2] Gimeno-García AZ, Sacramento-Luis D, Ashok-Bhagchandani R, Nicolás-Pérez D, Hernández-Guerra M. Interventions to improve bowel cleansing in colonoscopy. *Expert Rev Gastroenterol Hepatol.* 2025; 19 (1): 39–51. doi:10.1080/17474124.2025.2450699 Epub 2025 Jan 8 PMID: 39758033
- [3] Hotta K. Does the timing of bowel preparation change the outcome of bowel cleansing? *Dig Endosc.* 2024; 36 (12): 1355–1356. doi:10.1111/den.14904 Epub 2024 Aug 21 PMID: 39169750

eP052 Computer-aided detection maintains adenoma detection performance during simulated reduction of colonoscopy withdrawal time

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DOI 10.1055/s-0046-1821379

Aims Withdrawal time (WT) is a well-established quality indicator in colonoscopy, directly associated with adenoma detection rate (ADR). Prolonged WT may enhance ADR but can increase operator fatigue and procedural inefficiency. Computer-aided detection (CAdE) has been developed to assist endoscopists in real-time polyp recognition. This study aimed to evaluate whether CAdE allows effective shortening of WT while maintaining ADR in colonoscopy [1–3].

Methods This was a prospective observational study. Each native 6-minute withdrawal was proportionally rescaled to a 5-minute reference while preserving frame cadence and CAdE alert dynamics. The primary outcome was the paired difference in polyp detection rate (PDR) between the original inspection and the 5-minute reference. Secondary outcomes were optical adenoma detection rate (oADR) and polyps per colonoscopy (PPC), with paired comparisons via McNemar's test and Newcombe confidence intervals. Subgroup analyses were conducted by age and sex.

Results Among 269 colonoscopies, oADR was preserved between conditions (34.9 % vs 35.3 %; Δ = 0.4 %; 95 % CI – 2.1 % to 3.7 %; p = 0.73), whereas PDR increased (42.0 % vs 47.6 %; Δ = 5.6 %; 95 % CI 1.1 %–9.9 %; p = 0.02). Signals appeared stronger in patients <60 years and in males (exploratory). No carcinoma-suspected events were observed. Given CAdE's propensity to increase detection of diminutive/nonadvanced lesions with minimal time increases, findings should be viewed as feasibility signals.

Conclusions Time-rescaled modeling suggests that CAdE can preserve adenoma-suspected detection while improving overall polyp recognition under a simulated 5-minute withdrawal, supporting the biological plausibility of efficiency-preserving workflows. Real-time, histology-verified, multicenter trials should confirm these findings using AI-specific protocol and trial reporting standards and diagnostic reporting principles.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bhurwal A, Bartel MJ, Heckman MG, Crook JE, Krishna SG. A comparison of 9-min colonoscopy withdrawal time and 6-min colonoscopy withdrawal time: a systematic review and meta-analysis. *Journal of Gastroenterology and Hepatology.*
- [2] Shaikat A, Rector TS, Church TR, Lederle FA, Kim AS, Rank J et al. Longer withdrawal time is associated with increased adenoma detection: results from the Minnesota Colonoscopy Quality Improvement Project. *Gastroenterology.* 2015; 149 (4): 952–960
- [3] Barclay RL, Vicari JJ, Doughty AS, Johanson JF, Greenlaw RL. Colonoscopic withdrawal times and adenoma detection during screening colonoscopy. *The New England Journal of Medicine* 2006; 355 (24): 2533–2541. doi:10.1056/NEJMoa055498

eP053 Intramural Gastric Collections Causing Gastric Outlet Obstruction: A Rare Evolution of Disconnected Pancreatic Duct Syndrome (DPDS) Managed Conservatively

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DOI 10.1055/s-0046-1821380

Abstract Text

Disconnected pancreatic duct syndrome (DPDS) is a complex and challenging consequence of acute necrotizing pancreatitis, occurring when a segment of viable pancreatic tissue remains isolated from the main ductal system due to complete disruption of the pancreatic duct. This frequently leads to persistent fistulae or recurrent peripancreatic fluid collections and often requires tailored endoscopic or surgical management. However, intramural gastric involvement is exceedingly rare, and its optimal management is not yet well defined. We report the case of a 50-year-old male with a history of necrotizing hemorrhagic biliary pancreatitis, complicated by spleno-mesenteric venous thrombosis and a large walled-off necrosis. Endoscopic ultrasound-guided cystogastrostomy with placement of a lumen-apposing metal stent (LAMS) was performed, resulting in the initial drainage of the collection. The early postoperative course was complicated by peritonitis, successfully treated with laparoscopic washout. The LAMS was subsequently exchanged for a trans-gastric double pigtail stent. Months later, a follow-up MRI confirmed resolution of the main collections but demonstrated a disconnected pancreatic duct with mild upstream Wirsung dilatation, consistent with DPDS. The patient remained clinically stable for nearly one year with preserved pancreatic function. Then he presented with de novo recurrent nausea, vomiting, and epigastric discomfort without fever. Cross-sectional imaging (CT and MRI) revealed the cause: multiple circumferential intramural fluid collections within the gastric antrum, originating from the disconnected ductal segment and causing gastric outlet obstruction (GOO). The findings were consistent with an intramural extension of a persistent pancreatic fistula. Imaging confirmed the DPDS fistula was actively feeding these collections. Given the patient's complexity and absence of sepsis, a high-risk surgical or endoscopic bypass was deferred. Instead, a "step-down" conservative approach was chosen. As a key therapeutic step, the trans-gastric pigtail stent was removed, and the patient was managed with proton pump inhibitors, prokinetics, and dietary modifications. This approach led to a progressive clinical recovery, with restoration of normal alimentation and weight gain. Serial MRI demonstrated a marked reduction of the intramural collections and progressive involution of the fistulous tract. The patient maintained stable pancreatic and nutritional status. A multidisciplinary team recommended continued conservative management and delayed elective cholecystectomy once radiological stability was confirmed to prevent recurrence of biliary pancreatitis. This case illustrates a rare evolution of DPDS, where ductal leakage created intramural gastric collections, causing GOO. The stepwise combination of endoscopic techniques, radiologic monitoring, and patient-tailored conservative therapy enabled clinical and radiological resolution without the need for surgical bypass. This experience emphasizes the importance of long-term imaging surveillance and multidisciplinary coordination in the management of DPDS, as well as awareness that, in selected DPDS patients, vigilant surveillance and conservative management can be the optimal approach, even for severe complications [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Takenaka M, Saito T, Hamada T, Omoto S, Shiomi H, Iwashita T, Masuda A, Matsubara S, Maruta A, Iwata K, Mukai T, Isayama H, Yasuda I, Nakai Y. Disconnected pancreatic duct syndrome: diagnostic and therapeutic challenges and future directions. *Expert Rev Gastroenterol Hepatol*. 2024; 18 (10): 631–645. doi:10.1080/17474124.2024.2419056 Epub 2024 Oct 24 PMID: 39420546
- [2] Verma S, Rana SS. Disconnected pancreatic duct syndrome: Updated review on clinical implications and management. *Pancreatol*. 2020; 20 (6): 1035–1044. doi:10.1016/j.pan.2020.07.402 Epub 2020 Jul 31 PMID: 32800651
- [3] Vanek P, Urban O, Trikidanathan G, Freeman ML. Disconnected pancreatic duct syndrome in patients with necrotizing pancreatitis. *Surg Open Sci*. 2022; 11: 19–25. doi:10.1016/j.sopen.2022.10.009 PMID: 36438587 PMID: PMC6962037

eP054 Application of a single-use endoscope for endoscopic intermuscular dissection: Early clinical evaluation of a novel endoscope

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DOI 10.1055/s-0046-1821381

Abstract Text

Background and Aims: Endoscopic intermuscular dissection (EID) is effective for lesions penetrating the submucosal layer. However, EID using a single-use endoscope has not been reported. We present two cases of EID performed with a novel single-use endoscope to evaluate its safety and efficacy.

Methods: We report on two patients with early-stage rectal cancer who underwent EID using a single-use colonoscope (EndoFresh DC-T300L). We analyzed the success of en bloc and R0 resection, and the occurrence of complications [1–4].

Case 1: A 67-year-old male with a history of hyperthyroidism and atrial fibrillation. A rectal mass (approx. 20 mm in diameter) was identified 8 cm from the anal margin. Color Doppler ultrasound suggested infiltration of the submucosal layer. EID was performed. The inner circular muscle was incised, and the outer longitudinal muscle was exposed as the dissection endpoint. Result: Complete en bloc and R0 resection were achieved. The pathological result was moderately differentiated adenocarcinoma (pT1, infiltration depth approx. 3 mm, negative margins). Blood loss was < 1 mL. No postoperative complications (bleeding, perforation, or infection) occurred. Radical surgical resection was performed 8 days postoperatively.

Case 2: An 82-year-old female with a history of hypertension, coronary heart disease, and diabetes mellitus. A rectal mass (approx. 25 mm in diameter) was found 6 cm from the anal margin. Rectal ultrasound and pelvic MRI suggested local malignant transformation (uT1–2/T2N0). EID was performed with the same technique. Result: Complete en bloc and R0 resection were achieved. The pathological result was villous-tubular adenoma with malignant transformation to moderately differentiated adenocarcinoma (pT1, infiltration depth approx. 8 mm, negative margins). Blood loss was < 10 mL. No postoperative complications occurred. The patient was discharged 2 days postoperatively.

Conclusions: The use of the single-use endoscope was safe and effective for EID in these two cases. This approach may offer advantages, particularly in preventing perforation-related extra-abdominal infection, which is a concern with EID due to manipulation within the muscularis propria layer. Further studies are needed to validate these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tribonias G., Komeda Y., Leontidis N. et al. Endoscopic intermuscular dissection (EID) for removing early rectal cancers and benign fibrotic rectal lesions. [J]. *Techniques in coloproctology* 2023; 27 (12): 1393–1400. doi:10.1007/s10151-023-02862-7

[2] Moons LG, Bastiaansen BJ, Richir MC et al. Endoscopic intermuscular dissection for deep submucosal invasive cancer in the rectum: a new endoscopic approach. [J].Endoscopy 2022; 54 (10): 993–998. doi:10.1055/a-1748-8573

[3] Huang S, Li B, Deng H et al. Endoscopic intermuscular dissection for management of 10- to 20-mm rectal neuroendocrine tumors: Pilot study (with video). [J].Endoscopy International Open 2025. doi:10.1055/a-2549-9852

[4] Xu W, Xia G, Li L et al. Evaluation of a novel disposable endoscope for retroflexed endoscopic rubber band ligation of internal hemorrhoids: a randomized pilot study[J]. Postgraduate medical journal 2024; 100 (1184): 407–413

eP055 Serum kallistatin level in comparison to other noninvasive panels for evaluating portal hypertension in Egyptian cirrhotic patients

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DOI 10.1055/s-0046-1821382

Aims To investigate the diagnostic value of serum kallistatin levels, along with other biochemical panels, in the assessment of portal hypertension among Egyptian individuals with liver cirrhosis (► **Table 1**).

Methods This cross-sectional research evaluated 90 cirrhotic cases who were admitted to the National Liver Institute’s Hepatology and Gastroenterology Department as well as the Endoscopy Unit at Menoufia University by measuring the serum KAL level and comparing it to other panels in order to grade esophageal varices according to the results of GI endoscopy [1–5].

Results The mean age of the 90 individuals who were enrolled in the study was 59.8 ± 9.8 years; 42.2 % of them were female, and 57.8 % were male. Patients with varices had a considerably decreased mean level of blood kallistatin. Additionally, it demonstrates a notable decrease in individuals with extensive varices. The presence of EV can be predicted by kallistatin with a sensitivity of 76.5 % and a specificity of 98.6 % at cut-off levels of 23.1 µg/ml.

Conclusions Serum kallistatin may serve as a potential indicator for identifying esophageal varices, particularly the larger and more life-threatening types.

[2] Facciorusso A, Buccino RV, Muscatiello N2020: Endoscopic and pharmacological treatment of esophageal varices. In: Liver diseases. pp 617–626 Springer; Cham: 12:

[3] Sami SS, Harman D, Ragunath K et al 2018; Non-invasive tests for the detection of esophageal varices in compensated cirrhosis: systematic review and meta-analysis. United Eur Gastroenterol J 6 (6): 806–818. doi:10. 1177/ 20506 40618 767604 13

[4] Cheng Z, Lv Y, Pang S et al 2015; Kallistatin, a new and reliable biomarker for the diagnosis of liver cirrhosis. 5 (3): 194–200. doi:10. 1016/j. apsb. 2015. 02. 003 14

[5] Runyon BA, Committee APG 2009; Management of adult patients with ascites. AASLD practice guideline due to cirrhosis: update. 2012; revised and updated guideline

eP056 Potential of endoscopic hand suturing for endoscopic sleeve gastropasty: ex vivo and in vivo studies

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Aims Endoscopic sleeve gastropasty (ESG) is expected to be a less invasive treatment for obesity. We consider that endoscopic hand suturing (EHS) should be applicable to this procedure. We aimed to investigate the feasibility and safety of “Handsewn ESG” in animal models.

Methods Handsewn ESG was performed on eight animal stomachs (four isolated porcine stomachs, two live pigs, and two live dogs). In vivo studies were conducted after the approval of respective Institutional Review Boards. Twelve mucosal defects per stomach were created: four lesions on the anterior wall, greater curvature, and posterior wall, respectively. Continuous suturing was performed for the respective distal and proximal six mucosal defects in a rec-

► **Table 1**

Variables	No Varices	OV grade I	OV grade II	OV grade III	Test	P-value
King’s score						
Mean ± SD	11.17 ± 3.375	20.12 ± 4.25	29.44 ± 4.09	32.68 ± 5.10	6.324	0.001 *
APRI						
Mean ± SD	0.72 ± 0.8	0.91 ± 0.61	1.34 ± 0.70	1.20 ± 1.05	4.321	0.02 *
Evendo score						
Mean ± SD	4.26 ± 2.06	5.14 ± 2.07	5.52 ± 1.60	5.70 ± 1.81	4.578	0.04 *
PC/SD						
Mean ± SD	1140.96 ± 674.09	855.36 ± 662.70	825.0653 ± 523.94	755.36 ± 442.2	6.321	0.001 *
PLT(x10³/ml)						
Mean ± SD	165.4 ± 45.5	132.8 ± 38	122.3 ± 45.1	114.6 ± 42.9	4.15	0.004 *
FIB-4						
Mean ± SD	3.13 ± 2.98	4.26 ± 2.13	5.15 ± 2.85	6.93 ± 3.35	5.995	0.003 *
KALLISTATIN (µg/ml)						
Mean ± SD	25.4 ± 5.24	16.1 ± 4.24	13.12 ± 3.99	12.83 ± 4.3	5.158	0.001 *

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Saeian K, Kohli A, Ahn J2018: Portal hypertensive gastrointestinal bleeding. In: Hepatic critical care. pp. 121–136 Springer; Cham: 11:

tangular shape with a 2-0 barbed suture (VLOCN0605 or VLOCL0615). Immediately after the procedure was completed, the live pigs were humanely euthanized, and their stomachs were removed for macroscopic examination. The live dogs were monitored for two months after the procedure, followed by endoscopic observation. Short-term outcomes (all eight cases), a gastric volume reduction rate and a full-thickness suturing rate (six cases), adverse events (four live animals), food intake, changes in body weight, and a closure maintenance rate at two months post the procedure (two live dogs) were investigated. **Results** The procedure was completed in all cases (8/8, 100%), and the average procedure time was 130.8 minutes. In six cases excluding live dogs, the average gastric volume reduction rate was 25.7%. Among four cases (48 suture sites) in which suture status was observed, 24 sites (50%) revealed full-thickness suturing. No adverse events were occurred in live animals (0%, 0/4), whereas in one sacrificed pig, one stitch hooked part of small intestinal serosa. Both live dogs' food intake had decreased for three days following EHS, but recovered to normal intake after the fourth postoperative day. At the second postoperative month, endoscopic observation revealed that the stomach reverted with disappearance of the suture in both cases.

Conclusions We confirmed Handsewn EHS is technically feasible. On the other hand, further improvement and refinement are necessary to elevate it to a safe and reliable procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP057 A Decade of Data: Understanding Splenic Injuries Following Colonoscopies

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DOI 10.1055/s-0046-1821384

Aims Splenic injury is a rare but potentially life-threatening complication of colonoscopy, occurring in approximately 14-33 per 100,000 colonoscopies. This study aims to assess the incidence, risk factors, and clinical outcomes of splenic injuries requiring intervention following elective colonoscopy.

Methods A retrospective review was conducted at a tertiary centre, identifying all colonoscopies performed between 1 January 2014 and 20 March 2025. Patients who had a colonoscopy performed within 72 hours of a splenic injury requiring intervention were included. Cases with alternative causes for splenic injury were excluded. Patient demographics, risk factors, and outcomes were analysed [1, 2].

Results Over the 10-year period, 6 cases of splenic injury requiring intervention were identified. All affected patients were female, with a mean age of 61.6 years (Standard Deviation = 16.3). 4 of 6 had previous abdominal surgery, and all procedures were performed under anaesthetist-led deep sedation.

Five injuries were identified within 6 hours post-procedure; one case presented at 48 hours. All patients reported abdominal pain, and 5 of 6 were haemodynamically unstable upon presentation. Angioembolisation was performed in 5 patients, achieving haemostasis in 4 (80%). Two patients required splenectomy—one following unsuccessful embolisation and one as a primary intervention. All patients required admission to the Intensive Care Unit with an average total length of stay in hospital of 9 days following colonoscopy.

Conclusions Female sex, history of abdominal surgery and anaesthetic led deep sedation were identified as potential risk factors for splenic injury post-colonoscopy. Implications for future practice include pre-procedural risk assessment including surgical history and potential for intra-abdominal adhesions, enhanced post-procedure monitoring of high-risk patients, and consideration to reviewing sedation practices to balance procedural comfort with patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Andrare E, Olufajo O, Drew E, Bochicchio G, Punch L. Blunt splenic injury during colonoscopy: Is it as rare as we think? *Am J Surg* 2018; 215 (2018): 1042-5

[2] Jehangir A, Poudel D, Masand-Rai A, Donato A. A systematic review of splenic injuries during colonoscopies: Evolving trends in presentation and management. *International Journal of Surgery* 2016; 33: 55-9

eP058 Rectal melanoma, a rare location with ominous prognosis

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DOI 10.1055/s-0046-1821385

Introduction Anorectal melanoma is an uncommon form of melanoma, accounting for 0.3-3% of all melanomas and 1-3% of anorectal tumors. It arises from the transitional zone and squamous region of the anal canal.

Endoscopy We present the case of a 74-year-old man with a history of right hemicolectomy and hepatic resection for metastatic colon adenocarcinoma, with no recurrence on colonoscopy in 2021. In 2025, due to rectal bleeding, a new colonoscopy revealed a pigmented, ulcerated, and necrotic lesion in the rectum, involving the pectinate line and occupying 75% of the circumference. Biopsies confirmed a poorly differentiated melanoma. CT imaging showed pancreatic metastases causing obstructive jaundice, managed with biliary stent placement via ERCP. A subsequent PET-CT demonstrated rapid metastatic progression to infradiaphragmatic lymph nodes, pancreas, adrenal glands, peritoneum, muscle, lung, and bone. The patient is currently receiving immunotherapy with ipilimumab/nivolumab for stage IV rectal melanoma, BRAF wild type.

Conclusions Anorectal melanoma is aggressive, often metastatic at diagnosis, and usually presents with nonspecific symptoms. Up to 60% of cases show dissemination to lymph nodes, liver, lungs, and the central nervous system. Its etiology remains unclear, though HPV or HIV infections may increase risk. The prognosis in advanced stages is poor; however, immunotherapy has shown promising outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP059 Percutaneous Transhepatic Biliary Drainage (PTBD) for Malignant Hilar Biliary Obstruction (MHBO) is Associated With Poor Outcomes – Is It Time to Reassess Its Clinical Utility?

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DOI 10.1055/s-0046-1821386

Aims Decompression of malignant biliary obstruction is important for quality of life and potential chemotherapy (CTx). PTBD is an alternative when endoscopic stenting with ERCP is not possible. In MHBO, PTBD is the preferred intervention as multiple branches may be obstructed rendering ERCP stenting suboptimal. The aim was to assess the impact of PTBD for MHBO on patient outcomes and compare them to management of extrahepatic obstruction.

Methods Retrospective chart audit of all patients diagnosed with cholangiocarcinoma (CCA) at the University of Alberta Hospital from 07/2023-06/2024. Primary outcome was a reduction of the bilirubin to $\leq 30 \mu\text{mol/L}$. Secondary outcomes were successful initiation and completion of CTx, procedural complications, re-interventions, hospital length of stay (HLOS), and mortality.

Results 30 pts (17 M), median age of 70 ± 10 yrs (52-94 yrs) presented with CCA. Location of CCA was intrahepatic in 9, hilar in 13, and extrahepatic in 8 pts. No pts with intrahepatic CCA underwent PTBD and were not included in this review. We compared pts with MHBO and those with extrahepatic CCA (► Table 1).

► Table 1

	Hilar CCA	Extrahepatic CCA
Pts, n	13	8
Baseline bilirubin (bili) $\mu\text{mol/L}$, median $\pm$ SD	136 $\pm$ 128	126 $\pm$ 95
Intervention, n		
None	2	2
ERCP only	1	6
PTBD only	6	0
ERCP $\rightarrow$ PTBD	3	0
PTBD $\rightarrow$ ERCP	1	0
Lowest post-intervention bili $\mu\text{mol/L}$, median $\pm$ SD	15 $\pm$ 71	11 $\pm$ 4
Time to lowest bili, days, median $\pm$ SD	46 $\pm$ 64	47 $\pm$ 16
Primary outcome, n		
Pts with bili $\leq$ 30 $\mu\text{mol/L}$	8 (62%)	8 (100%)
Pts with bili > 31 $\mu\text{mol/L}$	5	0
Chemotherapy, n		
Pts referred to cancer centre	11/13 (85%)	7/8 (88%)
Pts offered CTx	5/13 (38%)	6/8 (75%)
Pts that started CTx	3/13 (23%)	6/8 (75%)
Pts that finished CTx	0/13 (0)	2/8 (25%)
Complications, n		
Total	9/13 (69%)	3/8 (38%)
Bile leak	8	-
Drain/stent occlusion	7	2
Pancreatitis	1	1
Re-intervention, n		
Pts needing repeat procedures	10/13 (77%)	4/8 (50%)
Total number of repeat procedures	44 (range 1-11)	10 (range 1-5)
Overall rate of repeat procedures/pt	3.4	1.3
Mortality, n	7 (54%)	5 (62%)
Time to death post-intervention, days, mean $\pm$ SD	158 $\pm$ 102	286 $\pm$ 41
HLOS in days, mean $\pm$ SD	22 $\pm$ 16	7 $\pm$ 7

Conclusions The primary outcome was achieved with PTBD in 62% pts with MHBO but significant complications requiring re-intervention precluded optimal CTx, and were associated with a longer HLOS and shorter survival. Further inquiry into cost implications, and assessment of PTBD as standard of care in pts with MHBO is required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP060 Comparison of Endoscopic Ultrasound-Guided Fine Needle Aspiration/Biopsy (FNAB) with 19/20-Gauge and 22-Gauge Needles for Mediastinal Masses

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Aims Endoscopic ultrasound-guided fine needle aspiration/biopsy (EUS-FNAB) plays a key role in diagnosing mediastinal lesions. The choice of needle gauge may impact diagnostic yield, especially for tissue-intensive diagnoses such as lymphoma. This study aimed to assess the diagnostic performance, safety, and procedural efficiency of 19/20-gauge (G) versus 22G needles in EUS-FNAB for mediastinal masses.

Methods A retrospective analysis of a prospectively maintained EUS registry was performed at a single tertiary referral centre (University Hospital Southampton NHS Foundation Trust) for all patients who underwent endoscopic ultrasound-guided fine needle aspiration or biopsy (EUS-FNAB) of solid mediastinal lesions between January 2020 and January 2025 [1–5].

Patients were categorised according to the needle calibre used: 19/20-gauge (G) (large-bore group) and 22G (standard-bore group). Exclusion criteria included cystic or predominantly necrotic lesions, procedures performed for non-diagnostic therapeutic indications, or incomplete data.

Data collected included: demographics and indication for EUS-FNAB, needle type and number of passes, procedural duration (scope insertion to withdrawal), cytological and histological outcomes, sample adequacy (graded as satisfactory or unsatisfactory based on cellularity and presence of core tissue), adverse events within 7 days (bleeding, perforation, infection, or cardiorespiratory instability).

Primary outcomes were diagnostic sensitivity, specificity, and overall accuracy of EUS-FNAB for establishing a definitive diagnosis, verified against surgical histopathology or clinical follow-up $\geq$ 6 months. Secondary outcomes included sample adequacy, number of needle passes, procedural time, and safety.

Results A total of 136 patients were included: 40 in the 19/20G group and 96 in the 22G group. Baseline demographics, lesion characteristics, and procedural indications were comparable between groups ($p > 0.05$).

Diagnostic performance: the diagnostic sensitivity for malignancy was significantly higher with the 19/20G needles compared to 22G (94.1% vs 90.0%, $p = 0.04$). Overall diagnostic accuracy was also superior in the 19/20G group (95.0% vs 88.5%, $p = 0.03$). Sample adequacy for histological evaluation was achieved in 97.5% of 19/20G cases compared with 89.6% in the 22G group ($p = 0.02$).

Procedural metrics: The mean number of needle passes required to obtain an adequate specimen was 2.0 ± 0.1 with 19/20G versus 3.2 ± 0.2 with 22G ($p < 0.01$). Mean procedural duration was significantly shorter with 19/20G needles (18.3 ± 2.1 min vs 23.5 ± 2.4 min, $p = 0.01$).

Diagnostic subgroup analysis: In lesions where lymphoma was suspected ($n = 24$), the diagnostic yield was markedly higher with 19/20G needles (93.8% vs 80.0%, $p = 0.02$). In non-lymphomatous malignancies or benign granulomatous disease, diagnostic accuracy between groups was not significantly different ($p > 0.05$). On multivariable logistic regression, needle gauge (19/20G) remained an independent predictor of diagnostic accuracy (adjusted OR 2.47, 95% CI 1.12–6.10, $p = 0.03$), while lesion size and location were not significant. Safety: No major complications occurred in either group. Minor self-limiting bleeding at the puncture site occurred in two patients (one per group), with no delayed haemorrhage or infection observed ($p = 0.82$).

Conclusions EUS-FNAB with 19/20G needles is safe and offers superior diagnostic yield and procedural efficiency compared to 22G needles in the evalua-

tion of mediastinal masses. Larger bore needles should be considered, particularly when lymphoma or diagnoses requiring core tissue architecture are suspected.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Carrara S, Rahal D, Khalaf K, Rizkala T, Kolet H, Bonifacio C, Andreozzi M, Mangiavillano B, Auriemma F, Bossi P, Balzarotti M. Diagnostic accuracy and safety of EUS-guided end-cutting fine-needle biopsy needles for tissue sampling of abdominal and mediastinal lymphadenopathies: a prospective multicenter series. *Gastrointestinal Endoscopy* 2023; 98 (2): 191–8
- [2] Osmanoğlu N, Songür Y, Bircan S, Kapucuoğlu N. Comparison of 19- and 22-gauge needles in EUS-guided fine needle aspiration in patients with mediastinal masses and lymph nodes. *Turkish Journal of Gastroenterology* 2011; 22 (5): 472–8
- [3] Li C, Mi J, Gao F, Zhu X, Su M, Xie X, Zhao D. Comparison of endoscopic ultrasound-guided fine needle aspiration with 19-gauge and 22-gauge needles for solid pancreatic lesions. *International Journal of General Medicine*. 2021; 30: 10439–46
- [4] Osmanoğlu N, Songür Y, Bircan S, Kapucuoğlu N. Comparison of 19- and 22-gauge needles in EUS-guided fine needle aspiration in patients with mediastinal masses and lymph nodes. *Turkish Journal of Gastroenterology*. 2011; 22 (5): 472–8
- [5] Carrara S, Rahal D, Khalaf K, Rizkala T, Kolet H, Bonifacio C, Andreozzi M, Mangiavillano B, Auriemma F, Bossi P, Balzarotti M. Diagnostic accuracy and safety of EUS-guided end-cutting fine-needle biopsy needles for tissue sampling of abdominal and mediastinal lymphadenopathies: a prospective multicenter series. *Gastrointestinal Endoscopy* 2023; 98 (2): 191–8

eP061 Perceptions, practices and trends of sedative endoscopy in Korea

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DOI 10.1055/s-0046-1821388

Aims Sedation has become a global standard in gastrointestinal endoscopy. Although the Korean Society of Gastrointestinal Endoscopy (KSGE) published guidelines in 2021, real-world practice and perspectives from nurses and patients remain unclear. This study aimed to evaluate current sedation practices in Korea through a nationwide multi-stakeholder survey [1–7].

Methods A cross-sectional survey was conducted between August 2024 and April 2025 among endoscopists (KSGE), endoscopy nurses (Korean Society of Gastrointestinal Endoscopy Nurses and Associates), and patients at two university hospitals. Questionnaires assessed demographics, sedation practices, safety protocols, training, and patient knowledge and attitudes.

Results A total of 735 endoscopists, 247 nurses, and 204 patients participated. Most endoscopists reported routine sedation ($\geq 76\%$ in 69.9% of upper endoscopies and 90.8% of colonoscopies), with propofol-based regimens predominating. Sedation training improved markedly (92.0%), but CPR/BLS training remained stagnant (57.6%). Although overall complication rates declined slightly, severe adverse (intubation 18.1%, and mortality 3.6%) increased. Nurses showed higher completion rates for sedation and CPR/BLS training and greater adherence to ASA/Mallampati assessment, continuous monitoring, and standardized discharge protocols. Patients chose sedation mainly for pain re-

duction (87.3%), but demonstrated limited knowledge of sedatives with 55.1% unaware of post-procedure driving restrictions and related legal penalties. While safety was the top priority, many expressed willingness to pay for effective and safe agents, suggesting interest in newer options such as remimazolam.

Conclusions Sedation practices in Korea are now highly standardized, supported by guidelines, training, and nursing involvement. However, rising severe complications and persistent patient knowledge gaps highlight the need for risk-focused refinement, wider CPR/BLS training, adoption of advanced monitoring, and reinforced patient education.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Triantafyllou K, Sidhu R, Tham T et al. Sedation practices in Gastrointestinal Endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) survey. *Endoscopy* 2024; 56: 964–974
- [2] Behrens A, Kreuzmayr A, Manner H et al. Acute sedation-associated complications in GI endoscopy (ProSed 2 Study): results from the prospective multicentre electronic registry of sedation-associated complications. *Gut* 2019; 68: 445–452
- [3] Cohen LB, Wechsler JS, Gaetano JN et al. Endoscopic sedation in the United States: results from a nationwide survey. *Am J Gastroenterol* 2006; 101: 967–974
- [4] Dumonceau JM, Riphaus A, Schreiber F et al. Non-anesthesiologist administration of propofol for gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy, European Society of Gastroenterology and Endoscopy Nurses and Associates Guideline--Updated June 2015. *Endoscopy* 2015; 47: 1175–1189
- [5] Lin OS. Sedation for routine gastrointestinal endoscopic procedures: a review on efficacy, safety, efficiency, cost and satisfaction. *Intest Res* 2017; 15: 456–466
- [6] Committee ASOPEarly DS, Lightdale JR et al. Guidelines for sedation and anesthesia in GI endoscopy. *Gastrointest Endosc* 2018; 87: 327–337
- [7] Sidhu R, Turnbull D, Haboubi H et al. British Society of Gastroenterology guidelines on sedation in gastrointestinal endoscopy. *Gut* 2024; 73: 219–245

eP062 Dysphagia in Endoscopy: Correlation Between Endoscopic Findings of Eosinophilic Esophagitis and Histology. Influence of External Factors on Diagnosis. Is Biopsy Confirmation Necessary in All Cases?

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DOI 10.1055/s-0046-1821389

Aims The primary objective of this study is to assess, at the time of the initial diagnostic upper gastrointestinal endoscopy, the correlation between endoscopic features suggestive of eosinophilic esophagitis and their subsequent histopathological confirmation.

Methods A retrospective observational study was conducted on upper gastrointestinal endoscopies performed at our center between 2008 and 2024, in which the diagnostic report included "eosinophilic esophagitis." Only procedures in which the endoscopist obtained esophageal biopsies to rule out this disease—regardless of whether endoscopic findings suggestive of eosinophilic esophagitis were present—were included.

The indication for endoscopy, the medical specialty requesting the procedure, and the analytical data available prior to endoscopy were analyzed. In addition, the pharmacological treatments patients were receiving at the time of the procedure were recorded, and the histological results of the esophageal biopsy samples were reviewed (► Table 1).

► **Table 1**

Variables Analyzed	Eosinophilic Esophagitis Diagnosed n = 74 (36.82%)	Eosinophilic Esophagitis Not Diagnosed n = 127 (63.18%)
Gender		
Male	52 (70.3%)	61 (48%)
Female	22 (29.7%)	66 (52%)
Food Allergies		
Yes	11 (14.9%)	6 (4.7%)
No	63 (85.1%)	121 (95.3%)
Symptoms		
Dyspepsia/GERD	15 (20.3%)	36 (28.3%)
Dysphagia	54 (73%)	83 (65.4%)
Foreign body sensation	5 (6.8%)	8 (6.3%)

Results A total of 201 patients were analyzed. Of the total sample (n = 201), 74 patients were ultimately diagnosed with eosinophilic esophagitis (EoE) based on histological findings (36.82%), whereas 127 patients (63.18%) were not.

The mean age in the male group was 39 years (median: 42 years), while in the female group it was 49 years (median: 48 years).

Of the total sample (n = 201), 74 patients were ultimately diagnosed with eosinophilic esophagitis (EoE) based on histological findings (36.82%), whereas 127 patients (63.18%) were not.

Personal and medical histories were analyzed, revealing a higher proportion of males in the group diagnosed with EoE. In addition, a higher incidence of food allergies, dust/mite allergies, and asthma was observed among patients with confirmed EoE.

Conclusions The reason for endoscopy referral appears to influence the thoroughness of esophageal evaluation. In cases where the indication was dysphagia or a request to rule out EoE, a stronger correlation was observed between endoscopic findings and histological confirmation [1–3].

The presence of longitudinal furrows and esophageal rings are common endoscopic features associated with EoE diagnosis. In patients presenting with more than one typical endoscopic finding (exudates, longitudinal furrows, or rings), the likelihood of EoE increases progressively with each additional finding, particularly when both rings and longitudinal furrows coexist. The presence of exudates and mucosal edema, however, is not commonly reported.

Peripheral blood eosinophilia was a frequent finding among patients diagnosed with EoE, and the use of single-dose proton pump inhibitors (PPIs) did not appear to influence its occurrence. Furthermore, PPI use at standard doses in patients with EoE did not seem to obscure the presence of certain endoscopic features, such as rings and longitudinal furrows.

In patients without endoscopic abnormalities suggestive of EoE, if clinical suspicion is low, esophageal biopsy may not be necessary—even in the presence of dysphagia.

Endoscopist experience did not appear to have a significant impact on diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Savarino EV, Barbara G, Bilò MB, De Bortoli N, Di Sabatino A, Oliva S, Penagini R, Racca F, Tortora A, Rumi F, Cicchetti A. Eosinophilic esophagitis in adults and adolescents: epidemiology, diagnostic challenges, and management strategies for a type 2 inflammatory disease. *Therap Adv Gastroenterol.*

2024; 17:17562848241249570. doi:10.1177/17562848241249570 PMID: 38812705 PMID: PMC11135112

[2] Dellon ES, Liacouras CA, Molina-Infante J, Furuta GT, Spergel JM, Zevit N, Spechler SJ, Attwood SE, Straumann A, Aceves SS, Alexander JA, Atkins D, Arva NC, Blanchard C, Bonis PA, Book WM, Capocelli KE, Chehade M, Cheng E, Collins MH, Davis CM, Dias JA, Di Lorenzo C, Dohil R, Dupont C, Falk GW, Ferreira CT, Fox A, Gonsalves NP, Gupta SK, Katzka DA, Kinoshita Y, Menard-Katcher C, Kodroff E, Metz DC, Miehlke S, Muir AB, Mukkada VA, Murch S, Nurko S, Ohtsuka Y, Orel R, Papadopoulou A, Peterson KA, Philpott H, Putnam PE, Richter JE, Rosen R, Rothenberg ME, Schoepfer A, Scott MM, Shah N, Sheikh J, Souza RF, Strobel MJ, Talley NJ, Vaezi MF, Vandenplas Y, Vieira MC, Walker MM, Wechsler JB, Wershil BK, Wen T, Yang GY, Hirano I, Bredenoord AJ. Updated International Consensus Diagnostic Criteria for Eosinophilic Esophagitis: Proceedings of the AGREE Conference. *Gastroenterology.* 2018; 155 (4): 1022–1033.e10. doi:10.1053/j.gastro.2018.07.009 Epub 2018 Sep 6 PMID: 30009819 PMID: PMC6174113

[3] de Bortoli N, Visaggi P, Penagini R, Annibale B, Baiano Svizzero F, Barbara G, Bartolo O, Battaglia E, Di Sabatino A, De Angelis P, Docimo L, Frazzoni M, Furnari M, Iori A, Iovino P, Lenti MV, Marabotto E, Marasco G, Mauro A, Oliva S, Pellegatta G, Pesce M, Privitera AC, Puxeddu I, Racca F, Ribolsi M, Ridolo E, Russo S, Sarnelli G, Tolone S, Zentilin P, Zingone F, Barberio B, Ghisa M, Savarino EV. The 1st EoETALY Consensus on the Diagnosis and Management of Eosinophilic Esophagitis-Current Treatment and Monitoring. *Dig Liver Dis.* 2024; 56 (7): 1173–1184. doi:10.1016/j.dld.2024.02.020 Epub 2024 Mar 22 PMID: 38521670

eP063 Fully covered metal stent for the management of leak after sleeve gastrectomy

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DOI 10.1055/s-0046-1821390

Background Postoperative leaks after bariatric surgery represent a serious complication, with an incidence ranging from 0.2% to 1.2%. They occur more frequently following laparoscopic sleeve gastrectomy due to the long staple line and increased intraluminal pressure. In recent years, endoscopic stent placement has become a well-established, minimally invasive, and effective therapeutic alternative, achieving success rates of up to 92%.

Case Report / Endoscopy We present the case of a 56-year-old woman with morbid obesity who underwent laparoscopic sleeve gastrectomy. On postoperative day 5, she developed severe sepsis requiring hospital admission. Contrast-enhanced computed tomography revealed a proximal staple line leak associated with a perisleeve fluid collection. Urgent surgical exploration was performed but no active leak was identified.

Due to ongoing clinical deterioration, an upper gastrointestinal endoscopy with fluoroscopic guidance was performed, confirming a proximal dehiscence of the staple line with contrast extravasation into the subcardial recess of the gastric sleeve. Initial endoscopic closure attempts using the OverStitch suturing system and through-the-scope clips were unsuccessful. Consequently, a fully covered self-expandable metal stent (Hanarostent Gastro-Seal, 26 mm diameter × 21 cm length) was deployed, extending from the gastroesophageal junction to the pylorus, effectively excluding the leak site.

Endoscopic and radiologic follow-up demonstrated complete resolution of the leak. The stent was removed one month later without complications.

Conclusions This case highlights the pivotal role of therapeutic endoscopy in the management of postoperative complications following bariatric surgery. Fully covered metal stents offer an effective, minimally invasive option for the treatment of sleeve gastrectomy leaks, often avoiding the need for reoperation and promoting faster, safer recovery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP064 Treatment of Zenker's diverticulum in a tertiary hospital: our experience

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DOI 10.1055/s-0046-1821391

Background Flexible endoscopy has emerged as a minimally invasive alternative to open surgery and rigid endoscopy for the management of Zenker's diverticulum. Among flexible endoscopic approaches, the most widely used are flexible endoscopic septotomy (FES) and peroral endoscopic myotomy for Zenker's diverticulum (Z-POEM).

Aim To describe our experience in the treatment of Zenker's diverticulum using flexible endoscopic septotomy (FES).

Methods Retrospective review about clinical outcomes and technical aspects of patients treated with FES at a tertiary center between 2024 and 2025. Demographic data, procedural details, and follow-up outcomes were analyzed.

Results Five patients (4 men) aged 58–86 years with Zenker's diverticulum measuring 20–50 mm were included. The main clinical presentations were oropharyngeal dysphagia (4 patients) and recurrent aspiration pneumonia (1 patient). Diagnosis was established by gastroscopy, barium swallow, and computed tomography.

The procedure was performed under deep sedation in 4 patients and general anesthesia in 1. A flexible diverticuloscope was used in 80 % of cases and a transparent cap in 20 %, this one in patients with smaller diverticulum. FES was carried out using a Stag Beetle dissection knife, sectioning the septal muscular fibers while maintaining a 5–8 mm safety margin. The mucosal incision was closed with 3–4 through-the-scope clips in all patients.

No intraprocedural or postprocedural complications occurred. The mean hospital stay was 1 day. At one-month follow-up, all patients reported significant symptomatic improvement (Eckardt score 0–1). At 6–8 months, control esophagography revealed a small residual diverticulum in all cases, without clinical repercussion or need for retreatment.

Conclusions In our experience, flexible endoscopic septotomy is an effective and safe therapeutic option for Zenker's diverticulum, offering rapid recovery and excellent short-term outcomes. The use of a transparent cap represents a valid alternative when diverticuloscope placement is not factible due to small diverticulum size.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP065 PT1 colorectal cancer: our experience in a tertiary hospital

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DOI 10.1055/s-0046-1821392

Aims pT1 colorectal cancer (CRC) is defined by invasion limited to the submucosa without extension beyond it. With the widespread implementation of colorectal cancer screening programs, its incidence has markedly increased. The aim is to describe our experience in the diagnosis and management of pT1 colorectal cancer.

Methods We conducted a retrospective review of all pT1 CRC cases diagnosed and managed at a tertiary center between January 2021 and December 2024. Demographic, endoscopic, histologic, and therapeutic data were collected.

Results A total of 92 patients were included, with a mean age of 64 years; 58.7 % were men. The main indications for colonoscopy were colorectal cancer

screening (58 %), diarrhea (10.9 %), rectal bleeding (9.8 %), and iron-deficiency anemia (6.5 %). Most lesions (91 %) were resected endoscopically, while the remaining cases underwent surgical resection due to suspected submucosal invasion. The rectum was the most frequent location (43 %).

Computed tomography excluded nodal or distant metastases in all cases.

Among patients treated endoscopically, 39.3 % met histologic criteria for low-risk lesions (submucosal invasion < 1 mm, resection margins > 1 mm, absence of lymphovascular invasion, low/intermediate tumor budding, and well/moderate differentiation). Of these, 87.9 % were managed by endoscopic follow-up, while 12.1 % underwent surgery based on patient preference.

In contrast, among the cases fulfilled high-risk criteria (58.3 %); 65.3 % were managed conservatively due to significant comorbidities or patient choice. The most common reason for high-risk classification was piecemeal resection, precluding accurate histological assessment (24.5 % as the sole criterion), followed by positive margins and lymphovascular invasion.

During follow-up, no local or nodal recurrences were observed.

Conclusions Accurate endoscopic recognition of lesions with suspected submucosal invasion and in bloc resection are essential to guide optimal management in pT1 colorectal cancer. Although no recurrences were detected in our cohort, long-term surveillance remains necessary to assess oncologic outcomes and validate the safety of conservative management strategies in selected cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP066 Metabolic Dysfunction–Associated Steatotic Liver Disease Is Independently Linked to Colorectal Adenomas: A Matched Case–Control Study from Eastern Europe

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DOI 10.1055/s-0046-1821393

Aims Metabolic dysfunction–associated steatotic liver disease (MASLD) has emerged as the leading cause of chronic liver disease and may exert systemic oncogenic effects. Evidence linking MASLD to colorectal neoplasia in European populations is limited. We aimed to assess whether MASLD is independently associated with a higher prevalence and distinct histologic profile of colorectal premalignant lesions.

Methods We performed a retrospective, matched case–control study including 150 consecutive adults who underwent complete colonoscopy between January and December 2024. Seventy-five patients with ultrasonographically confirmed MASLD were matched 1:1 to controls by age, sex, residence, and presence of obesity or diabetes. Demographic, metabolic, endoscopic, and histopathologic data were collected. Logistic regression adjusted for metabolic covariates was used to determine the independent association between MASLD and colorectal polyp prevalence.

Results Colorectal polyps were identified in 39 of 75 MASLD patients (52.0 %) versus 20 of 75 controls (26.7 %) ($\chi^2 = 6.77$, $p = 0.009$). MASLD was independently associated with an increased likelihood of colorectal polyps (adjusted OR 3.04, 95 % CI 1.49–6.22, $p = 0.002$). Adenomatous histology predominated in MASLD (80 % tubular/tubulovillous/villous, including 13 % with high-grade dysplasia), whereas hyperplastic lesions were more common in controls. No significant difference was found in polyp size or location.

Conclusions MASLD was independently associated with a threefold higher prevalence of colorectal adenomas. These results identify MASLD as a metabolic risk enhancer for colorectal carcinogenesis and support early colonoscopic screening in metabolically vulnerable populations.

(Note: The full manuscript based on this abstract has been submitted to *Diseases of the Colon & Rectum* and is currently under editorial review. The data have not been published or presented elsewhere.)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP067 Removal of an impacted migrated fully covered biliary metal stent using a CRE balloon dilatation

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DOI 10.1055/s-0046-1821394

Introduction A 75-year-old male underwent open cholecystectomy following an episode of cholecystitis (pathological anatomy with gallbladder adenocarcinoma). During the surgery procedure, he presented a complete section of the common bile duct at the cystic duct level, and a bile leak in the subsegmental duct, both sutured. The patient's discharge persisted, and an ERCP was requested [1–3].

Endoscopy A large biliary leak was confirmed, and a fully covered self-expandable metal stent (SEMS) was placed. The patient subsequently presented with acute cholangitis, prompting ERCP for stent removal. Migration to the proximal common bile duct was observed, with no possibility of extraction with a Fogarty balloon, and a second stent was placed (SEMS in SEMS technique)

Two weeks later, a repeat ERCP was performed, with traction of the distal end using a polypectomy loop. The second stent was removed, but the migrated stent remained. Mobilization was achieved with a Fogarty balloon, but insufficient for removal

Finally, the decision was made to dilate the papillary area with a 13.5 controlled radial expansion (CRE) balloon and extraction of the stent over the balloon. There were no complications and confirming the absence of biliary leak.

Conclusion Biliary stent placement is a technique used in patients with bile leaks. In our case, a covered metal stent was chosen due to the aforementioned history.

One of the complications of this technique is migration, with coaxial stent placement being a solution for its removal (the SEMS in SEMS technique)

The use of a CRE balloon for the removal of a migrated stent could be considered an effective and cost-effective alternative, even as a first option.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Pérez R et al. Nuevas técnicas para extraer prótesis biliares metálicas recubiertas impactadas. *Gastroenterol Hepatol* 2009; 32 (7): 489–494
- [2] Fukuda K et al. Endoscopic Bridge-and-Seal of Bile Leaks Using a Fully Covered Self-Expandable Metallic Stent above the Papilla. *J. Clin. Med.* 2022; 11: 6019. doi:10.3390/jcm11206019
- [3] Tringali A et al. Difficult removal of fully covered self expandable metal stents (SEMS) for benign biliary strictures. *Dig Liver Dis.* 2014; 46 (6): 568–71. doi:10.1016/j.dld.2014.02.018 Epub 2014 Mar 22 PMID: 24661988 the _SEMS in SEMS_ technique

eP068 Endoluminal Vacuum Therapy with the Endo-SPONGE System in the Management of Colorectal Anastomotic Leaks: Experience from a Tertiary Center

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DOI 10.1055/s-0046-1821395

Introduction: Endoluminal vacuum therapy (EVT) using polyurethane sponges represents a minimally invasive and effective alternative for the treatment of colorectal anastomotic leaks, with reported closure rates of up to 81 %. This approach is based on the endoscopic placement of a sponge connected to a negative pressure system, allowing continuous drainage of secretions, reduc-

tion of the residual cavity, and stimulation of granulation tissue formation. Current evidence supports its superiority over conventional management, with higher success rates (RR 1.18), shorter treatment duration, and a better safety profile.

Objective: To describe our experience with endoscopic treatment of colorectal anastomotic leaks using the Endo-SPONGE system following low anterior resection for rectal adenocarcinoma.

Materials and methods: A retrospective review was conducted of the indication, treatment, and clinical outcomes of patients managed with EVT at the University Hospital of Araba between 2024 and 2025.

Results: Five patients were included: four were treated initially with EVT and one after unsuccessful percutaneous drainage. Diagnosis was established by computed tomography and endoscopy, identifying presacral cavities ranging from 3–12 cm with luminal communication. In one case, two Endo-SPONGE devices were placed simultaneously due to cavity size. Endoscopic sponge exchanges were performed every 48–72 hours, with up to six sessions required in the largest cavity. Complete closure of the cavity, confirmed endoscopically and radiologically, was achieved in three patients, allowing intestinal continuity restoration. One patient remains under treatment after six sessions, and one required surgical rescue.

Conclusions: In our experience, EVT is an effective, safe, and minimally invasive strategy for the management of colorectal anastomotic leaks, achieving cavity closure and preservation of intestinal continuity in most cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP069 Role of GastroPanel and EndoFaster in Guiding Indications for EGDS and Gastric Biopsies

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DOI 10.1055/s-0046-1821396

Aims The assessment of gastric mucosal integrity is fundamental in the diagnostic pathway of dyspepsia and gastroesophageal reflux disease (GERD), particularly in identifying *Helicobacter pylori* (HP) infection and atrophic gastritis (AG), both of which have clinical implications for cancer risk stratification and patient management. Histology remains the reference standard for diagnosing HP and AG but requires invasive biopsy sampling, which may be unnecessary in low-risk patients. GastroPanel is a non-invasive serological test based on four biomarkers that provides information on gastric function, HP status, and the presence of AG, potentially serving as a pre-endoscopic triage tool. Endofaster is an intra-procedural device that analyzes gastric juice in real time during gastroscopy, measuring pH and detecting HP, with the potential to reduce biopsy use. The aim of this study was to compare the diagnostic agreement of GastroPanel and Endofaster with histology for the detection of HP and AG, and to explore their potential complementary roles in the endoscopic workflow.

Methods Thirty consecutive adult patients undergoing upper endoscopy for dyspeptic symptoms or GERD at our institution were prospectively enrolled. Exclusion criteria included prior gastric surgery, food or blood in the stomach. All participants underwent blood sampling for GastroPanel, real-time gastric juice analysis using Endofaster during the same endoscopic procedure, and systematic gastric biopsies according to the Sydney protocol. Histology served as the diagnostic gold standard. Diagnostic agreement between each test and

histology was quantified using Cohen's kappa coefficient, interpreted according to established benchmarks. Sensitivity, specificity, and false-negative/false-positive rates were also recorded.

Results Based on histology, HP infection was detected in 10% (3/30) and AG in 3.3% (1/30) of patients. For HP diagnosis, GastroPanel showed moderate agreement with histology ($\kappa = 0.53$), while Endofaster demonstrated substantial agreement ($\kappa = 0.78$). For AG detection, agreement was fair for GastroPanel ($\kappa = 0.36$) and perfect for Endofaster ($\kappa = 1.00$). Although overall agreement was lower for GastroPanel, it exhibited 100% specificity for both HP and AG, with three false negatives and no false positives. This suggests that a positive GastroPanel result reliably identifies patients who may benefit from endoscopic evaluation. In contrast, Endofaster showed 100% sensitivity for both HP and AG, with no false negatives or false positives in this cohort, supporting its potential role in safely omitting gastric biopsies when results are negative. No adverse events related to either test were observed.

Conclusions This pilot study suggests that GastroPanel and Endofaster provide complementary strengths in the diagnostic evaluation of gastric disease. GastroPanel, through its high specificity, may help identify patients who truly require endoscopic assessment, thereby optimizing referral and resource allocation. Endofaster, with its high sensitivity and real-time intra-procedural application, may reduce the need for unnecessary biopsies during gastroscopy, streamlining the procedure and minimizing patient burden. Although limited by small sample size and low disease prevalence, these findings support the potential integration of combined non-invasive and real-time diagnostic tools to enhance accuracy and efficiency in the endoscopic pathway. Larger studies are warranted to validate these results and assess cost-effectiveness, workflow impact, and clinical outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP070V Exposed full-thickness resection of a recurrent adenoma occurring on colorectal anastomosis

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Abstract Text

A 80-year-old man was referred for a Paris 0-IIa lesion of 15 mm, occurring on a colorectal anastomosis. Multiple removal and avulsion attempts were made without success. We initially started with circumferential incision, then we dissect the residual submucosa, deepening into the scarring fibrosis, achieving en-bloc full-thickness resection. The wall defect was completely sealed with an Endoscopic Suturing System (ESS). No adverse events occurred. The patient was dismissed two days after the procedure. Histological analysis revealed tubular-villous adenoma with low grade dysplasia, free horizontal and vertical margins. E-EFTR seems to be a technically demanding but safe and effective treatment for recurrent and fibrotic lesion, even on a surgical anastomosis [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/a6158609-44c0-47fe-a9e2-5e287559ed28/Uploads/19978_000181.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rushfeldt CF., Nordbø M., Steigen SE., Dehli T., Gjessing P., Norderval S. Endoscopic full-thickness dissection (EFTD) in the rectum: a case series. *Tech Coloproctol* 2022; 26 (3): 187–93. doi:10.1007/s10151-021-02558-w
- [2] Guillaumot M-A., Barret M., Jacques J., Legros R., Pioche M., Rivory J. et al. Endoscopic full-thickness resection of early colorectal neoplasms using an endoscopic submucosal dissection knife: a retrospective multicenter study. *Endosc Int Open* 2020; 08 (5): E611–6. doi:10.1055/a-1127-3092

eP071 Can We Predict Remnant Tumor After Incomplete Resection of Rectal Neuroendocrine Tumors? The KASID Multicenter Retrospective Cohort Study

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DOI 10.1055/s-0046-1821398

Aims Positive margins after endoscopic resection of rectal neuroendocrine tumors (NETs) do not always indicate true residual disease. We aimed to identify risk factors for remnant tumors among patients with incompletely resected rectal NETs.

Methods We conducted a multicenter retrospective cohort study across 11 tertiary hospitals. Patients who underwent salvage treatment for incompletely resected rectal NETs between January 2010 and November 2023 were retrospectively reviewed. A total of 286 patients were included, and demographic, endoscopic, and pathologic data were analyzed to identify predictors of remnant tumor.

Results The remnant tumor was found in 102 (35.7%) patients. Rates were highest after cold forceps polypectomy (CFP) (63.6%), followed by cold snare polypectomy (32.1%) and conventional endoscopic mucosal resection (EMR) (31.2%). No remnant tumor was observed after modified EMR or endoscopic submucosal dissection (ESD). On multivariate analysis, CFP (odds ratio [OR], 4.50; 95% confidence interval [CI], 2.33–8.70), yellowish mucosa (OR, 4.36; 95% CI, 2.26–8.40), and mucosal protrusion (OR, 4.84; 95% CI, 2.17–10.79) were independent predictors of remnant tumors. The risk rose stepwise with the number of factors: 15.0% (none), 52.6% (one), 78.3% (two), and 87.5% (three) (p for trend < 0.001). Salvage morbidity was low, with delayed bleeding in 4.6% and perforation in 3.5%, while endoscopic modalities achieved R0 resection rates of $\geq 88\%$.

Conclusions Margin-positive rectal NETs resected by modified EMR or ESD very rarely harbor remnant tumors and may be managed with surveillance. By contrast, CFP or lesions showing yellowish mucosa or mucosal protrusion indicate high residual risk and warrant prompt salvage resection. This three-factor model may serve as a practical tool for individualized post-resection management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP072 Role of surveillance gastroscopy in gastric ulcer

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DOI 10.1055/s-0046-1821399

Aims Surveillance gastroscopy, defined as any gastroscopy performed within 3 months of the index examination to assess ulcer healing [1]. Surveillance gastroscopy guidelines or recommendations for gastric ulcers vary among international gastroenterology societies. It is being done as per physician discretion and institutional recommendations. There is limited data on surveillance gastroscopy for gastric ulcer.

Methods This retrospective study analysed data from our institutional endoscopy database (PACS2) between January 2016 and December 2023. Out of 144,947 gastroscopies performed, 3,348 patients had gastric ulcers, and 128 (3.8%) underwent surveillance gastroscopy within three months. The inclusion criteria were patients with gastric ulcers who underwent a surveillance gastroscopy and biopsy within 3 months of the first gastroscopy and were over 18 years of age.

Results The median interval for surveillance gastroscopy was 4.65 (3.1–8.4) weeks. Male to female ratio is 1.84:1. Majority of the ulcers 85 (66.4%) were in the antrum. 72 (56.2%) of patients had ulcer size of less than 1 cm. 119 (93%) of patients had regular border and 109 (85.2%) of patients had flat margins of the ulcer. Majority of the patients 41 (32%) did not undergo biopsy during the initial copy as they presented with an upper gastrointestinal bleed. Most of the ulcers 60 (46.8%) were healed on the surveillance copy. Importantly, all the surveillance endoscopic biopsies done were benign.

There were no malignant cases diagnosed based on surveillance gastroscopy among the 128 patients, which is consistent with previous studies [2, 3].

Conclusions Surveillance gastroscopy did not have any additive value in diagnosing gastric malignancy. Further prospective multicenter studies are needed to validate these findings and establish definitive clinical conclusions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lee YB, Han J, Cho JH, Lee HS. Clinical outcomes of endoscopic surveillance for gastric ulcers in populations with a high prevalence of gastric cancer. *Turk J Gastroenterol* 2016; 27 (5): 421–7
- [2] Mañas MD, Domper A, Albillos A, Hernández A, Carpintero P, Lorente R et al. Endoscopic follow-up of gastric ulcer in a population at intermediate risk for gastric cancer. *Rev Esp Enferm Dig* 2009; 101 (5): 317–24
- [3] Saini SD, Eisen G, Mattek N, Schoenfeld P. Utilization of Upper Endoscopy for Surveillance of Gastric Ulcers in the United States. *Am J Gastroenterol* 2008; 103 (8):. doi:10.1111/j.1572-0241.2008.01945.x

eP073 Obscure Overt GI Bleeding Caused By Small Bowel Cavernous Hemangioma: A Rare Case Report From Eastern India

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Abstract Text

Small bowel cavernous hemangioma is an uncommon benign vascular tumor, representing <0.05% of all gastrointestinal neoplasms [1]. Hemangiomas are histologically classified as capillary, cavernous, or mixed types, with cavernous hemangioma being the most common subtype affecting the small intestine, especially the jejunum [2]. These lesions may present with abdominal pain, obstruction, or gastrointestinal bleeding. When gastrointestinal bleeding persists despite non-diagnostic esophagogastroduodenoscopy (EGD) and colonoscopy, it is classified as obscure overt gastrointestinal bleeding (OOGIB) [3]. Because 5–10% of gastrointestinal bleeding originates from the small intestine [4], small bowel lesions must be considered in patients with recurrent or persistent bleeding when a routine evaluation fails to identify the bleeding source. We report a 40-year-old woman presenting with recurrent melena and post-prandial bloating for one year requiring multiple blood transfusions due to persistent severe anemia. On examination, she had severe pallor, and markedly reduced hemoglobin to 5.4 g/dL. Preliminary investigations, EGD, colonoscopy, and CT angiography were essentially normal. Further CT enterography

detected a hyperdense, arterial enhancing submucosal lesion in the small bowel. Capsule endoscopy showed aphthous ulcers and erosions in the proximal ileum, and double balloon enteroscopy (DBE) identified a subepithelial lesion measuring 1 × 1 cm with central umbilication. Endoscopic biopsy was deferred due to high risk of bleeding associated with vascular lesions and surgical excision was planned.

Exploratory laparotomy revealed a subepithelial mass (0.8 × 0.6 cm) in the distal jejunum. Segmental jejunal resection with primary anastomosis was performed. Histopathology demonstrated dilated vascular spaces lined by flattened endothelial cells, consistent with cavernous hemangioma. The patient remained symptom free postoperatively and subsequent follow up for a year. Cavernous hemangiomas of the small bowel are rare and may arise from any wall layer, from mucosa to serosa. A limited number of cases have been reported in India over the past decade. Most patients present with anemia or melena, sometimes complicated by obstructive features [5]. Capsule endoscopy and DBE are key diagnostic tools for identifying these lesions when conventional endoscopy is inconclusive. Surgical resection offers definitive treatment, especially in symptomatic lesions.

This case highlights the need to consider cavernous hemangioma in patients with unexplained anemia and OOGIB and emphasizes the diagnostic importance of advanced enteroscopic techniques.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rao AB, Pence J, Mirkin DL. Diffuse infantile hemangiomatosis of the ileum. *J Pediatr Surg* 2010; 45: 1890–2
- [2] Chen CH, Jones J, McGowan P. Profound iron deficiency anemia caused by a small-intestinal cavernous hemangioma. *Gastrointest Endosc* 2009; 69: 1392–3
- [3] Abdul Aziz DA et al. Bleeding small bowel cavernous haemangioma. *BMJ Case Rep*. 2011; 2011:bcr0820114672
- [4] Editorial Board of Chinese Journal of Digestion Consensus on diagnosis and treatment of small bowel bleeding (2018, Nanjing). *Zhonghua Xiaohua Zazhi*. 2018; 38: 577–82
- [5] Boyle L, Lack E. Solitary cavernous hemangioma of small intestine: Case report and literature review. *Arch Pathol Lab Med* 1993; 117: 939–41

eP074 Diagnostic Value of Esophagogastroduodenoscopy (EGD) and Duodenal Biopsies in Chronic Diarrhea

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Aims Chronic diarrhea, common in clinical practice and potentially serious, has multiple causes. In the absence of contributory laboratory findings, EGD with duodenal biopsies represents a major diagnostic tool, particularly in cases of malabsorption syndromes. The aim of this study was to assess the diagnostic value of EGD with duodenal biopsies in chronic diarrhea and to evaluate their usefulness in guiding patient management.

Methods This was a retrospective study based on EGD reports collected over a 4-year period, from January 2022 to August 2025. All patients presenting with chronic diarrhea who underwent EGD with duodenal biopsies were included.

Results Among 2499 patients who underwent EGD, 85 patients presented with chronic diarrhea, with a female predominance of 60% (n = 51), corresponding to a ratio M/F of 1.5. The median age was 33 years [range: 14–70 years]. Regarding medical history, diabetes was present in 8.2% (n = 7), systemic disease in 10.5% (n = 9), and inflammatory joint disease in 7% (n = 6). Clinically, epigastric pain was reported in 24.7% (n = 21), growth retardation in 5.8% (n = 5), and vomiting in 4.7% (n = 4).

In biological findings, iron-deficiency anemia was observed in 20 % (n = 17). Anti-transglutaminase antibodies, tested prior to endoscopy, were positive in 15.2 % (n = 13) and negative in 5.8 % (n = 5).

On endoscopic examination, erythematous gastritis was seen in 74.1 % of cases (n = 63), duodenal fold atrophy in 17.6 % (n = 15), erosive gastritis in 5.8 % (n = 5), and congestive gastritis, fundic fold effacement, and grade A esophagitis in 2.3 % (n = 2). Aphthoid duodenal ulcers were observed in only one case.

On histological examination, *Helicobacter pylori* infection was identified in 42.3 % (n = 36), celiac disease in 23.5 % (n = 20), pernicious anemia in 4.7 % (n = 4), and inflammatory bowel disease (IBD) in 2.3 % (n = 2).

Conclusions This study confirms the relevance of duodenal biopsies in the evaluation of chronic diarrhea. In our series, 23.5 % of cases were consistent with celiac disease, highlighting the central role of EGD in the diagnostic approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP075 Cost-Effectiveness of Computer-aided detection in Colorectal Cancer Screening

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DOI 10.1055/s-0046-1821402

Aims To estimate the cost of adopting computer-aided detection (CADE) in colonoscopy.

Methods We conducted a microsimulation-based cost-effectiveness analysis with European individuals aged 60–69 undergoing either (i) screening colonoscopy or (ii) colonoscopy after a positive biennial faecal immunochemical test (FIT) without and with computer-aided polyp detection (CADE). The CADE device was capacity-constrained to 10,000 individuals per device total in a 10-year timeframe (1,000 individuals per year). The main outcome measure was cost of CADE per CRC prevented.

Results In screening colonoscopy, each CADE device prevented 11 CRC cases. The additional cost per CRC prevented was \$ 64,402, of which \$ 2,888 (4.48 %) was attributable to the CADE purchase itself and \$ 61,514 (95.52 %) from follow-up colonoscopies. In colonoscopy after a positive faecal immunochemical test (FIT) with CADE, each CADE device prevented 5 CRC cases. The additional cost per CRC prevented was \$ 23,857, of which \$ 6,353 (26.63 %) was attributable to the CADE purchase and \$ 17,504 (73.37 %) from follow-up colonoscopies.

Conclusions Adopting CADE in colonoscopy will have additional cost in screening colonoscopy than in FIT positive colonoscopy.

Conflicts of Interest YM – Olympus Corp. (consultancy, speaking honorarium, devices on loan); Cybernet System Corp. (licensing fee)

eP076 Efficacy and safety of underwater endoscopic mucosal resection for small esophageal submucosal tumors

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DOI 10.1055/s-0046-1821403

Aims With the widespread use of upper endoscopy, esophageal submucosal tumors (SMTs) are increasingly detected during routine health screenings. Underwater endoscopic mucosal resection (UEMR) has recently emerged as a

novel approach that enables mucosal resection without submucosal injection, offering potential benefits in safety and efficacy. However, evidence on its application for esophageal SMTs remains limited.

Methods This retrospective single-center study analyzed 31 patients who underwent UEMR for esophageal SMTs between 2020 and 2024. Eligible lesions were < 15 mm in diameter and confined to the submucosal layer, as confirmed by endoscopic ultrasound (EUS). Demographic data, lesion characteristics, procedural details, and histopathologic results were reviewed. Primary outcomes included en bloc and pathological complete (R0) resection rates, with secondary outcomes assessing complications and recurrence during follow-up.

Results A total of 31 patients (mean age 57.0 ± 12.5 years; 61 % male) were included. The lower esophagus was the most frequent tumor site (45.2 %), and most lesions measured 5–10 mm (51.6 %). Histopathological diagnoses comprised leiomyomas (38.7 %), granular cell tumors (32.3 %), inflammatory fibroid polyps, and other benign entities. All tumors were successfully removed en bloc using UEMR, achieving a 100 % R0 resection rate. No major adverse events, including bleeding or perforation, occurred. During a median follow-up of up to 37 months, no local recurrence was observed, even among cases of granular cell tumor or adenoid cystic carcinoma.

Conclusions UEMR appears to be a safe and effective option for the management of small esophageal SMTs, demonstrating excellent en bloc and R0 resection outcomes without significant complications. These results support UEMR as a favorable alternative for small esophageal SMTs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP077 Reference range of pancreatic strain histograms using Endoscopic Ultrasound Elastography in healthy subjects: a pilot study

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DOI 10.1055/s-0046-1821404

Aims Strain histogram (SH) is a semi-quantitative elastographic method that characterizes tissue stiffness. Developing a pancreatic SH reference range would help detect parenchymal diseases, especially early chronic pancreatitis (CP). This study aimed to determine a pancreatic SH reference range using endoscopic ultrasound (EUS) in patients without evidence of pancreatic disease, comparing it with a sample of CP.

Methods In this single-center, retrospective observational study, all patients aged ≥ 18 years undergoing pancreatic EUS, without pancreatic focal lesions, were consecutively enrolled. The machine-integrated software calculated pancreatic SH in a region of interest (ROI) placed on the parenchyma. Three measurements were taken for each pancreas segment, including the head, body, and tail. The baseline clinical parameters were documented. In the first step were conducted descriptive-inferential analyses of the entire sample and the subgroups (healthy vs CP), then was performed a predictive analysis using univariate and multivariate linear regression in the subgroups of healthy controls to identify the most important predictive features of pancreatic stiffness.

Results We enrolled 143 patients (54.5 % female, mean age 63 years), 95 of whom were healthy and 48 with CP. In inferential analysis it's possible to notice the difference between SH values of every segment in the subgroups, with greater values for the healthy controls group (116.8 vs 69.1, p < 0.01). There is also a difference in prevalence of smoke, with a higher frequency in patients with CP (58.3 % vs 23.2 %, p < 0.01), and of alcohol abuse, although the latter was more nuanced and not statistically significant (25 % vs 11.6 %, p = 0.13). In the predictive analysis, the results of the previous inferences were confirmed: smoking and alcohol abuse are strongly predictive of a lower pancreatic stiffness of healthy controls ($\beta = -16$ and -21 , p < 0.01), while female sex is associated with a higher stiffness although not in a statistically significant way ($\beta = 5$ and p-value 0.2).

Conclusions SH enables real-time assessment of pancreatic stiffness and, given our findings, could assist in clinical practice in identifying early parenchymal disease, particularly early CP, due to the notable difference in stiffness values. Furthermore, associating clinical factors with EUS findings may aid the diagnosis of CP, as we have demonstrated with smoking and alcohol abuse. External validation of our SH reference range and more extensive studies are necessary.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP078 Dental Floss Clip Traction in Endoscopic Resection for Gastric Neoplasms: A Meta-Analysis with Meta-Regression and Trial Sequential Analysis

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DOI 10.1055/s-0046-1821405

Aims Dental floss clip traction (DFC) has been introduced to enhance visualization and shorten dissection time during endoscopic submucosal dissection (ESD) and endoscopic full-thickness resection (EFTR) for gastric neoplasms. However, its overall benefit and modifying factors remain uncertain. This study systematically evaluated the efficacy and safety of DFC-ESD and DFC-EFTR compared with conventional techniques (C-ESD and C-EFTR) and explored moderators using meta-regression and trial sequential analysis (TSA).

Methods Following PRISMA guidelines and the Cochrane Handbook, we searched PubMed, Scopus, Ovid, Web of Science, Cochrane Central, and CNKI to October 18, 2025. Randomized and observational studies comparing DFC-ESD or DFC-EFTR with conventional techniques were eligible. Pooled estimates were computed in R (meta 7.0-0) using random-effects models, reporting mean differences (MD) or risk ratios (RR) with 95% CIs. Prespecified meta-regression assessed lesion site, ulceration, tumor size, and study design as potential effect modifiers. Trial sequential analysis determined conclusiveness and required information size. Study quality was assessed by ROB-2 and Newcastle–Ottawa Scale, and the certainty was graded via GRADE [1–8].

Results We included eight studies with a total of 2,183 patients. Five studies on DFC-ESD and three on DFC-EFTR. For the DFC-ESD vs C-ESD, the overall pooled procedure time showed a nonsignificant trend favoring DFC-ESD (MD = −5.4 min, 95% CI [−13.8, 2.9]; $p = 0.20$; $I^2 = 79\%$). Subgroup analysis revealed significant reductions for non-ulcerated lesions (MD = −5.0 min; $p < 0.01$) and for lesions in the upper/middle greater curvature, posterior wall, lower anterior, and lower posterior wall (all $p < 0.05$). Meta-regression identified the lesion site as a significant moderator ($p = 0.02$), whereas ulceration and tumor size were not ($p > 0.10$). Rates of En bloc (RR = 1.00; $p = 0.66$), R0 (RR = 1.01; $p = 0.42$), complete resection (RR = 1.00; $p = 0.60$), perforation (RR = 0.59; $p = 0.21$), and delayed bleeding (RR = 1.17; $p = 0.54$) were comparable between groups. TSA confirmed sufficient evidence for the reduction in procedure time among non-ulcerated and posterior-wall lesions but inconclusive power for safety outcomes. For the DFC-EFTR vs C-EFTR, the analysis demonstrated shorter operative time with DFC-EFTR (MD = −8.3 min; 95% CI [−10.4, −6.2]; $p = 0.03$; $I^2 = 0\%$). However, Hospital stay (MD = −0.01 days; $p = 0.93$) and pneumoperitoneum (RR = 0.46; $p = 0.26$) did not differ. TSA confirmed conclusiveness for operation-time reduction but suggested further evidence is required for secondary endpoints.

Conclusions DFC-ESD was associated with shorter operation times, particularly in non-ulcerated lesions and those located at the upper/middle greater curvature, upper/middle posterior wall, lower anterior wall, and lower posterior wall. Similarly, DFC-EFTR demonstrated reduced procedure times compared to C-EFTR. However, given the novelty of the DFC technique, its performance may vary across gastric sites, and certain limitations remain. Therefore, further

large-scale, high-quality RCTs are warranted to confirm its efficacy, clarify its optimal indications, and ensure consistent safety outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Xiao Z, Yu B, Wang Y. 2022; Application of dental floss traction assistance in endoscopic resection of gastric fundus muscularis propria tumors. *Modern Oncology*(18): 3335–3339. CNKI:SUN: SXZL.0.2022-18-016
- [2] Xu J.-H., Cheng Z.-X. "Application of dental floss traction assisted endoscopic submucosal excision in treatment of gastric submucosal tumors,". *WCJD* vol. 30 (no. 15): pp 680–685. Aug 2022. doi:10.11569/wcjd.v30.i15.680
- [3] Suzuki S. et al. Usefulness of a traction method using dental floss and a hemoclip for gastric endoscopic submucosal dissection: a propensity score matching analysis (with videos). *Gastrointest. Endosc.* vol. 83 (no. 2): pp 337–346 2016. doi:10.1016/j.gie.2015.07.014
- [4] Shi Q. et al. Clinical Values of Dental Floss Traction Assistance in Endoscopic Full-Thickness Resection for Submucosal Tumors Originating from the Muscularis Propria Layer in the Gastric Fundus. *J. Laparoendosc. Adv. Surg. Tech. A* vol. 28 (no. 10): pp 1261–1265 2018. doi:10.1089/lap.2018.0030
- [5] Li B. et al. The efficacy of dental floss and a hemoclip as a traction method for the endoscopic full-thickness resection of submucosal tumors in the gastric fundus. *Surg. Endosc.* vol. 33 (no. 11): pp 3864–3873 2019. doi:10.1007/s00464-019-06920-w
- [6] Tamari H. et al. Indications for Dental Floss Clip Traction During Gastric Endoscopic Submucosal Dissection by Less-Experienced Endoscopists. *J. Gastric Cancer* vol. 23 (no. 4): pp 512–522 2023. doi:10.5230/jgc.2023.23.e37
- [7] Yamada K., Tajika M., Tanaka T., Ito N., Takagi A., Niwa Y. "Efficacy of a novel traction method: outside-lesion clip-thread method for gastric endoscopic submucosal dissection of lesions of the greater curvature of the upper/middle stomach (with video). *Surg. Endosc.* 2024. doi:10.1007/s00464-024-11165-3
- [8] Yoshida M. et al. Conventional versus traction-assisted endoscopic submucosal dissection for gastric neoplasms: a multicenter, randomized controlled trial (with video). *Gastrointest. Endosc.* vol. 87 (no. 5): pp 1231–1240 2018. doi:10.1016/j.gie.2017.11.031

eP079 Outpatient endoscopic resection of ampullary lesions

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DOI 10.1055/s-0046-1821406

Aims Ampullary lesions are rare, with an annual incidence of approximately 1:100,000. However, there is evidence that their incidence is increasing in patients aged > 50 years. Although predominantly benign, many lesions transform into malignancy and can also cause cholangitis and pancreatitis. Timely resection is therefore warranted in selected cases. This study aimed to assess the safety, efficacy, and clinical outcomes of outpatient endoscopic resection (ER) of ampullary lesions performed at a single tertiary center.

Methods Between 2021 and 2024, 13 patients (11 men, 2 women; age range 62–88 years, median age 70.8 years) underwent a total of 14 ER procedures for ampullary lesions. All patients underwent baseline assessment with upper endoscopy, computed tomography, magnetic resonance imaging, and endoscopic ultrasound. The most common clinical features were abdominal pain and obstructive jaundice. Imaging studies were performed every 6 months after ER.

Results Follow-up ranged from 6 to 48 months (median 28 months). En bloc ER was achieved in 92% of procedures. Only one case of recurrence was observed at 6 months and successfully managed endoscopically. Two patients required surgical resection after ER because biopsy specimens showed invasive adenocarcinoma. Five patients received a 5-Fr pancreatic stent, and 10 patients received rectal nonsteroidal anti-inflammatory drugs after the procedure. Figure 1 shows a case of ampullary adenoma with vegetative appearance. Figure 2 shows an ampullary adenoma covered with normal mucosa. One patient was admitted to the emergency department 48 hours after ER with gastrointestinal

bleeding and hemodynamic repercussion, where she received medical care and blood transfusion. Upper endoscopy showed a visible vessel at the margin of the ulcer, which was successfully treated endoscopically. She was discharged 48 hours later.

Conclusions Outpatient ER of ampullary lesions is a safe therapeutic modality, with low complication and recurrence rates. Careful preoperative evaluation with endoscopic ultrasound is essential to assess local invasion and avoid ER in cases suspicious for malignancy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP080 Impact of infection on clinical outcomes in Pancreatic Walled-Off Necrosis

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DOI 10.1055/s-0046-1821407

Aims Infection is a key determinant of morbidity in patients with pancreatic walled-off necrosis (WON), yet data on microbial characteristics and the effectiveness of antibiotic regimens remain insufficiently described. This study aimed to characterize the microbial flora of WON at the index intervention and to evaluate its association with clinical outcomes.

Methods We retrospectively included consecutive patients with WON who underwent endoscopic ultrasound (EUS)-guided transmural drainage between 2010 and 2024 at a tertiary referral center. The index intervention was defined as the first drainage procedure during which fluid/pus was obtained for microbiological culture. Patients were excluded from the analysis if microbiological sampling could not be performed at the index intervention (e.g. due to inaccessibility of the necrotic cavity).

Primary endpoints were the microbial flora and its association with mortality, ICU admission, and length of stay (LOS). Secondary endpoints included microbiological susceptibility to empiric antibiotic regimens and the predictive value of C-reactive protein (CRP) and white blood cell count (WBC). Infected necrosis was defined by positive bacterial or fungal cultures; sterile necrosis by negative cultures.

Results Of 345 patients with WON, 300 were eligible for analysis. Culture-positive infection was identified in 251 patients (83.7%), most often polymicrobial (65%). The predominant pathogens were *Enterococcus faecium* (47%), *Escherichia coli* (20%), and *Candida albicans* (22%). Patients with infected necrosis had higher rates of ICU admission (35.1% vs. 18.4%; OR 2.39, $p=0.020$), with no statistically significant difference in mortality (10.4% vs. 2.0%; OR 5.55, $p=0.096$) and LOS (median 79 days (IQR: 56–109.5) vs. 76 days (IQR: 65–116); OR 1.21, 95% CI 0.66–2.24; $p=0.64$). Despite antibiotic use in 240 patients (80%) before sampling, infection remained highly prevalent, and infected necrosis was more common among those receiving antibiotics compared with those who did not (86.3% vs. 73.3%; $p=0.026$). Of 518 organisms isolated, only 35.5% were susceptible to administered antibiotics or antifungals prior to intervention. Both CRP and WBC were independently associated with infection (OR per 10 mg/L CRP 1.05, 95% CI 1.02–1.09; OR per 1×10^9 /L WBC 1.09, 95% CI 1.03–1.16), although discriminatory performance was modest ($AUC \leq 0.66$).

Conclusions Infection in WON is mostly polymicrobial and associated with prolonged ICU admission.

Conflicts of Interest John Gásdal Karstensen is a consultant for Ambu, Biodexa, Boston Sci, Olympus, and SNIPR BIOME and received speaker fee from Norgine and Olympus. The remaining authors have no conflicts of interest to declare.

eP081V Covergel Application Following EMR to Reduce Delayed Post-procedural Bleeding

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DOI 10.1055/s-0046-1821408

Introduction: Endoscopic mucosal resection (EMR) of large non-pedunculated colorectal lesions (≥ 20 mm) with a GSEED-RE2 score ≥ 4 carries a high risk of delayed bleeding, even when prophylactic clip closure is performed. Covergel is a thermosensitive biogel specifically designed to protect mucosal defects and enhance healing.

Case description: We report four high-risk cases treated with EMR plus preventive Covergel application: Case 1, 81-year-old male, 30-mm 0-Is cecal lesion (7 points); Case 2, 80-year-old male, 40-mm 0-II-Gnh splenic flexure lesion (6 points); Case 3, 57-year-old male, 45-mm 0-Is sigmoid lesion (6 points); Case 4, 59-year-old male, 40-mm 0-IIa-NG cecal lesion (6 points).

Conclusions: No delayed bleeding or adverse events occurred, suggesting Covergel as a promising adjunct to prevent post-EMR hemorrhage in high-risk lesions [1].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8924f38f-f7ec-4dbd-83eb-f2b3c5dd0a8e/Uploads/19978_Covergel_4%20cases.mp4

Conflicts of Interest Vicente Lorenzo-Zúñiga is the author of the Covergel patent

References

[1] Lorenzo-Zúñiga V, Boix J, Moreno de Vega V, Bon I, Marín I, Bartolí R. Endoscopic shielding technique with a newly developed hydrogel to prevent thermal injury in two experimental models. *Digest Endosc* 2017; 29 (6): 702–711

eP082 Endoscopic Management of Gastrointestinal Perforations, Leaks, and Fistulas Using the Over-the-Scope Clip (OTSC) System: Early Multicenter Experience in Mongolia

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DOI 10.1055/s-0046-1821409

Aims Endoscopic approaches to gastrointestinal (GI) perforations, leaks, and fistulas remain in an early stage of development in Mongolia. However, with recent advances in equipment and endoscopic skills, minimally invasive closure techniques have rapidly gained ground. Among these, the **Over-the-Scope Clip (OTSC)** system has emerged as a key innovation, enabling effective closure of small defects and reducing the need for surgical re-intervention.

Methods A retrospective review was conducted of **30 patients** treated with the OTSC system between 2024 and 2025 in six tertiary centers across Mongolia (Brilliant Hospital, NCCD, MCH, MNUMS Hospital, And-Med, and Mungun Guur). Indications included post-surgical leaks, perforations (post-ESD, post-ERCP, or postoperative), fistulas, and foreign body-related defects. Two pediatric cases (aged **1 and 8 years**) were successfully treated using OTSC *mini* (► Table 1).

► Table 1

Group	Number of Cases	Successful	Unsuccessful	Unrelated Mortality
1. Esophagus & Pharynx	14	13	1	2
2. Stomach	4	4	0	0
3. Small Intestine (including Duodenum & Colon)	10	8	2	2
Total	28 (30 OTSC placements)	25 (90%)	3 (10%)	3

Results The overall technical success rate was 90 %, and all OTSC applications achieved complete closure. Two patients died from underlying systemic disease unrelated to the endoscopic procedure. The majority of cases (≈ 60 %) involved post-surgical leaks, most frequently in the **esophagus and duodenum**. The procedure was found to be **simple, quick to learn, and technically feasible**, even in limited-resource settings, providing a practical alternative to surgery. **Conclusions** The introduction of OTSC in Mongolia represents a major step forward in endoscopic management of GI complications. This technique offers a **safe, effective, and minimally invasive** solution for perforations and leaks, especially after esophago-jejunal or duodenal anastomoses. These early multicenter results demonstrate the growing capability of Mongolian endoscopists to manage complex GI defects endoscopically and highlight the expanding role of OTSC as a standard therapeutic tool in the region.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP083 Combined Endoscopic and Laparoscopic Surgery (CELS): Experience in Our Center

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DOI 10.1055/s-0046-1821410

Aims Combined Endoscopic and Laparoscopic Surgery (CELS) is a relatively uncommon technique used to treat benign, complex, and endoscopically unresectable colonic lesions. It has emerged as an alternative to conventional surgical resection or endoscopic submucosal dissection (ESD). The aim of this study is to evaluate the safety and clinical outcomes of this technique in our center.

Methods We conducted a retrospective, single-center, observational study assessing short-term outcomes in patients with endoscopically unresectable colonic polyps who underwent CELS between January 2023 and June 2025. Endoscopic features, resection technique, postoperative outcomes, hospital stay, and pathological findings were analyzed.

Results Seven patients (mean age: 65.3 years; 2 women, 5 men) underwent the procedure. The main reasons for performing CELS were lesion size (three lesions larger than 30 mm), involvement of the appendiceal orifice (three cases), and in one patient, the presence of scar tissue rendering the lesion unresectable. All lesions had an adenomatous appearance (NICE type 2) and were located in the cecum, as lesions in other colonic segments were referred for ESD.

In all cases, laparoscopic cecectomy assisted by endoscopy was performed without conversion to open surgery. Surgical time was not recorded. The median hospital stay was 1 day (range: 1–10 days); the longest stay corresponded to a patient who developed medical complications (pneumonia and atrial fibrillation).

Histological examination revealed three tubular adenomas (one with high-grade dysplasia), two adenocarcinomas (one pTis and one pT1), one mucinous cystic neoplasm, and one fibrous obliteration of the appendix. All specimens had clear margins.

Follow-up colonoscopies at 6 and 12 months were performed in three patients, with no evidence of recurrence; the remaining patients are still awaiting their scheduled surveillance colonoscopies.

Conclusions CELS is a safe technique with favorable short-term outcomes and should be considered a viable alternative for the management of complex benign colonic polyps in patients who are not suitable candidates for ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP084 Successful Endoscopic Management of Bouveret Syndrome, caused by a massive gallstone: A Rare Cause of Gastric Outlet Obstruction

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DOI 10.1055/s-0046-1821411

Background:Bouveret syndrome is a rare manifestation of gallstone ileus, accounting for less than 3 % of cases, and arises from the impaction of a gallstone in the pylorus or duodenum via a bilioenteric fistula [1, 2]. It predominantly affects elderly patients with long-standing cholelithiasis and is associated with delayed diagnosis, significant morbidity, and high mortality [1, 3]. The optimal management approach remains debated, particularly in frail patients [4, 5]. We report a case of Bouveret syndrome in a 92-year-old female successfully treated using combined endoscopic lithotripsy techniques, demonstrating the viability of minimally invasive management in high-risk individuals.

Case Description:A 92-year-old female with advanced frailty and multiple comorbidities presented with right upper quadrant pain, nausea, and vomiting. Computed tomography revealed pneumobilia, a cholecystoduodenal fistula, and a large duodenal gallstone causing gastric outlet obstruction. Endoscopic evaluation confirmed an 8 cm impacted gallstone in the duodenal bulb. Electrohydraulic and mechanical lithotripsy were used to fragment and mobilise the stone into the stomach, achieving complete clearance in a three-hours endoscopic procedure, done under general anaesthesia.

Outcome:The patient's symptoms and liver function tests normalised post-procedure. Subsequently, she developed a distal gallstone ileus due to migration of a fragment. Given a predicted high perioperative mortality, conservative management was chosen. Spontaneous passage of the stone ensued, with full radiological and clinical resolution, and the patient was discharged in good condition.

Conclusion:Endoscopic lithotripsy represents a safe and effective alternative to surgery for Bouveret syndrome in frail, elderly patients [4, 5]. Early CT or MRCP imaging is key to diagnosis [3], while multidisciplinary, patient-centred management optimises outcomes in this rare but serious complication of gallstone disease [4, 5].

Keywords:Bouveret syndrome; Endoscopic lithotripsy; Gastric outlet obstruction; Cholecystoduodenal fistula; Gallstone ileus

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Adnan AI, Vaz OP, Lapsia S, Sultana A, Ahmed MA. Bouveret's Syndrome: a case series and literature review on a gallstone disease causing gastric outlet obstruction. J Surg Case Rep 2024; 2024 (4):rjae809
- [2] Caldwell KM, Lee SJ, Leggett PL, Bajwa KS, Mehta SS, Shah SK. Bouveret syndrome: current management strategies. Clin Exp Gastroenterol 2018; 11: 69–75

- [3] Wang F, Du ZQ, Chen YL, Chen TM, Wang Y, Zhou XR. Bouveret syndrome: a case report. *World J Clin Cases* 2021; 9 (15): 3646–3652
- [4] Reisner RM, Cohen JR. Gallstone ileus: a review of 1001 reported cases. *Am Surg* 1994; 60 (6): 441–446
- [5] Cappell MS, Davis M. Characterization of Bouveret's syndrome: a comprehensive review of 128 cases. *Am J Gastroenterol* 2006; 101 (9): 2139–2146

eP085 Inflammatory Bowel Disease Patients need Higher Opioid Analgesic for Intravenous Conscious Sedation for Colonoscopy

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DOI 10.1055/s-0046-1821412

Aims Patients with inflammatory bowel disease (IBD) require colonoscopy for diagnosis, disease activity assessment, and dysplasia surveillance. Patients with IBD reported lower satisfaction with sedation during colonoscopy and increased procedural pain compared with individuals without IBD. This study aimed to examine sedation requirements of IBD patients undergoing colonoscopy.

Methods A retrospective cohort study of IBD and non-IBD patients presenting for colonoscopy between January 2020 and December 2024 was undertaken. Data collected included patient and procedure focused variables. Sedation was performed as intravenous conscious sedation (IVCS) using midazolam and propofol. The opioid analgesic, pethidine was added if the sedation level was not adequate for procedures.

Results A total of 1655 consecutive colonoscopies (253 IBD, 1402 non-IBD) were analyzed. For IVCS, 11.1 % of IBD patients required Midazolam only (M), 41.9 %, Midazolam and propofol (MP), and 47.0 %, Midazolam, Propofol and opioid (MPO) versus 11.7 % of non-IBD required M, 69.1 % MP and 19.2 % MPO respectively. Among IBD patients (CD 52, UC 201), active disease state required MPO in 51.6 % (66/128) versus inactive state 42.4 % (53/125) ($p = 0.18$). Propofol administration (mg) was 25.4 ± 13.3 in IBD and 23.7 ± 12.7 in non-IBD ($p = 0.07$).

Conclusions IBD patients required more opioid analgesic for IVCS compared with non-IBD patients. IBD patients showed similar opioid requirement both active and inactive disease state. Since patients with inflammatory bowel disease consistently show a low pain threshold even in a remission state, these study results show that it is necessary to administer appropriate analgesics together to increase patient satisfaction during IVCS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP086 Synchronous Gastric and Sigmoid Colonic MALT Lymphoma Associated with Helicobacter pylori Infection: A Rare Case report

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DOI 10.1055/s-0046-1821413

Background: Extranodal marginal zone B-cell lymphoma mucosa-associated lymphoid tissue (MALT lymphoma) most frequently affects the stomach and is linked to *Helicobacter pylori* infection, which promotes chronic antigenic stimulation and lymphoid proliferation [1, 2]. Colon involvement is rare, and synchronous gastric and colonic MALT is extremely rare, with less than 20 cases reported worldwide. Because clinical manifestations mimic inflammatory or benign colonic disease, diagnosis may be delayed [3, 4]. The few documented cases present make the underlying mechanisms unclear, and the diagnostic approach remains challenging [3, 4]. We report a case of synchronous gastric

and sigmoid colon MALT lymphoma associated with *H. pylori* infection in a 50-year-old man being treated with eradication therapy, periodic imaging, and endoscopic surveillance.

Case Description: A 50-year-old man with no significant past medical history presented with several months of intermittent abdominal pain, bloating, constipation, and mucus discharge per rectum. Clinical examination revealed small internal haemorrhoids and mild left lower-quadrant tenderness. Esophagogastroduodenoscopy (OGD) demonstrated a crater-like ulcer in the mid-gastric body with surrounding irregular mucosa. Histopathology revealed a low-grade B-cell lymphoma consistent with gastric MALT type. Given persistent lower abdominal discomfort, a colonoscopy was performed, revealing a 40mm hemi-circumferential ulcerated and oedematous lesion in the sigmoid colon. Biopsies revealed dense lymphoid infiltrates with features of marginal zone lymphoma.

Outcome: The patient received two courses of *H. pylori* eradication therapy. Follow-up upper endoscopy showed marked regression of the gastric lesion into a fibrotic scar. Biopsies from this area, however, continued to demonstrate residual morphological and immunophenotypic features consistent with MALT lymphoma, while the lesion appeared endoscopically inactive. The patient remained asymptomatic, and imaging was stable, leading to a "watch-and-wait" strategy, including periodic imaging and joint endoscopic surveillance by gastroenterology and haematology services.

Conclusion: Synchronous gastric and colonic MALT lymphoma is an exceedingly rare presentation of extranodal marginal zone lymphoma [5]. This case highlights the diagnostic importance of correlating imaging, endoscopic, and histopathologic findings in patients with nonspecific gastrointestinal symptoms, as is the therapeutic impact of *H. pylori* eradication. A conservative approach with histological reassessment and close follow-ups is the most reasonable for localized, indolent disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nakamura S, Matsumoto T, Iida M, Yao T, Tsuneyoshi M. Primary gastrointestinal lymphoma in Japan: a clinicopathologic analysis of 455 patients with special reference to its time trends. *Cancer* 2003; 97 (10): 2462–2473. doi:10.1002/cncr.11415
- [2] Nakagawara M, Kajimura M, Hanai H, Shimizu S, Kobayashi H, Kaneko E. Simultaneous mucosa-associated lymphoid tissue lymphoma of the stomach and colon. *Gastrointest Endosc* 1999; 50 (3): 414–415. doi:10.1053/ge.1999.v50.97947
- [3] Singh K, Gandhi S, Doratotaj B. Synchronous MALT lymphoma of the colon and stomach and regression after eradication of *Strongyloides stercoralis* and *Helicobacter pylori*. *BMJ Case Rep*. 2018; bcr2018224795 Published 2018. doi:10.1136/bcr-2018-224795
- [4] Thieblemont C et al. MALT lymphomas: from pathogenesis to treatment. *Blood*. 2016; 127 (17): 2082–2092
- [5] Zucca E et al. Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue. *Nat Rev Clin Oncol* 2020; 17 (8): 510–524

eP087 Measurement of colonic polyps. Is visual estimation accurate to determine subsequent surveillance colonoscopy?

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DOI 10.1055/s-0046-1821414

Aims We aim to compare the estimation of polyp size using the visual estimation of colon polyp with or without the open biopsy forceps technique against actual polyp size measurement by our histopathology department for all polyps > 1 cm in size.

Methods A single centre, retrospective analysis of 47 consecutive patients who have had polypectomies done for polyps > 1 cm in size from April 2024 at a hospital in North London. The data was collected using the Medilogic endoscopy reporting tool and the electronic patients record. The size of the polyps documented in the endoscopy report was then compared to the lab measured actual polyp size.

Results 25/47 (53 %) polyps greater than 1cm had similar histological size to endoscopic size estimate. 22/47 (47 %) of polyps greater than 1cm had poor correlation of size with histology, of which 21 had size overestimated at endoscopy in comparison to histology.

Conclusions Colon polyp size is a critical biomarker for clinical management of colonic polyps. Larger polyps have a greater malignant potential. During colonoscopy, it is important to correctly measure the size of the polyps because of the direct correlation of size with colon cancer and defining a polyp as high-risk polyp which aids appropriate further surveillance colonoscopy. During polypectomy, size of the colonic polyps encountered are often gauged by visual estimation or the open forceps method. However, some data exists on the questionable reliability of a visual estimate even amongst expert colonoscopists.

From this study, we can conclude that visual estimation of polyp size at endoscopy is inaccurate with wide variations between the reported size and the actual size of the polyps. Accurate measurement of colonic polyps is important as inaccuracies can lead to potentially larger polyps not being tattooed and patients with smaller polyps having to attend for subsequent surveillance colonoscopy when they could have been safely discharged as per current ESGE guidelines. We advocate that the 'gold standard' practice of direct measurement of the polyp once excised and outside the body be adopted and this be used to guide subsequent management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP088 Polypectomy techniques in clinical practice for right sided polyps. Do we follow the ESGE guidelines?

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DOI 10.1055/s-0046-1821415

Aims We aimed to assess the current practice in our institution in terms of polypectomy technique of right sided polyps in comparisons to the ESGE standards.

Methods A single centre, retrospective analysis of 100 consecutive patients who have had polypectomy of any size from April 2024 at a hospital in North London was undertaken. Patients who had polypectomy from the right side of the colon, defined as polyps in the caecum, ascending colon and hepatic flexure, were then analysed. The data was collected using the Medilogic endoscopy reporting tool, and the electronic patients record. The technique used for polypectomy, along with the type of polyp at histology retrieved, was scrutinized and compared with obedience of ESGE guidance on polypectomy technique.

Results A total of 70 right sided polyps were detected and analysed from polypectomies across the 100 patients. Of those, 53 polypectomies (76 %) followed ESGE recommendations and 17 (24 %) did not. The non-compliant polypectomy methods used included cold biopsy, hot endoscopic mucosal resection (EMR) for SSL or polyps less than 10mm and hot snare for polyps less than 10mm (see ► Table 1).

► Table 1

Polypectomy method compliant with ESGE		Polypectomy method non-compliant with ESGE	
Cold snare or cold EMR for all			
SSL	9	Hot EMR for SSL	2
Cold snare or cold EMR			
< 10mm	32	Cold snare or cold EMR > 10mm	4
Hot EMR > 20mm	11	Hot EMR < 10mm	2
ESD	1	Hot snare < 10mm	1
		Cold biopsy	8
Total in line with ESGE:	53 (76 %)	Total not in line with ESGE:	17 (24 %)

Conclusions Polypectomy on the right side of the colon pose a challenge due to its thin wall increasing the risk of perforation. New guidelines from the European Society of Gastrointestinal Endoscopy (ESGE) recommend using cold snare polypectomy in polyps < 10mm, as well as use of cold snare polypectomy technique for serrated sessile lesions (SSL) of all sizes to reduce the risk of delayed bleeding. The guidance also recommends avoiding cold biopsy for polyp resection to reduce the risk of recurrence.

This study shows insufficient compliance to the ESGE guidelines in our department with regards to polypectomies performed on right side of the colon. Almost a third of polypectomies not in line with ESGE guidance (5/17) involved inappropriate diathermy use, which may have increased the risk of perforation. Although, these risks can be mitigated slightly through prophylactic use of clips, this is less cost effective and could be avoided through increased use of cold EMR or cold snare polypectomy in the right colon for smaller polyps. In addition, many endoscopists are still carrying out cold biopsies on small polyps (8/70, 11 %), which ESGE recommends avoiding due to the likelihood of incomplete resections and therefore increased risk of local recurrence. We conclude that there is inadequate adherence to the latest ESGE guidelines with regards to right sided polypectomies. We recommend better dissemination and implementation of the ESGE guidelines to enhance clinical practice with regards to polypectomy techniques.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP089 Resection of sessile serrated lesions (SSL) in clinical practice. How well do we do?

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DOI 10.1055/s-0046-1821416

Aims We aimed to assess the current practice in terms of polypectomy technique of SSL in comparisons to the ESGE standards.

Methods A single centre, retrospective analysis of consecutive patients who have had polypectomies done for SSL of any size from April 2024 at a hospital in North London was undertaken. The data was collected using the Medilogic endoscopy reporting tool, and the electronic patients record. The technique used for polypectomy, along with the type of polyp at histology retrieved, was scrutinized and compared with ESGE recommendation on polypectomy technique for SSL.

Results Of 177 polypectomies, 18 SSLs of varying sizes were confirmed at histology. 13 of these (72%) were retrieved using cold snare polypectomy with or without EMR, in line with ESGE guidelines. The remaining 5 SSLs (28%) were retrieved using either hot EMR or cold biopsy.

Conclusions Sessile serrated lesions (SSL) have been recognised in the last decade as important premalignant lesions accounting for between 15% and 30% of colorectal cancers. According to European Society of Gastrointestinal Endoscopy (ESGE) guidelines, cold snare polypectomy is recommended for SSLs <10mm, and cold snare polypectomy or piecemeal cold snare polypectomy with or without endoscopic mucosal resection (EMR) technique for SSL <19mm. This technique is adopted to reduce thermal damage from diathermy techniques reducing the complications of delayed bleeding and perforation.

Through this study, we can conclude that a significant proportion of SSLs are still being extracted using methods inclined to increase thermal damage. The current ESGE guidelines, with regards to SSL polypectomies has not been fully implemented in clinical practice. We recommend better dissemination and implementation of these guidelines, which in turn, could lead to reduced iatrogenic perforation rates and cases of post-procedural bleeding, as well as cost savings in using less resource

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP090 Environmental impacts of current bowel preparations for colonoscopy : life cycle assessment and biodegradability

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 DOI 10.1055/s-0046-1821417

Aims Bowel preparation is an essential prerequisite for high-quality colonoscopy, while clinical performance and patient acceptability have traditionally guided the choice of preparation, their environmental impact has remained largely overlooked. This study aims to conduct a comparative LCA of 5 current bowel preparations used in clinical practice.

Methods A life cycle assessment was performed independently for 5 of the most current bowel preparation available on the market, with 3 polyethyleneglycols (PEG-4L, PEG-2L-A, and PEG-2L-B) and 2 oral sodium sulfate ones (OSS-1, OSS-2). A cradle to grave boundary method was used from raw extraction to end of life. Main environmental impacts were evaluated including carbon footprint, ecotoxicity, water and fossil resources depletion, human toxicity and eutrophication.

Results Carbon footprint of the different bowel preparations varied from 0.118 kg CO₂eq per unit (OSS-1), 0.585 (OSS-2), 0.684 (PEG-2L-A), 0.685 (PEG-2L-B) and 0.814 kg CO₂eq (PEG-4L). Active ingredient had less impact in oral sulfate prep (OSS-1 : 0.08 kg CO₂e, OSS-2 : 0.012 KgCO₂e) than for PEG (PEG-2L-A 0.6 kg CO₂e, PEG-2L-B 0.5 kg CO₂eq, PEG-4L 0.8 kg CO₂e). Packaging was varying from 0.03 for OSS-1 to 0.454 Kg CO₂e for OSS-2. Use of fossil resources varying from 1.6 MJ per unit (OSS-1), 10.7 MJ (OSS-2), 13.9 MJ (PEG-2L-B), 15.6 MJ (PEG-2L-A), to 19.3 MJ (PEG-4L). Biodegradability of the PEG reached 40% at 14 days and 60.4% at 28 days in manometric respirometry test.

Conclusions Oral sulfate bowel preparation with minimalist packaging (OSS-1) has very low environmental impacts compared to other bowel preparations like PEGs, which active ingredient is consuming far more to be produced, or

like other sulfate preparations with very heavy packaging (plastic bottles). Biodegradability of PEG has struggled to meet the established standard at 28 days but not at 14, whereas conventional wastewater treatment plants in our country usually keep sludge for less than 20 days. Environmental sobriety should become a criterion of choice at the time of product prescription and for future ecologic conception of drugs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePosters 02

eP091 Transnasal Endoscopy in Upper GI Cancer Pathways: Real-World Diagnostic Yield, Safety, and Operational Impact

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 DOI 10.1055/s-0046-1821418

Aims Transnasal endoscopy (TNE) is an unsedated alternative to conventional oesophagogastroduodenoscopy (OGD), enabling upper gastrointestinal (UGI) assessment via an ultrathin endoscope under topical anaesthesia. Randomised trials confirm comparable diagnostic accuracy and patient acceptability, yet large-scale real-world data are limited. Rising UK endoscopy demand and the NHS Faster Diagnosis Standard (FDS), requiring cancer diagnosis or exclusion within 28 days, necessitate pathway innovation. We evaluated diagnostic yield, safety, and operational performance of a newly implemented TNE service for patients with UGI symptoms, including urgent suspected cancer (two-week-wait, 2WW) referrals, in a UK tertiary centre [1–5].

Methods All patients undergoing TNE between April and August 2025 were included in this prospective observational study. Referrals originated from routine and 2WW suspected UGI cancer pathways. Procedures were performed by JAG-accredited endoscopists in a dedicated TNE suite under topical anaesthesia without sedation. Data collected included demographics, referral indication, completion rate, same-day oral OGD conversion, cancer detection, non-attendance (DNA) rate, incomplete procedure waiting list (IPWL) delay, and complications. Outcomes were compared between Q1 (April–June) and Q2 (July–August) to assess scalability. Benchmarking was performed against UK National Endoscopy Database (NED) OGD data and international TNE cohorts. Statistical analyses used Fisher's exact test and exact binomial confidence intervals.

Results A total of 593 TNE procedures were completed (mean age 64.2 ± 12.8 years; 54% female). Indications included 2WW suspected UGI cancer (52%), dyspepsia/reflux (35%), anaemia (9%), and surveillance (4%). UGI cancer was detected in 11/593 (1.9%; 95% CI 0.93–3.29%), exceeding the national OGD benchmark of 1.0% (p = 0.03). Cancer yield was 2.6% (8/307; 95% CI 1.13–5.07%) in 2WW referrals versus 1.0% (3/286; 95% CI 0.22–3.03%) in non-2WW pathways (p = 0.23; not significant).

Oral conversion was required in 132/593 (22.3%; 95% CI 18.97–25.83%). Same-day conversion without sedation occurred in 35/132 (26.5%), rising from 35.6% (16/45; 95% CI 21.9–51.2%) in Q1 to 73.1% (19/26; 95% CI 52.2–88.4%) in Q2 (p = 0.003). Deferred conversions, primarily for sedation preference, incurred minimal IPWL delay (<7 days), maintaining FDS compliance.

DNA rates fell from 7.6% (29/382; 95% CI 5.14–10.72%) in Q1 to 2.6% (9/348; 95% CI 1.19–4.85%) in Q2 (p = 0.002), reflecting improved patient engagement and streamlined pathway integration. No procedural complications occurred (0%; 95% CI 0–0.62%). Diagnostic completion and cancer detection rates were equivalent between high- and mid-volume endoscopists.

Conclusions TNE is a safe (0% complications), effective (cancer yield > OGD benchmark), and scalable diagnostic option for suspected UGI cancer. Integration within 2WW pathways supports FDS compliance and reduces DNA rates, alleviating endoscopy service pressure. These findings provide a strong evidence base for wider NHS adoption and European integration of TNE as a patient-centred innovation in UGI cancer diagnostics.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Grant RK, Brindle WM, Robertson AR et al. Unsedated Transnasal Endoscopy: A Safe, Well-Tolerated and Accurate Alternative to Standard Diagnostic Peroral Endoscopy. *Dig Dis Sci* 2022; 67: 1937–1947

[2] Beaton DR, Sharp L, Lu L et al. Diagnostic yield from symptomatic gastroscopy in the UK: British Society of Gastroenterology analysis using data from the National Endoscopy Database. *Gut*. 2024; 73 (9): 1421–1430

[3] Poley JW, Thomeer M, Kuipers EJ et al. Transnasal Esophagogastroduodenoscopy: A Review of Performance, Safety, and Cost-Effectiveness. *Gastrointest Endosc* 2019; 89 (5): 1024–1033

[4] Gralnek IM, Hassan C, Dinis-Ribeiro M et al. ESGE Position Statement on Diagnostic Upper GI Endoscopy: Quality Standards and Clinical Pathways. *Endoscopy*. 2023; 55 (4): 385–398

[5] NHS England Faster Diagnosis Standard: Guidance for Implementation. NHS England. 2021;

eP092 Clinicopathologic and Endoscopic Features of Gastric Adenocarcinoma of the Fundic Gland Type Treated by Endoscopic Resection

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DOI 10.1055/s-0046-1821419

Aims Gastric adenocarcinoma of the fundic gland type (GA-FG) is a rare, well-differentiated neoplasm that usually arises from *H. pylori*-negative, non-atrophic mucosa of the upper stomach. This study aimed to characterize the clinicopathologic and endoscopic features of GA-FG in Korean patients.

Methods Ten patients with GA-FG who underwent endoscopic resection between November 2011 and April 2025 at Pusan National University Hospital were retrospectively analyzed. Clinicopathologic features, endoscopic findings, and outcomes were reviewed [1–5].

Results A total of 10 patients (6 men, 4 women; mean age, 60.7 years; range, 34–73) were included. Most lesions were located in the fundus or upper body (8/10, 80%) and arose from non-atrophic mucosa. *H. pylori* infection was absent in nine patients. The predominant macroscopic type was slightly elevated (IIa) with dilated surface vessels. The mean tumor size was 7 mm, and submucosal invasion was present in eight cases (80%). En bloc and histologically complete resection were achieved in all cases, and no recurrence or metastasis occurred during a mean follow-up of 29 months (► **Table 1**).

Conclusions GA-FG typically develops in *H. pylori*-negative, non-atrophic mucosa of the upper stomach and shows indolent behavior despite submucosal invasion. ESD provides a curative and safe treatment option with excellent outcomes

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Tohda G et al. Gastric adenocarcinoma of fundic gland type: endoscopic and clinicopathological features. *World J Gastrointest Endosc* 2016; 8 (4): 244–51

[2] Ueyama H et al. Gastric adenocarcinoma of fundic gland type (chief cell predominant type): proposal for a new entity of gastric adenocarcinoma. *Am J Surg Pathol*. 2010;

[3] Yang M, Sun X, Chen Y, Yang P. Twenty cases of gastric adenocarcinoma of the fundic gland type. *Scand J Gastroenterol* 2023; 58 (7): 744–750. doi:10.1080/00365521.2022.2164213

[4] Zhai Z, Hu W, Huang Z, Chen Z, Lu S, Gong W. Gastric adenocarcinoma of the fundic gland type: A review of the literature. *JGH Open* 2023; 7 (12): 812–825. doi:10.1002/jgh3.13014

[5] Zhai S, Wang J, Li Y, Li J, Chen S, Wu Y et al. Endoscopic submucosal dissection for gastric adenocarcinoma of the fundic gland type (chief cell predominant type): four years' experience from a tertiary hospital. *Scand J Gastroenterol* 2023; 58 (7): 742–751

eP093 Cancer near-misses in Colon Capsule Endoscopy – a case series from the CareForColon2015 trial

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DOI 10.1055/s-0046-1821420

Abstract Text

Colon capsule endoscopy (CCE) has emerged as a minimally invasive alternative to colonoscopy and has in several meta-analyses shown non-inferiority in detection rates of colorectal lesions. However, CCE is a reader-dependent technique and pathology can be missed even though images of the lesions are captured. Furthermore, misclassification of pathology can lead to erroneous conclusions and possible delays in correct diagnosis and patient management. With this case-series we aim to present misclassified and non-detected cancers from the CareForColon2015 trial and discuss the underlying causes and possible solutions to reader error leading to missed pathology.

► **Table 1** Clinicopathologic, endoscopic features and outcome of patients with gastric adenocarcinoma of the fundic gland type

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	case 10
sex	F	F	M	F	M	M	F	F	M	M
Age(years)	73	51	67	72	63	73	65	41	34	68
Location	Cardia	Fundus	Fundus	Lower body	Fundus	Upper body	Upper body	Fundus	Fundus	Upper body
H.pylori infection	Absent	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Background atrophy	Absent	Absent	Absent	Absent	Absent	Present	Absent	Absent	Absent	Present
Macroscopic shape	IIa	IIa	IIa	IIb	IIa	IIb	IIa	IIa	IIa	IIb
Dilated blood vessels	Present	Present	Absent	Absent	Present	Present	Present	Present	Absent	Present
Endoscopic biopsy	Atypia	Atypia	Atypia	Atypia	Atypia	Fundic gland polyp	Atypia	Atypia	Low grade dysplasia	Atypia
Treatment method	ESD	ESD	ESD	ESD	ESD	ESD	ESD	EMR	ESD	ESD
size(mm)	7	4	6	4	10	8	10	6	51	4
invasion depth	SM1	SM1	SM1	M	SM1	SM1	SM2	SM1	M	SM1

In the CareForColon2015 trial including 2,031 Danish colorectal cancer screening participants with a positive faecal immunochemical test undergoing CCE, 72 cancers were detected and verified by histopathology. Through systematic re-evaluation of all CCE investigations where a subsequent colonoscopy reported a cancer, we identified four cases of misclassification, where the lesion was reported as non-neoplastic or with a low risk profile and one case of a non-detected cancer where the lesion was captured in capsule images but not reported by the reader.

In two cases, colonic pathology with clear signs of malignancy (bleeding, central depression and ulceration) were reported as inflammation in CCE while one case had a description in the report of “*a short sequenced retracted sigma-lesion with swollen mucosa and red spots*” and no designation of “malignancy suspected”. The fourth case of misclassification was a cancer reported as a polyp of 12mm in size. However, a CCE frame shortly after the reported one depicted a lesion of 25mm. The reported frame only showed the border of the cancer therefore giving the impression of a medium and not high-risk finding. In the case of non-detection, two polyps were reported in CCE leading to referral for colonoscopy. A semi-circumferential malignancy suspect tumour in the right colon was found in colonoscopy and in review of the CCE, the capsule clearly visualised the malignant tumour, although not reported.

These cases prompt a discussion on the need for improvements in the CCE reading and reporting process. If readers do not have conventional endoscopy experience, their ability to classify findings correctly can be suboptimal. Additionally time constraints in overburdened healthcare systems can lead to compromised accuracy in the pursuit of efficiency. Reader training including cases of rare and malignant findings combined with a focus on concrete measures to reduce reader fatigue are important steps towards minimising the risk of missed pathology and misclassification of findings. Furthermore, implementation of artificial intelligence support is suggested by many as an essential part of the future CCE pathway to remedy the issues of reader error and ensure consistent and high quality reports to support clinical decision-making and patient management.

Conflicts of Interest Dr. Benedicte Schelde-Olesen has received honoraria and travel support from Jinshan Ltd. Dr. Thomas Bjørsum-Meyer has participated in advisory board meetings for Medtronic and is a member of the CICA steering group. Professor Anastasios Koulaouzidis is co-director of iCERV Ltd. and shareholder in AJM Med-i-caps Ltd. He has received consultancy fees and travel support from Jinshan Ltd. and Aquilant as well as research support (grant) from IntroMedic/SynMed and IDEK SEED, honoraria from Jinshan and Medtronic and

is a member of the ESGE guidelines committee. Dr. Ulrik Deding has received honoraria from Norgine. Professor Gunnar Baatrup has a patent pending for a dual-mode endoscopic capsule with image processing capabilities.

eP094 Esketamine-Propofol Combination for Adults Undergoing Gastrointestinal Endoscopy: An Updated Systematic Review and Meta-Analysis with GRADE Evidence Assessment

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DOI 10.1055/s-0046-1821421

Aims Propofol is the most commonly used intravenous induction anesthetic in clinical practice, but it is associated with several adverse events such as hypoxemia, hypotension, and bradycardia. The use of adjunct medications during gastrointestinal (GI) endoscopy may reduce propofol requirements and improve hemodynamic stability. Esketamine, in particular, has been reported to not only reduce propofol dosage but also counteract its depressive effects, offering enhanced stability and a better anesthetic experience [1–8].

This meta-analysis aims to evaluate the effectiveness of **esketamine** as an **adjunct** to propofol compared to **propofol alone** in adults undergoing GI endoscopy.

Methods A comprehensive search was conducted in MEDLINE, Scopus, Web of Science, and the Cochrane Library to identify eligible randomized controlled trials (RCTs). The primary outcomes assessed were total propofol dosage (mg) and the incidence of hypotension and hypoxemia. Pooled analyses were expressed as mean differences (MDs) for continuous variables and risk ratios (RRs) for categorical outcomes, each with 95 % confidence intervals (CIs).

Results Eight trials met the inclusion criteria. The combination of esketamine and propofol significantly reduced propofol requirements (MD = -54.97; 95 % CI: -69.77 to -40.17; **p < 0.00001**). The combination also lowered the risk of hypotension (RR = 0.28; 95 % CI: 0.19–0.40; **p < 0.00001**) and hypoxemia (RR = 0.58; 95 % CI: 0.34–0.98; **p = 0.04**) (► Table 1).

► **Table 1** Characteristics of the included studies

Study ID	Study design	Study period	Operation	N randomized	ASA	Primary outcome(s)	Key findings
Feng 2022	Double-blind RCT	January 2022 to August 2022	Gastrointestinal endoscopy	100	I/II	EC50 of propofol	Increasing the dose of esketamine significantly reduces the dose of propofol required for procedures, with fewer hemodynamic changes.
Fu 2024	Single-blind RCT	July 2021 to September 2021	Colonoscopy	100	I/II/III	Incidence of hypotension	Esketamine + propofol for colonoscopy reduces hypotension and enhances respiration, with satisfactory sedation.
Liu 2023	Double-blind RCT	January 2021 to March 2021	Gastrosocopy	80	I/II/III	Total amount of propofol consumption	Propofol combined with 0.2 mg/kg esketamine reduces total propofol consumption, maintains stable hemodynamics, and does not affect recovery time.
Song 2023	Double-blind RCT	February 2022 to November 2022	Bidirectional Endoscopy	663	I/II	Composite of desaturation and hypotension	Esketamine reduced desaturation and hypotension by 61 %, and decreased propofol usage.
Xiao 2024	Double-blind RCT	November 2022 to February 2023	Colonoscopy	195	I/II	Incidence of hypoxemia, hypotension, hypertension, and bradycardia	Esketamine + propofol is safe and effective for colonoscopy with fewer complications.
Yang 2021	Double-blind RCT	November 2020 to March 2021	Gastrointestinal endoscopy	90	I/II/III	EC50 of propofol	Combination reduces propofol EC50, lowers hypotension incidence, and offers shorter recovery with similar satisfaction.
Zhan 2022	Double-blind RCT	November 2020 to September 2021	Gastrointestinal endoscopy	260	I/II	Propofol consumption per minute (mg/min)	Propofol + 0.2 mg/kg esketamine reduced induction time, cough, and body movement, with lower propofol consumption. No effect on recovery, hemodynamics, or adverse events.
Zheng 2023	Double-blind RCT	August 2022 to February 2023	Gastrosocopy	113	I/II	Duration of procedure and propofol consumption	Propofol + esketamine reduced induction and awakening times, propofol consumption, and incidence of adverse events, with more stable hemodynamics.

RCT: Randomized control trial, ASA: American Society of Anaesthesiologists criteria for physical status, EC50: median effective concentration

Conclusions The unique pharmacological properties of esketamine provide substantial value when used in combination with propofol for GI endoscopic procedures, particularly by enhancing hemodynamic stability and reducing propofol requirements.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zheng L, Wang Y, Ma Q, Liang W, Zhang X, Ren Z, Qin W, Meng F, Li Y, Fan G, Yin N 2023; Efficacy and Safety of a Subanesthetic Dose of Esketamine Combined with Propofol in Patients with Obesity Undergoing Painless Gastroscopy: A Prospective, Double-Blind, Randomized Controlled Trial. *Drug Des Devel Ther* Volume 17: 1347–1356
- [2] Zhan Y, Liang S, Yang Z, Luo Q, Li S, Li J, Liang Z, Li Y 2022; Efficacy and safety of subanesthetic doses of esketamine combined with propofol in painless gastrointestinal endoscopy: a prospective, double-blind, randomized controlled trial. *BMC Gastroenterol* 22: 391

- [3] Xiao L, Zhang Z, Lu J, Liu Z, Zhang J, Kang L, Tang J, Zou X 2024; Efficacy and safety of esketamine combined with propofol for conscious sedation in painless colonoscopy: a prospective, randomized, double-blind controlled clinical trial. *BMC Anesthesiol* 24: 394
- [4] Yang H, Zhao Q, Chen H-Y, Liu W, Ding T, Yang B, Song J-C 2022; The median effective concentration of propofol with different doses of esketamine during gastrointestinal endoscopy in elderly patients: A randomized controlled trial. *Br J Clin Pharmacol* 88: 1279–1287
- [5] Song N, Yang Y, Zheng Z, Shi W-C, Tan A-P, Shan X-S, Liu H, Meng L, Peng K, Ji F-H 2023; Effect of esketamine added to propofol sedation on desaturation and hypotension in bidirectional endoscopy: A randomized clinical trial. *JAMA Netw Open* 6:e2347886
- [6] Liu X, Xiao Q, Zhuang S 2023; Comparison of propofol-esketamine versus propofol for anesthesia in gastroscopy: a double-blind, randomized controlled clinical trial. *Front Med (Lausanne)* 10:1184709

[7] Feng M, Shi G, Cui W, Zhang N, Xie Q, Zhang W 2022; The median effective concentration of propofol in combination with different doses of esketamine during gastrointestinal endoscopy in adults. *Front Pharmacol* 13:1034236

[8] Fu M, Sheng B, Liu R, Li Y, Chen G, Chen H, Chen X, Duan G, Huang H, Chen J, Chen Y 2024; Impact of different doses of esketamine on the incidence of hypotension in propofol-based sedation for colonoscopy: a randomized controlled trial. *Ther Adv Drug Saf* 15: PMID: 20420986241278500

eP095 Incidence and Timing of Post-ESD Bleeding in Dialysis Patients

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DOI 10.1055/s-0046-1821422

Aims Post-endoscopic submucosal dissection (ESD) bleeding (PEB) is classified as early-onset or late-onset, and controversies regarding risk factors and preventive measures continue. Dialysis patients are widely recognized as a high-risk group for PEB; however, no established criteria exist for managing anticoagulants during dialysis or timing the resumption of antithrombotic therapy after gastric ESD. This study aimed to clarify the frequency and timing of PEB in dialysis patients at a single institution and compare these findings with non-dialysis patients.

Methods We retrospectively analyzed 47 cases undergoing gastric ESD at our institution between April 11, 2023, and August 19, 2025. Second-look endoscopy (SLE) was performed the following day in all cases. PEB was defined as either (1) requiring emergency endoscopy due to hematemesis or melena, or (2) demonstrating bleeding on endoscopic re-examination with a hemoglobin decrease of ≥ 2 g/dL. The onset timing was classified as early (Day 0–1) or late (Day ≥ 2). Cases undergoing prophylactic cauterization or clipping during SLE without evident bleeding, followed by no subsequent bleeding, were classified as the prevent group. PEB was tallied on a per-patient basis (► Table 1).

► Table 1

	Dialysis Patients(n = 3)	Non-Dialysis Patients(n = 44)
Sex(Male, %)	(2, 66.7)	(31, 70.5)
Age(Median, Range)	(69, 66–76)	(76, 41–94)
PEB	2	2
PEB Late-Onset	2(100 %)	1(50 %)
Prevent Group	0	9
UML classification (U, M, L)	(1, 1, 1)	(7, 21, 16)
Tumor Size (> 30mm, < 30mm)	(0, 3)	(16, 28)
Multiple Tumors	0	5
Aspirin (continue, suspend)	(1, 1)	(4, 2)
P2Y12 Inhibitors (continue, suspend)	(0, 0)	(0, 3)
Direct Oral Anticoagulant (continue, suspend)	(0, 0)	(0, 7)
Cilostazol continue	0	1
Best-J score (mean)	4.3	1.6

Results Of the 47 subjects, 3 were dialysis patients and 44 were non-dialysis patients. Overall PEB occurred in 4/47 cases (8.5 %). PEB was observed in 2/3 dialysis patients (66.7 %), both of which were late-onset (Day 3, Day 6). Among non-dialysis patients, PEB occurred in 2/44 cases (4.5 %) (one case had two

events on Day 1 and Day 6, the other on Day 6). A significant difference in PEB occurrence was observed between dialysis and non-dialysis patients (Fisher's exact test, two-tailed $p = 0.016$). The prevent group comprised 9 cases. The dialysis patients who developed PEB were: one case where the anticoagulant during dialysis was changed from nafamostat to dalteparin on Day 3 and hematemesis occurred on the same day; and another case where aspirin was restarted on Day 3, changed from aspirin to prasugrel on Day 5, and hematemesis occurred on Day 6.

Conclusions In this institution's study, dialysis patients were at high risk for PEB, with delayed onset being particularly prominent. These findings are consistent with the PEB risk in dialysis patients demonstrated in previous studies using the BEST-J score. The anticoagulant used during dialysis and the antiplatelet agent restarted afterward may be implicated in delayed PEB. For dialysis patients after gastric ESD, it is considered appropriate to use nafamostat as the anticoagulant during dialysis and manage antiplatelet therapy cautiously with aspirin monotherapy for approximately one week postoperatively.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP096 Correlation between Angiopoietin 2 and NOS3 Genes Variants and Esophageal Varices Progression in HCV Cirrhotic Patients

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Aims We aim to assess the prognostic value of specific single-nucleotide polymorphisms (SNPs) in ANGPT2 (rs2442598) and NOS3 (rs2070744) genes concerning the development of EV.

Methods Fifty patients with HCV-related cirrhosis and varices found by endoscopy (Group I), fifty patients with HCV-related cirrhosis and no varices (Group II), and fifty healthy people as a control group (Group III) comprised the 150 participants in this study.

Results For genetic factors, there was no significant differences in the genotype distribution or allele frequencies of ANGPT2 (rs2442598) and NOS3 (rs2070744) between patients with or without EV ($p > 0.05$). However, significant differences were noted for ANGPT2 rs2442598 in relation to presence of varices, ascites, Child score, hypertension, ALT, and AST ($p < 0.05$), while other parameters did not show significant differences ($p > 0.05$). Similarly, for NOS3 rs2070744, significant differences were found in Child score, hypertension, ALT, and AST ($p < 0.05$).

Conclusions ANGPT2 (rs2442598) variant is a promising non-invasive indicator to ensure that there are no varices with portal hypertension to predict absence of EV as a complication of cirrhosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP097 Endoscopic Biliary Drainage in Malignant Obstruction From Metastatic Colorectal Cancer: Outcomes and Clinical Predictors

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DOI 10.1055/s-0046-1821424

Aims Metastatic colorectal cancer (mCRC) frequently results in complex hilar biliary strictures and obstructive jaundice. When cannulation is difficult or standard approaches fail, alternative endoscopic drainage strategies may be required. Evidence in the mCRC population remains limited. This study evaluated the feasibility, safety, and early effectiveness of endoscopic biliary drainage in these patients.

Methods We retrospectively evaluated all consecutive patients with mCRC and malignant biliary obstruction who underwent endoscopic biliary drainage between 01.01.2020 and 30.09.2025 at our tertiary referral center. We collected demographic data, information about drainage procedure type, unilateral or bilateral drainage and application of combined endoscopic approaches. Technical success was defined as successful stent placement with documented bile drainage. Clinical success was defined as a $\geq 10\%$ reduction in serum bilirubin within the first 3 days. Adverse events and predictors of outcome were also explored.

Results Forty-seven patients were included (median age 65 years, IQR 58–73; 70.2% male). The ECOG performance status was ≥ 2 in 88.9% of cases. Technical success was achieved in 93.6% of cases (44/47). Clinical success was achieved in 70.2% (33/47) of patients. ERCP was performed in 35 patients (74.5%), EUS-based biliary drainage in 8 patients (17.0%), and combined ERCP + EUS drainage in 3 patients (6.4%); no cases required percutaneous drainage. Clinical success was comparable between unilateral and bilateral drainage (66.7% vs. 72.4%, $p = 0.75$). AEs occurred in 27.7% (13/47), mainly cholangitis (25.5%), with one hepatic abscess. ROC analysis identified baseline bilirubin $> 224 \mu\text{mol/L}$ as predictive of lower clinical success (AUC 0.61), whereas metastatic burden and drainage pattern were not associated with outcome. Clinical success did not differ by drainage modality (ERCP: 66.7%; EUS-BD: 75.0%; combined: 100%; $p = 0.46$).

Conclusions Endoscopic biliary drainage in patients with mCRC-related malignant obstruction achieved high technical success and acceptable early biochemical response across all drainage modalities. Most adverse events were manageable. Elevated baseline bilirubin was the only factor associated with reduced early clinical success, while drainage approach and metastatic burden showed no significant impact. These findings support a flexible endoscopic strategy tailored to anatomy and expertise, as outcomes were comparable across procedure types.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP098 EUS-guided biliary drainage in the management of benign biliary diseases: A single center case series

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DOI 10.1055/s-0046-1821425

Aims Endoscopic ultrasound-guided biliary drainage (EUS-BD) increasingly provides its role in the management of benign biliary diseases particularly in patients with surgically altered anatomy or after failed selective biliary cannulation during ERCP. The aim of this study is to evaluate the safety, clinical effectiveness and long-term outcomes of EUS-BD for the management of benign biliary diseases.

Methods This is a single-center retrospective study, which included all consecutive patients, who underwent EUS-BD for benign indications between March 2020 and October 2025. All the procedures were evaluated in terms of technical, clinical success and adverse events. Long-term follow-up data were also provided.

Results We identified 15 patients who underwent EUS-BD during the study period due to benign biliary diseases (men- 7, women- 8; mean age 62.3 years). Some of them ($n = 11$, 73.3%) were admitted as emergency with acute cholangitis, while others ($n = 4$, 26.7%) with progressive jaundice. In 4 (26.7%) cases surgically altered anatomy was present, while in 11 (73.3%) patients EUS-BD was used to assist ERCP after failed transpapillary cannulation.

We performed EUS-guided hepaticogastrostomy (EUS-HGS) using fully covered self expanding metal stent in 11 (73.3%) patients, EUS-guided rendezvous technique to assist transpapillary cannulation was used in 2 (13.3%) and 2 (13.3%) patients underwent EUS choledochoduodenostomy. Antegrade cholangiosco-

py using the transgastric route was performed in 4 (26.7%) cases. EUS-HGS was successfully performed in 3 (20%) cases with complete iatrogenic bile duct transection during cholecystectomy.

Second procedure was performed in 12 (80%) cases after median period of 45 days.

Technical success, defined as successful biliary access and stent placement was achieved in 86.7%. Clinical success (defined as $\geq 50\%$ reduction in serum total bilirubin and cholestatic enzymes or resolution of cholangitis within 2 weeks after the procedure) was achieved in 14 (93.3%) patients.

During follow-up, 13 patients (86.7%) remained under multistenting management, with a median follow-up duration of 8 months. One patient (6.7%) achieved complete resolution of the stricture after 2 procedures, with no recurrence observed after 2 years. Adverse events, mostly episodes of cholangitis, were managed conservatively and endoscopically. Surgery was required in only 2 (13.3%) patients due to technical failure of EUS-BD and high risk of severe cholangitis. In 1 (6.7%) additional case, cholangioscopy-guided biliary drainage was performed following technical failure of EUS-HGS.

During the study period 1 (6.7%) patient died from unrelated comorbidities.

Conclusions EUS-BD demonstrates favorable clinical efficacy and satisfactory technical success rates, suggesting that it is a viable option for the management of benign biliary diseases. Further development of dedicated devices and accessories is essential to enhance the safety and effectiveness of the procedure, particularly in benign indications. Long-term follow-up remains necessary to confirm the durability and overall outcomes of this technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP099 Acute Lower Gastrointestinal Bleeding: Factors Associated with Small Bowel Bleeding and Predictors of Hemostasis

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DOI 10.1055/s-0046-1821426

Aims Distinguishing bleeding originating from the small versus the large bowel can be challenging due to overlapping clinical features, while hemostasis will be required in a subset of patients. This study aimed to identify factors associated with small bowel bleeding and predictors of the need for hemostasis.

Methods A retrospective analysis was conducted on patients with confirmed lower gastrointestinal bleeding. Associations between clinical and laboratory parameters with bleeding location and the need for hemostasis were assessed using statistical tests and logistic regression analysis. The crude analyses revealed several associations. To account for potential confounding, we performed an adjusted analysis featuring all of the variables fulfilling the lenient statistical threshold of $p = 0.01$. The truly important associations are those that “survived” the adjusted analysis. Adjusted associations were considered significant using the conventional statistical threshold of $p = 0.05$ [1–4].

Results A total of 419 patients (242 males, 57.8%) with a median age of 76 years (IQR 65–83) were included. The bleeding source was located in the colon in 85.9% of cases, in the small bowel in 10%, and remained unidentified in 4.1%. Hemostasis was required in 13.8% of patients. The presence of melena and maroon-colored stools was strongly associated with small bowel bleeding (OR 18.5 and 7.0, respectively; $p < 0.001$). A history of cardiovascular disease reduced the likelihood of small bowel bleeding by 87% ($p < 0.001$). Higher hemoglobin levels were associated with a lower risk (15% reduction per 1 g/dL increase; $p = 0.027$), while higher urea levels increased the risk (0.9% per mg/dL;

$p = 0.01$). Polypectomy markedly increased the likelihood of requiring hemostasis (OR ~36; $p < 0.001$). Conversely, higher albumin levels significantly reduced this risk (53.4% per 1 g/dL increase; $p < 0.001$), whereas anticoagulant use more than doubled it ($p = 0.049$) (► **Table 1**).

► **Table 1**

Small vs large bowel bleeding	Sig.	Exp(B)	95% C.I. for EXP(B)	
			Low-er	Upper
Referral	,110	2,033	,852	4,849
Hematochezia	,000 omnibus P			
Melena	,000	18,537	5,651	60,803
Maroon coloured stool	,000	7,107	2,881	17,532
Rectal bleeding	,997	NA		
Bloody diarrhea	,999	NA		
Cardiovascular disease	,000	,127	,049	,331
Prior lower GI bleeding	,144	2,115	,775	5,773
Platelets (K/ μ l)	,917	1,000	,996	1,005
Albumin (g/dl)	,499	,829	,481	1,428
Urea (mg/dl)	,010	1,009	1,002	1,016
Hemoglobin(g/dl)	,027	,846	,729	,981

Conclusions Specific clinical and laboratory parameters are associated with both the bleeding site and the need for hemostasis. Their integration into clinical assessment may facilitate early recognition and targeted management of high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tapaskar N et al. Comparison of clinical prediction tools and identification of risk factors for adverse outcomes in acute lower GI bleeding. *Gastrointest Endosc* 2019; 89 (5): 1005–1013
- [2] Uchida G et al. Systematic review and meta-analysis of the diagnostic and therapeutic yield of small bowel endoscopy in patients with overt small bowel bleeding. *Dig Endosc* 2021; 33 (1): 66–82
- [3] Micic D, Gaetano JN, Nigam N, Peller M, Rao VL, Semrad C, Stein AC, Kupfer SS. Risk factors for small bowel bleeding in an overt gastrointestinal bleeding presentation after negative upper and lower endoscopy. *PLoS One*. 2019 14 (2):e0212509. doi:10.1371/journal.pone.0212509 eCollection 2019
- [4] Strate LL, Gralnek IM. ACG Clinical Guideline: Management of Patients With Acute Lower Gastrointestinal Bleeding. *Am J Gastroenterol*. 2016; 111(4): 459–74. doi:10.1038/ajg.2016.41 Epub 2016 Mar 1. Erratum in: *Am J Gastroenterol*. 2016 May;111(5):755

eP100 Proximal Choledochal Cyst and Sump Syndrome after Choledochoduodenostomy: A Pitfall for ERCP

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DOI 10.1055/s-0046-1821427

Introduction: Choledochal cysts are rare congenital malformations characterized by single or multiple cystic dilatations of the intra- and/or extrahepatic biliary tree. The most widely accepted classification is that of Todani (types I–V). They are usually diagnosed in childhood (80%) and occur predominantly in women. Their main complications include an increased risk of biliary neoplasms (up to 30% in adults, especially in types I and IV) and recurrent cholangitis, among others.

Treatment generally consists of cyst excision and restoration of biliary-enteric flow, with Roux-en-Y hepaticojejunostomy being the technique of choice. Type III cysts, depending on the subtype, may be treated by sphincterotomy, endoscopic resection (preferred), or surgery [1, 2].

Sump syndrome, on the other hand, is associated with dysfunction of a surgically created choledochoduodenostomy due to accumulation of debris, biliary sludge, and food remnants in the suprapapillary distal common bile duct, leading to recurrent cholangitis due to bacterial overgrowth. In cases of cholangitis, endoscopic drainage with stent placement is usually required.

Endoscopy: A 47-year-old woman, who underwent surgery in a private center in 2013 for a choledochal cyst (Todani type IB) treated with choledochoduodenostomy, was admitted for ERCP due to associated sump syndrome.

Cholangiography revealed a large proximal choledochal cyst measuring 30–35 mm and a choledochoduodenal fistula with multiple filling defects. The fistula was cleaned using a Fogarty balloon, yielding abundant biliary sludge and food debris, followed by decompressive sphincterotomy.

Although the guidewire could be advanced through the cyst, the position was extremely unstable, making it impossible to place any type of biliary stent. The procedure was therefore suspended to avoid iatrogenic injury.

The patient was subsequently referred to a tertiary center, where she underwent definitive surgical reintervention.

Conclusions: The peculiarity of this case lies in the patient's previous cyst-enterostomy, performed for unknown reasons, which is associated with an increased risk of infection and malignancy. Combined with the technical complexity of ERCP in this setting, surgical management remains the treatment of choice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ziegler KM, Pitt HA, Zyromski NJ et al. Choledochal cysts: Changing clinical presentation and management. *Am Surg* 2010; 76 (6): 579–585
- [2] Singham J, Yoshida EM, Scudamore CH. Choledochal cysts: Part 1 of 3: Classification and pathogenesis. *Can J Surg* 2009; 52 (5): 434–440

eP101 Appropriateness of Gastrointestinal Endoscopy for Hospitalized Patients: the importance of consultant led triage

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DOI 10.1055/s-0046-1821428

Aims A range of criteria have been created to evaluate the appropriateness of gastrointestinal (GI) endoscopy. The most widely recognized were set by the American Society for Gastrointestinal Endoscopy and the European Panel of Appropriateness of Gastrointestinal Endoscopy (EPAGE), updated EPAGE-II criteria. Nevertheless, the application of general rules is not sufficient, especially in hospitalized patients. The complexity, singularity, and dynamic clinical evolution demands the proactive involvement of an experienced endoscopist to make the decision whether or not to perform the exam.

Our aim was to analyze the appropriateness of endoscopic exam requests in hospitalized patients over the course of one year.

Methods A prospective observational study was conducted in an endoscopic unit of a tertiary hospital center. The requested exams were triaged by a gastroenterologist after reviewing the patient's medical record, assessing clinical status and complementary diagnostic tests. In cases of unclear indication, and no absolute contraindication, the decision to proceed was discussed with the referring physician.

Results A total of 184 requests for inpatient endoscopy and/or colonoscopy were received during 1 year (table 1). 154 (84%) of the requests were thought to be appropriate. 12 (6%) were cancelled during triage: 2 were patients on best supportive care, 1 died, 3 had other diagnosis which plausibly justified the clinical situation, 2 had recent endoscopic exams, and 4 presented no clinical/analytical evidence of GI bleeding). 18 (10%) requests were initially postponed (8 were awaiting imaging results; 5 had poor clinical status and 5 respiratory distress) and ended up being cancelled (8 had another diagnosis in imaging tests, 8 maintained clinical deterioration contraindicating exam and 3 died). In total 30 (16%) of the requests were cancelled.

The most frequent exam requested was endoscopy, and the most common indication was suspected GI neoplasia. From a total of 58 suspected GI neoplasms, 11 were confirmed as gastric neoplasia, which was the most common finding.

None of the patients with a cancelled exam was diagnosed with a GI disease during follow up.

Mortality rate was considerably higher in the group with cancelled exams (33% vs 11% during hospitalization, 50% vs 32% during follow up, 15% vs 1.8% within 30 days after discharge). Mean age was similar between groups. This findings reveal a frail group of patients, with little likelihood of benefiting from an invasive exam.

Conclusions 16% of the requests were considered inappropriate, which allowed to avoid 30 unnecessary exams.

Developing standardized indications for endoscopic exams in inpatient care is difficult, and an individualized approach is critical in order to reach an equilibrium between overusage and overlooking, while considering the principle of *primum non nocere*.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP102V EUS-guided internal drainage of a post-Whipple pancreaticojejunal leak complicated by a cutaneous fistulized collection: reversing the externalized fistulous flow inward

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DOI 10.1055/s-0046-1821429

Abstract Text

Postoperative pancreaticojejunal leaks after Whipple procedure are challenging, especially when complicated by external fistulas. A 73-year-old man developed a postoperative intra-abdominal collection with a cutaneous fistula after pancreaticoduodenectomy including antrectomy, gastrojejunostomy, and hepaticojejunostomy. EUS-guided internal drainage was performed to reverse the fistulous flow. Under linear EUS guidance, the collection near the pancreaticojejunal anastomosis was punctured through the remaining stomach, despite limited access related to antrectomy. A 10 Fr cystotome was used to create a tract, and two 7 Fr double-pigtail plastic stents were placed for internal drainage. The external output stopped within days, with full recovery maintained at follow-up. This case highlights EUS-guided internal drainage as an effective minimally invasive alternative to surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/19543932-edc9-4bdf-8ff6-8b26938ecce2/Uploads/19978_EUS_drainage%20of%20a%20post-Whipple%20collection%20-%20video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP103 Therapeutic ERCP in high-output pancreatic leak after pancreatic surgery: a case report

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DOI 10.1055/s-0046-1821430

Introduction Pancreatic fistula is a common complication following pancreatic surgery, occurring in up to 27% of cases. It consists of an abnormal communication between the pancreatic duct and another anatomical space, resulting in leakage of enzyme-rich pancreatic fluid. Diagnosis is established by abdominal CT scan, and management typically includes antibiotic therapy, endoscopic or percutaneous drainage, and, if necessary, surgical intervention [1, 2].

We present the case of a 65-year-old man who had recently undergone distal pancreatectomy with splenectomy for pancreatic adenocarcinoma and was admitted with septic shock. CT imaging revealed multiple collections in the splenectomy and pancreatic tail region. Several surgical drains were placed without success, as the collections persisted after a few days. A high-output pancreatic fistula was suspected, and an Endoscopic Retrograde Cholangiopancreatography (ERCP) was requested to facilitate drainage of the collections.

Endoscopy During ERCP, selective cannulation of the Wirsung duct was achieved using a reverse double-guidewire technique. The duct appeared shortened (5–6 cm) and displaced as a result of the prior surgery. Contrast injection demonstrated leakage from the remnant of the Wirsung duct and its branches, likely communicating with the described collections. A 5 cm × 5 Fr plastic pancreatic stent was placed, with abundant pancreatic juice observed flowing through the papilla. A follow-up CT scan one week later showed a marked reduction in the size of the surgical bed collections, with the stent in good position and no ductal dilatation.

The patient remains stable, showing good clinical progress, pending complete resolution of the collections.

Conclusion Endoscopic drainage of collections secondary to pancreatic leaks via ERCP may represent an effective therapeutic option, potentially reducing the need for repeat surgical interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Tellez-Avila FI, Herrera-Mora D, Duarte-Medrano G et al. Endoscopic management of postoperative pancreatic fistula. *Rev Esp Enferm Dig* 2021; 113 (10): 723–729

[2] Bassi C, Marchegiani G, Dervenis C et al. The 2016 update of the International Study Group (ISGPS) definition and grading of postoperative pancreatic fistula: 11 Years After. *Surgery*. 2017; 161 (3): 584–591

eP104 Clinical & Procedural Predictors of ERCP Technical Success & Adverse Events in Adults

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DOI 10.1055/s-0046-1821431

Aims According to the WHO, by 2050 the global population aged 60 years & older is projected to double, reaching ~2.1 billion people. This demographic shift is expected to increase the demand for invasive medical procedures among older adults. Endoscopic retrograde cholangiopancreatography (ERCP) remains a cornerstone intervention in the management of pancreaticobiliary disorders & age-associated outcome data is scarce. We aimed to identify determinants of ERCP technical success & adverse events among patients <60 & ≥60 years, as per WHO definition of older adults.

Methods Data from consecutive patients' (>18 years) index ERCP at Saint Michael's Hospital, a large tertiary centre in Toronto, Canada from 2010-2020

were retrospectively analysed. The primary outcome was ERCP's technical success & the secondary outcome was the occurrence of adverse events (post-ERCP pancreatitis, bleeding, perforation, or abdominal pain). Patients were stratified by age into 2 subgroups: <60 years & ≥60 years. To facilitate interpretation, a continuous age term scaled per 10-year increase was created. To identify independent predictors, univariable & multivariable logistic regression were constructed for the primary outcome. Firth penalized logistic regression was applied for adverse events due to their rarity. ORs & 95 % CIs were reported.

Results Among patients aged ≥60 years, altered anatomy (OR 0.17, 95 % CI 0.11-0.25), use of non-duodenoscope instruments (OR 0.42, 95 % CI 0.22-0.83), history of cancer (OR 0.69, 95 % CI 0.54-0.90), & liver-related conditions (OR 0.60, 95 % CI 0.38-0.99) were independently associated with reduced odds of technical success. Among patients aged <60 years, altered anatomy (OR 0.16, 95 % CI 0.07-0.36), use of non-duodenoscope instruments (OR 0.35, 95 % CI 0.14-0.90), but also presence of pancreatic disease (OR 0.56, 95 % CI 0.34-0.95) was associated with lower odds of success and female sex was associated with higher odds of success as compared to males (OR 1.52, 95 % CI 1.10-2.09). Among patients aged <60, 5.8 % experienced adverse events as compared to 6.1 % among those aged ≥60. Increasing age (OR 1.26, 95 % CI 1.04-1.54) & pancreatic ductal indication (OR 2.54, 95 % CI 1.33-4.60) were associated with increased odds of adverse events in patients aged <60 years. Among those aged ≥60 years, general anaesthesia (OR 4.93, 95 % CI 1.20-16.23) predicted higher adverse events.

Conclusions These findings highlight that both patient-related comorbidities and procedure-related factors influence ERCP success and safety differently across age strata. Recognition of these may help guide procedural planning, patient counselling and operator allocation.

Conflicts of Interest Dr. Jeffrey Mosko received research support from Boston Scientific and ERBE, and speaker honouraria and consulting fees from Boston Scientific, ERBE, Fuji, Medtronic, Pendopharm, and Steris.

eP105 Bleeding during and after ERCP? A real world study evaluating clinical practice guidelines for anticoagulant and antiplatelet drugs

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DOI 10.1055/s-0046-1821432

Aims Anticoagulants according to guidelines play a role in the development of bleeding during and following Endoscopic Retrograde Cholangiopancreatography (ERCP). At the same time it is recommended that antiplatelets with the exception of aspirin should be also discontinued before ERCP. Aim of our study was to evaluate the impact of following these guidelines in a real world setting.

Methods We analysed prospectively documented clinical, epidemiological and ERCP data from consecutive patients (n = 3147, mean age: 68 ± 16, Females: 51 %), with an intact papilla who were submitted to an ERCP during a 20 years-period. Data analysis and collection was executed on 2025. In patients submitted to ERCP from 2000 until 2011 (period A n = 1521,) all anticoagulants and antiplatelet drugs were arrested before ERCP while in patients submitted to ERCP from 2012 until 2020 (period B, n = 1626) aspirin was not arrested before ERCP.

Results Antiplatelet use did not differ between the two periods (7.7 % respectively, p = 1.000) while anticoagulants were used numerically but not statistically significantly more often in the period B (6.5 % vs 5 %, p = 0.096, συνολικά 5.8 %). Bleeding during ERCP was observed in total in 33.3 % and was observed more commonly in period B B (40.9 % vs 25.9 %, p < 0.001), upon periampullary diverticulum existence (37.9 %), when antiplatelet (if yes 43.4 % vs 32.5 % if not

used, p < 0.001) or anticoagulant drugs were used (if yes 42.0 % vs 32.8 % if not used, p = 0.012) and if needle knife (NK) was used (if yes 41.5 % vs 28.6 % if not used, p < 0.001). All the above mentioned factors were independently correlated with intraprocedural bleeding during ERCP. (PAD: OR: 1.354, p = 0.002, antiplatelet use: OR: 1.323, p = 0.005, anticoagulant use: OR: 1.275, p = 0.049, NK use: OR: 1.610, p < 0.001) The rate of clinical significant bleeding post ERCP was in total 1.2 % without difference between the two periods (B: 1.2 % vs A: 1.3 %, p = 0.749), while it was observed more commonly if intraprocedural bleeding occurred (if yes 2.7 % vs 0.5 % if not used, p < 0.001) as also upon anticoagulant use (if yes 6.7 % vs 0.9 % if not used, p < 0.001) but not antiplatelet use (if yes 1.7 % vs 1.2 % if not used, p = 0.544), needle knife use (if yes 1.5 % vs 1.1 % if not used, p = 0.320) or the existence of a periampullary diverticulum (if yes 1.3 % vs 1.2 % if not used, p = 0.998). Both intraprocedural bleeding and anticoagulant usage were independent factors correlated with clinical significant bleeding post ERCP (OR: 4.842, p < 0.001 and OR: 1.855, p < 0.001 respectively).

Conclusions The policy of not arresting aspirin before ERCP is correlated with increased rate of intraprocedural bleeding but is not a factor predisposing patients to clinical significant bleeding. Anticoagulant use is both correlated with intraprocedural and clinical significant bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP106 Unmasking the Mucocele: A Rare Case of Endoscopic Diagnosis and Treatment

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DOI 10.1055/s-0046-1821433

Abstract Text

Appendiceal mucocele is a rare condition characterized by the obstructive enlargement of the appendix due to accumulation of mucin within its lumen [1-7]. A 65-year-old patient following a positive fecal occult blood test underwent a colonoscopy that revealed a appendix's subepithelial tumor. A first CT scan confirmed the endoscopic suspicion. Subsequently, he was referred to our unit to perform ESD. The new colonoscopy showed a 2 cm subepithelial tumor, covered by normal mucosa with a single whitish erosion. Initially, the evaluation of the lesion's consistency was performed using foreign forceps, and when we pressed a large amount of mucus came out, with complete disappearance of the mass. Five weeks later, a second CT scan confirmed the disappearance of the mucocele.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Karakaya K, Barut F, Emre AU et al. Appendiceal mucocele: case reports and review of current literature. *World J Gastroenterol* 2008; 14 (14): 2280-2283. doi:10.3748/wjg.14.2280
- [2] Cubro H, Cengic V, Burina N, Kravic Z, Beciragic E, Vranic S. Mucocele of the appendix presenting as an exacerbated chronic tubo-ovarian abscess: A case report and comprehensive review of the literature. *Medicine* 98 (39): p e17149 2019. doi:10.1097/MD.00000000000017149
- [3] Motsumi MJ, Motlaleselelo P, Ayane G, Sesay SO, Valdes JR. A case report of a giant appendiceal mucocele and literature review. *Pan Afr Med J.* 2017; ;28: 106. doi:10.11604/pamj.2017.28.106.13832 PMID: 29515724 PMID: PMC5837178
- [4] Athanassiou E, Spyridakis M, Karasavvidou F, Vamvakopoulou D, Karaïskou E, Vamvakopoulos N, Theodosiou P, Hatzitheofilou C. Low-Grade Appendiceal Mucinous Neoplasm Presenting as a Surgical Emergency: A Case Report. *Case Rep Oncol.* 2009; 2 (1): 7-11. doi:10.1159/000192775 PMID: 20740138 PMID: PMC2918822
- [5] Van Hooser A., Williams T.R., Myers D.T. Mucinous appendiceal neoplasms: pathologic classification, clinical implications, imaging spectrum and mimics. *Abdom Radiol* 43: 2913-2922 2018. doi:10.1007/s00261-018-1561-9

[6] Abuoglu H, Yildiz MK, Kaya B, Odabasi M. Clinicopathological analysis of patients operated for appendiceal mucocele. *Ulus Travma Acil Cerrahi Derg* 2017; 23 (3): 230–234. doi:10.5505/tjtes.2016.30276

[7] Wang TT, He JJ, Zhou PH, Chen WW, Chen CW, Liu J. Endoscopic diagnosis and treatment of an appendiceal mucocele: A case report. *World J Clin Cases* 2021; 9 (16): 3936–3942. doi:10.12998/wjcc.v9.i16.3936

eP107 ERCP: Does Patient Position Count?

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DOI 10.1055/s-0046-1821434

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is conventionally performed in the prone or left lateral position (PP/LLP), providing optimal anatomical alignment and easier biliary cannulation. However, the supine position (SP) may facilitate airway management and anaesthetic safety, particularly in patients with obesity, respiratory compromise, or recent abdominal surgery. This study aimed to compare the efficacy, safety, and procedural outcomes of ERCP according to patient positioning in a tertiary Moroccan centre.

Methods A retrospective observational study was conducted at the Hepato-Gastroenterology Department, Mohammed VI University Hospital, Marrakech, from January 2021 to October 2025. A total of 738 consecutive ERCPs were analysed. Positions used: prone/lateral (PP/LLP, $n = 671$, 91 %) and supine (SP, $n = 67$, 9 %). Data collected included demographics, indication, cannulation success, procedure duration, and adverse events (cardiopulmonary events, post-ERCP pancreatitis [PEP], bleeding, perforation). Statistical analysis was performed using SPSS 26.0, with $p < 0.05$ considered significant.

Results Mean age was 58 ± 13 years, with 56 % females. Main indications were choledocholithiasis (62 %), malignant obstruction (24 %), benign strictures (9 %), and others (5 %). Cannulation success was significantly higher in the prone/lateral group (93.1 % vs 88.0 %; $p = 0.04$). Mean procedure time was comparable (32 ± 10 min vs 34 ± 12 min; $p = 0.27$). Cardiopulmonary events occurred in 2.6 % overall (PP/LLP = 2.4 %, SP = 2.9 %; $p = 0.71$). PEP occurred in 4.6 % (PP/LLP = 4.5 %, SP = 5.2 %; $p = 0.56$). Bleeding occurred in 1.8 % (1.7 % vs 2.3 %; $p = 0.63$), and perforation in 0.5 % (0.4 % vs 0.8 %; $p = 0.48$). No procedure-related mortality was recorded.

Conclusions Over this four-year experience, the prone/lateral position provided a higher ERCP success rate without prolonging procedure time or increasing complications. The supine position remains a safe and comfortable alternative for selected high-risk patients when prone positioning is not feasible. A patient-tailored strategy is recommended to optimise both technical performance and anaesthetic safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP108 Acute ectopic pancreatitis following EUS-guided fine needle biopsy of a duodenal subepithelial lesion: An exceedingly rare iatrogenic complication

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DOI 10.1055/s-0046-1821435

Background and Aims Ectopic pancreas is an uncommon subepithelial lesion typically located in the duodenum or gastric antrum. Although EUS-guided tissue acquisition can assist in differentiating these lesions from gastrointestinal stromal tumors or neuroendocrine neoplasms, biopsy of ectopic pancreatic tissue may, in rare instances, precipitate acute inflammation. We report a unique case of acute ectopic pancreatitis triggered by EUS-guided fine needle biopsy (EUS-FNB) of a duodenal lesion, underscoring the importance of procedural awareness and post-biopsy monitoring [1–6].

Case Description A 55-year-old man with a history of coronary artery disease and GERD presented with right upper quadrant pain. Cross-sectional imaging

revealed a 1.9 cm ovoid lesion in the distal duodenum, initially suspected to be a gastrointestinal stromal tumor. EUS demonstrated a 19 mm well-defined hypoechoic submucosal lesion arising from the muscularis propria, containing small anechoic foci suggestive of ductal elements. Under Doppler guidance, four passes were made using a 22-gauge SharkCore FNB needle. No immediate complication occurred. Within 6 hours post-procedure, the patient developed worsening abdominal pain and low-grade fever. Laboratory testing showed mild lipase elevation (59 U/L). CT abdomen revealed duodenal wall thickening and perilesional fat stranding, consistent with localized pancreatitis. The patient was managed conservatively with bowel rest, intravenous fluids, and analgesia, with full recovery within 72 hours. Histopathology confirmed benign pancreatic acinar and ductal tissue, diagnostic of ectopic pancreas.

Results The clinical, imaging, and histologic correlation established the diagnosis of acute ectopic pancreatitis secondary to EUS-FNB. At two-month follow-up, the patient remained asymptomatic without recurrence.

Conclusions Ectopic pancreatitis following EUS-guided biopsy is exceptionally rare, with only isolated cases reported in the literature. This case illustrates how needle-induced ductal injury within ectopic pancreatic tissue can provoke acute inflammation. Awareness of EUS features characteristic of ectopic pancreas should guide procedural decision-making and may prevent unnecessary tissue acquisition.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khashab MA, El Zein M, Canto MI et al. Role of endoscopic ultrasound and fine-needle aspiration in diagnosing subepithelial lesions of the gastrointestinal tract. *Gastrointest Endosc* 2018; 87 (6): 1504–1513. doi:10.1016/j.gie.2017.12.027
- [2] Park SH, Kim GH, Park DY et al. Endoscopic ultrasound-guided fine-needle aspiration biopsy of gastric ectopic pancreas: Feasibility and diagnostic yield. *Dig Dis Sci* 2021; 66 (2): 410–418. doi:10.1007/s10620-020-06178-0
- [3] Hirasawa K, Sato Y, Takizawa K et al. Endoscopic diagnosis of ectopic pancreas: Correlation between endoscopic ultrasound findings and histopathology. *Endosc Ultrasound* 2022; 11 (1): 29–35. doi:10.4103/eus.eus_65_21
- [4] Karimian N, Stoner J, Wu D et al. Beyond the abdomen: An unexpected finding of ectopic pancreas in a mediastinal mass. *J Surg Case Rep* 2025; 2025 (8): rjaf505. doi:10.1093/jscr/rjaf505
- [5] Giannetti A, Brocchi S, Bianchini S et al. Endoscopic ultrasound appearance of jejunal ectopic pancreas mimicking metastatic nodule in a cancer patient. *Diagnostics (Basel)* 2023; 13 (4): 660. doi:10.3390/diagnostics13040660
- [6] Zhang Y, Zhou Q, Chen W, Li J. Extensive heterotopic pancreas in a rare site: A case report and review of literature. *Medicine (Baltimore)* 2023; 102 (30): e34567. doi:10.1097/MD.00000000000034567

eP109 Endoscopic Ultrasound-Guided Diagnosis and Molecular Characterization of Pancreatic Perivascular Epithelioid Cell Tumor (PEComa) Harboring TSC2 Mutation: Expanding the Diagnostic and Therapeutic Spectrum

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DOI 10.1055/s-0046-1821436

Background: Perivascular epithelioid cell tumors (PEComas) are rare mesenchymal neoplasms characterized by epithelioid or spindle cells co-expressing melanocytic and smooth muscle markers. Pancreatic PEComas are exceedingly uncommon, with limited data guiding diagnosis and management. Mutations in TSC1/TSC2 lead to mTOR pathway activation, identifying a potential target for mTOR inhibitors such as everolimus and temsirolimus. Accurate endoscopic ultrasound (EUS) evaluation and molecular profiling are critical for diagnosis and therapeutic planning.

Case Presentation: A 37-year-old woman undergoing pelvic MRI for chronic pelvic pain was found to have a 4.1 cm enhancing mass at the inferolateral aspect of the pancreatic head. Cross-sectional imaging and ⁶⁸Ga-DOTATATE

PET were indeterminate for neuroendocrine tumor. EUS revealed a well-defined, hypoechoic lesion without vascular invasion or ductal dilation. EUS-guided fine-needle biopsy (FNB) demonstrated epithelioid cells with eosinophilic cytoplasm and absent atypia, mitoses, or necrosis. Immunohistochemistry showed strong positivity for HMB-45, Melan-A, MITF, and SMA, with patchy desmin, consistent with PEComa. Next-generation sequencing identified a pathogenic TSC2 frameshift mutation (p.R1355Wfs*60), microsatellite stability, and low tumor mutational burden (4.4 mut/Mb). The presence of a concurrent left renal angiomyolipoma suggested possible syndromic association with tuberous sclerosis complex (TSC). The patient underwent robotic-assisted enucleation, and final histopathology confirmed PEComa. A minor postoperative pancreatic leak resolved with conservative management [1–4].

Discussion: EUS-FNB plays a pivotal role in the minimally invasive diagnosis of pancreatic PEComa, enabling both histologic and molecular characterization. The identified TSC2 mutation confirms mTOR pathway dysregulation, supporting the rationale for targeted therapy with mTOR inhibitors in unresectable or recurrent disease. Prior reports demonstrate durable responses to everolimus and temsirolimus, highlighting their emerging role in the management of PEComas. In this case, complete resection achieved curative outcome, but the genomic findings underscore the importance of precision oncology in follow-up planning.

Conclusion: This case illustrates the diagnostic utility of EUS-guided biopsy coupled with molecular profiling in identifying pancreatic PEComa with actionable TSC2 mutation. Integration of EUS pathology and genomic testing not only establishes definitive diagnosis but also guides potential targeted therapy. Recognition of TSC-related features is essential for comprehensive evaluation and multidisciplinary management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dickson MA et al. "Extrarenal perivascular epithelioid cell tumors (PEComas): clinical investigation of sirolimus/everolimus." *Int J Cancer* 2013; 133 (4): 1005–1012
- [2] Italiano A et al. "Treatment with the mTOR inhibitor temsirolimus in patients with malignant PEComa." *Ann Oncol* 2010; 21 (4): 1135–1137
- [3] Starbuck KD et al. "Treatment of malignant uterine perivascular epithelioid cell tumors with mTOR inhibitors." *Anticancer Res* 2016; 36 (11): 6161–6168
- [4] Geng C et al. "Perivascular epithelioid cell tumor of the pancreas." *Int J Clin Exp Pathol* 2021; 14 (5): 653–661

eP110V Efficacy of Thermofusion Technique in the Management of Grade IV Internal Hemorrhoids

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DOI 10.1055/s-0046-1821437

Abstract Text

Hemorrhoids represent a common proctologic condition often requiring surgical management, particularly Grade IV. Thermofusion using the Ligasure device has emerged as an effective, minimally invasive technique ensuring precise hemostasis with limited thermal spread. We report the case of a 34-year-old male presenting rectal bleeding and anemia. Examination confirmed three internal Grade IV hemorrhoids. Thermofusion hemorrhoidectomy was performed under spinal anesthesia. The procedure achieved complete hemostasis, preserved sphincter integrity, and required no sutures. Postoperative recovery was uneventful, with same-day discharge and satisfactory healing at 3 weeks. Complete mucosal recovery occurred by 6 weeks. Thermofusion demonstrates a safe, efficient, and tissue-sparing alternative to conventional hemorrhoidectomy.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/c406a360-dd66-4394-a380-2aa62bb556ab/Uploads/19978_cf667152-679b-4510-9165-a8b5f416e97a.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP111 The effectiveness of the MAP(ASH) score in predicting clinical outcomes in patients with acute variceal bleeding

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DOI 10.1055/s-0046-1821438

Aims Acute variceal bleeding is one of the most fatal complications of cirrhosis. Accurate risk stratification is crucial to guide management and predict prognosis. Most existing scoring systems have limitations due to subjective variables and difficulties in practical application. The aim of this study was to evaluate the prognostic performance of the MAP(ASH) score, a novel and bedside applicable system previously validated in nonvariceal upper gastrointestinal bleeding, in patients with acute variceal bleeding [1].

Methods Between January 2019 and December 2024, 681 patients admitted with suspected upper gastrointestinal bleeding were retrospectively screened. Active variceal bleeding was confirmed in 162 patients, of whom 66 with complete data were included. The MAP(ASH) score was calculated by assigning 2 points for hemoglobin < 10 g/dL, systolic blood pressure < 90 mmHg, and albumin < 2.5 g/dL, and 1 point each for Glasgow Coma Scale < 15, ASA score ≥ 2, and pulse > 100/min (range 0–9). Demographics, endoscopic findings, variceal characteristics, MELD-Na, CTP, and MAP(ASH) scores were recorded. Outcomes included in hospital and 6 week mortality and rebleeding.

Results Of the patients, 60 % were male with a mean age of 63 years. The most common etiology of cirrhosis was steatotic liver disease (43.9 %), followed by hepatitis B (27.3 %). Endoscopic band ligation was performed in 93 %. Patients who died or rebled during hospitalization or within 6 weeks had significantly higher MAP(ASH), CTP, and MELD-Na scores. A MAP(ASH) score ≥ 3.5 predicted in hospital and 6 week mortality as well as rebleeding with sensitivity and specificity exceeding 70 %.

Conclusions MAP(ASH) is a simple and practical scoring system that does not rely on subjective parameters and can be easily applied at the bedside. Our findings suggest that it performs comparably to established prognostic models in cirrhosis. Validation in larger cohorts may further support its use in routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Redondo-Cerezo E, Vadillo-Calles F, Stanley AJ et al. MAP(ASH): A new scoring system for the prediction of intervention and mortality in upper gastrointestinal bleeding. *J Gastroenterol Hepatol* 2020; 35 (1): 82–89. doi:10.1111/jgh.14811

eP112 Biliary Stent Migration Resulting in Colonic Perforation

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DOI 10.1055/s-0046-1821439

Introduction Endoscopic biliary stents are placed to relieve obstruction secondary to CBD stones, strictures and malignant obstruction. Common complications include stent occlusion and migrations. Perforation due to dislodged stent is a rare complication. The most common site of a migrated biliary stent is the duodenum, whereas complications in the rest of the small intestine or colon are rare. Routine prosthesis removal is done in 3 months but can be extended to 6 months.

Case Description/Methods 87F with history of diverticulosis initially presented with gallstone pancreatitis for which she underwent ERCP with sphincterotomy, balloon sweep with stone extraction and biliary stent placement [A 10 Fr x 7 cm biliary stent]. Patient tolerated the procedure without any complications. Two months later ERCP was repeated for stent removal, however old stent was not found in place. Extended sphincterotomy, s/p lithotripsy and balloon sweeps were performed. Some residual stones remained in the distal CBD. A 10 Fr x 7 cm biliary stent was placed. CT Abdomen with contrast was done revealing dislodged biliary stent in the sigmoid with intraluminal remnants in the sigmoid colon. Endoscopic retrieval was performed and the defect was closed with a 16mm Hemoclip.

Discussion Stent migration occurs in 6-8 % of the cases, only 1 % of the migration leads to bowel injury. The risk of migration is higher if a biliary sphincterotomy is performed while placing the stent. A review of literature revealed that the risk of migration is the highest with straight plastic stents and low stent migration in uncovered self-expanding metallic stents. Patients usually present with abdominal pain, with/without cholestatic disease. A CT abdomen or abdominal radiograph can aid in diagnosis of stent migration. A repeat ERCP would confirm the diagnosis of migration. Endoscopic retrieval sooner is recommended regardless of the presence of complications. In complicated cases surgical intervention is mandated as early as possible. In patients with biliary stent, abdominal pain, obstruction and abscess should raise a suspicion for stent migration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP113 Nationwide Trends in Colon Cancer: Exploring Racial and Gender Disparities, 2019–2022

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DOI 10.1055/s-0046-1821440

Aims Colon cancer incidence demonstrates notable disparities across racial and gender groups. Certain populations, such as Black individuals, experience significantly higher risks, while gender differences further influence the likelihood of diagnosis. These disparities highlight the need for targeted interventions to address inequities and improve prevention and treatment strategies.

Methods Data from the Nationwide Admission Database (HCUP) for 2019–2022 were analyzed, encompassing 1,748,576 adult hospital admissions. Patients included in the study had a principal diagnosis of colon cancer. Logistic regression was used to assess the relationships between race, gender, and the likelihood of colon cancer diagnosis. To address multicollinearity, Variance Inflation Factor (VIF) analysis was performed, and highly collinear variables were excluded. Race categories were encoded using one-hot encoding, and gender was incorporated as a predictor. The logistic regression model, developed with Statsmodels, evaluated the significance of predictors using z-values and p-values, quantifying the independent effects of race and gender while controlling for other variables.

Results Analysis revealed significant associations between race, gender, and colon cancer incidence. Black individuals had higher odds of being diagnosed with colon cancer, whereas other racial groups exhibited lower odds. Gender differences were also evident, with females demonstrating an increased likelihood of colon cancer diagnosis. These findings provide robust evidence of demographic disparities in colon cancer risk.

Conclusions This study highlights the substantial influence of race and gender on colon cancer incidence. The elevated risk observed among African Americans underscores the need for targeted preventive measures, while the increased risk among females points to gender-specific factors requiring further investigation. These results stress the importance of incorporating race and gender considerations into strategies to reduce disparities in colon cancer burden and improve health equity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP114 Beta-Blocker Therapy With Carvedilol Is Linked to Lower Bleeding and Readmission Rates in Cirrhosis: A Nationwide Analysis

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DOI 10.1055/s-0046-1821441

Aims Carvedilol, a non-selective beta-blocker, is widely prescribed for hypertension and heart failure. Recently, its potential in preventing variceal bleeding, a severe complication in cirrhosis patients, has been investigated. With the high rates of hospital readmissions among these patients, evaluating interventions to reduce these occurrences is vital. This study uses a large-scale national dataset to assess the effects of carvedilol on variceal bleeding incidence and subsequent hospital readmissions in cirrhosis patients.

Methods We analyzed data from the Nationwide Inpatient Sample (HCUP) covering 2,858,576 adults between 2019 and 2024. The study focused on patients prescribed carvedilol, assessing its impact on variceal bleeding and readmission rates. Chi-square tests were used for categorical variables, examining carvedilol's effects on outcomes. Risk reduction was quantified using odds ratios (OR) with 95 % confidence intervals (CI). Contingency tables evaluated bleeding and readmission rates at 30 and 60 days. Statistical significance was set at $p < 0.05$.

Results Among 43,668 cirrhosis patients, those on Carvedilol ($n = 19,766$) had significantly lower variceal bleeding (18.3 % vs. 61.6 %) and 30-day readmissions (0.3 % vs. 51.8 %) compared to non-users ($n = 23,902$). At 60 days, readmissions were also reduced (1.0 % vs. 44.7 %). Carvedilol use was associated with lower odds of bleeding ($p < 0.001$), 30-day readmission (OR = 0.001, 95 % CI: 0.0008–0.0013; $p < 0.001$), and 60-day readmission (OR = 0.37, 95 % CI: 0.32–0.44; $p < 0.001$).

Conclusions This study demonstrates that carvedilol significantly reduces variceal bleeding and hospital readmission rates in cirrhosis patients. The decrease in 30-day and 60-day readmission rates suggests carvedilol provides both immediate and sustained benefits after discharge. These findings highlight carvedilol's potential as a preventive strategy for cirrhosis complications, improving patient outcomes and reducing healthcare utilization. Further research is needed to explore the mechanisms behind these effects and assess the long-term benefits of carvedilol therapy in diverse populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP115 Syphilitic Colonic Involvement Mimicking Lymphoid Aggregates: Diagnostic Considerations

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DOI 10.1055/s-0046-1821442

Introduction Syphilis is a sexually or vertically transmitted disease caused by the spirochete *T. pallidum*. The liver involvement is very uncommon (< 1 % of cases) and can occur in the 2^o or 3^o phase of the disease due to the multiplication and hematogenous spread of the spirochete to the liver. In the 2^o syphilis phase, cholestasis occurs, with a typical elevation of alkaline phosphatase. Signs include pyrexia, the typical generalized rash involving the palms and the soles, and even nephrotic syndrome, not all required. In the tertiary phase, the characteristic lesions are syphilitic gummas, most commonly in the right lobe of the liver, and generally asymptomatic, but can cause compression leading to Budd–Chiari syndrome. Diagnosis includes blood tests like CBC, LFTs, blood cultures, and imaging such as sonography, CT scan, MRCP, ERCP, and percutaneous transhepatic cholangiography. Treatment includes IV antibiotics, ERCP, or surgery to open the duct and drain bile to reduce the build-up of fluid. This

case study highlights the importance of detection of early syphilitic involvement of the bile duct and liver.

Case Description/Methods A 53-year-old female with right-sided abdominal lower abdominal pain and occasional epigastric pain with bloating. She presented with maculopapular rash involving palms and soles with vague right-sided abdominal pain and left quadrant abdominal pain for 2 weeks duration associated with nausea. *Treponema pallidum* was found to be reactive. Colonoscopy revealed hyperplastic changes with focal lymphoid aggregate. As the patient was allergic to penicillin, doxycycline was started for 14 days.

Discussion This case was unique as it shows the importance of keeping 2^o/3^o syphilis on the differential diagnosis of a patient presenting with cholestatic hepatitis. Treatment for syphilis results in the resolution of biochemical abnormalities. Syphilis as a cause of hepatitis was suspected based on the characteristic liver enzyme pattern, with more prominent elevation in the alkaline phosphatase level, negative serology for hepatotropic viruses, and the rapid resolution of symptoms and biochemical abnormalities with therapy. Given liver biopsy findings in syphilitic hepatitis, such as portal and lobular inflammatory cell infiltrates, hepatocellular necrosis, cholestasis, and non-caseating granulomas are non-specific and the identification of spirochetes is challenging, a liver biopsy is not crucial for diagnosing syphilitic hepatitis or cholangitis when therapy elicits a positive response.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP116 Gastric Ulcer Healing Disparities Across Race and Language Groups: Evidence From a National Database

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DOI 10.1055/s-0046-1821443

Aims This retrospective study examines the effects of race and language on the healing rates of gastric ulcers from 2021 to 2024, utilizing inpatient hospital data. By excluding patients who received endoscopic therapy, and using propensity score matching for baseline characteristic alignment, the focus shifts to the role of Proton Pump Inhibitors and sociodemographic factors in treatment outcomes. This analysis is essential for identifying disparities and improving targeted healthcare approaches.

Methods We conducted a retrospective analysis of inpatient hospital data from 2021 to 2024, focusing on patients diagnosed with gastric ulcers via endoscopy. Those who received endoscopic therapy were excluded. We utilized propensity score matching to align baseline characteristics of the cohort. All participants received 40mg of Proton Pump Inhibitors daily for 8 weeks, followed by a repeat endoscopy. The research specifically investigated the influence of race and language on ulcer healing rates, incorporating patient demographics (gender, race, language) and post-treatment outcomes. Descriptive statistics were used to evaluate healing rates across demographic groups, and logistic regression analyzed the impact of gender and race on healing, including coefficients and p-values to determine statistical significance.

Results This study included 350 patients who underwent pre- and post-endoscopy for gastric ulcer management, exploring the impact of race and language on healing outcomes. Race significantly influenced healing rates, with Hispanics experiencing the lowest rates ($P = 0.012$). Patients with English as a second language also showed lower healing rates compared to native speakers ($P = 0.035$). The regression analysis revealed a strong positive association between having English as a first language and healing likelihood (Coefficient = 3.59).

Conclusions The significant differences in ulcer healing rates among racial groups and between English-speaking and non-English-speaking patients highlight systemic disparities in healthcare outcomes. The notably lower healing rates in Hispanics and those for whom English is a second language suggest

that sociolinguistic barriers contribute to treatment inequity. These results underscore the necessity for culturally competent care and language-specific interventions to enhance treatment effectiveness and equity in healthcare services, aiming to mitigate the observed disparities in gastric ulcer management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP117 AI-Driven Innovation in Gastroenterology: Insights From ChatGPT-4.0 and GLASS AI

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DOI 10.1055/s-0046-1821444

Aims In the rapidly evolving field of Gastroenterology, AI tools such as GLASS AI and ChatGPT 4.0 are becoming increasingly vital. This study contrasts these technologies, exploring their effects on diagnostic accuracy, patient care, and educational initiatives. GLASS AI excels in image-based diagnostics and procedural support, whereas ChatGPT 4.0 efficiently processes vast amounts of medical literature and patient information, enhancing decision-making. Grasping their unique capabilities is key to integrating AI into gastroenterological practices effectively, thus improving patient outcomes and healthcare delivery.

Methods Our research conducted an in-depth comparative analysis of ChatGPT 4.0 and GLASS AI, focusing on critical factors like "Ease of Use," "Reliability," "Response Time," and "Overall Experience." We employed a Likert scale ranging from 1 (low performance) to 5 (high performance) to assess their effectiveness. The evaluation covered 50 different clinical scenarios in Gastroenterology and Hepatology. Five seasoned reviewers thoroughly assessed the outcomes, followed by paired t-tests for each category to perform a detailed and systematic analysis of the results, providing insightful findings on the comparative performance of these AI technologies.

Results Our data analysis revealed statistically significant differences between ChatGPT 4.0 and Glass AI in several categories. The paired t-tests results for "Ease of Use (T-test: 4.41, $P < 0.01$)," "Reliability (T-test: 4.425, $P < 0.01$)," "Response Time (T-test: 4.091, $P < 0.01$)," and "Overall Experience (T-test: 3.12, $P < 0.01$)" indicate significant discrepancies in performance ratings between the two systems, which are unlikely to occur by chance.

Conclusions The comparative analysis between GLASS AI and ChatGPT 4.0 in Gastroenterology highlights each AI tool's unique strengths and efficiencies. Significant statistical differences in ease of use, reliability, response time, and overall user experience demonstrate ChatGPT 4.0's superiority over GLASS AI. Adopting a hybrid approach that combines the advantages of both technologies could offer the greatest benefits in advancing Gastroenterology. This study underscores the importance of understanding the specific capabilities of various AI tools to maximize their potential in healthcare.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP118 Digital Platforms Driving Change: The Role of YouTube and TikTok in Colon Cancer Education

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DOI 10.1055/s-0046-1821445

Aims Social media platforms like YouTube and TikTok have become significant conduits for health information dissemination, impacting public awareness of critical issues such as colon cancer screening. This study examines how these platforms influence colon cancer awareness, comparing the quality and reliability of the content presented. By evaluating videos based on their educational value and trustworthiness, we aim to discern the potential of each platform

to effectively educate and guide patients concerning colon cancer prevention and screening practices.

Methods Our study at Nassau University Medical Center, New York, analyzed "colon cancer screening awareness" videos on YouTube and TikTok. We selected English-language videos with relevant audio, assessing quantitative aspects like views, likes, and subscriber counts, and qualitative aspects, classifying content as scholarly or personal. We used DISCERN, GQS, and PEMAT to evaluate credibility and quality, with intraclass correlation among seven researchers ensuring consistency. Statistical analyses were conducted using Microsoft Excel and IBM SPSS, highlighting differences in content quality between YouTube and TikTok.

Results Our analysis of 220 videos on colon cancer awareness (110 from YouTube and 110 from TikTok) revealed significant differences in quality and reliability. YouTube videos scored higher in DISCERN (45.27 ± 17.10 vs. 31.09 ± 13.42 , $p < 0.012$), PEMAT (3.89 ± 0.70 vs. 2.48 ± 0.85 , $p < 0.022$), and GQS (3.98 ± 0.55 vs. 2.58 ± 0.74 , $p < 0.041$) compared to TikTok. These results suggest that YouTube provides more dependable and higher-quality information for patients seeking knowledge about colon cancer.

Conclusions Our findings underscore significant discrepancies in the educational quality of colon cancer awareness videos on YouTube and TikTok. YouTube's superior scores in DISCERN, PEMAT, and GQS reflect its higher reliability and quality as an educational resource. This suggests that viewers seeking information about colon cancer screening will likely find more accurate and actionable content on YouTube. The results advocate for healthcare professionals to guide patients toward more reliable sources on social media for health information.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP119 Obesity as a Risk Factor for Diverticulitis: Insights From a Nationwide HCUP Database Analysis

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DOI 10.1055/s-0046-1821446

Aims This study analyzes data from 2,858,576 adults using the Nationwide Admission Database (HCUP) from 2019 to 2024, focusing on the incidence and readmission rates of diverticulitis within 30 and 60 days. It explores the impact of obesity—a known risk factor—alongside demographic influences like race and gender. Employing chi-square tests, logistic regression, and ROC curve analysis, the research examines how these factors correlate with diverticulitis outcomes, shedding light on their interplay in hospital readmissions.

Methods Data were collected from the HCUP database, reflecting hospital admissions spanning 2019 to 2024 for 2,858,576 adults. The study primarily investigates the incidence of diverticulitis and subsequent readmission rates at 30 and 60 days, while analyzing the effects of obesity, race, and gender on these outcomes. Chi-square tests were used to compare incidence and readmission rates between obese and non-obese groups across different demographics. Logistic regression assessed the influence of gender and race on the probability of readmissions at specified intervals, integrating coefficients for these variables.

Results Between 2019 and 2024, HCUP's Nationwide Admission Database was used to analyze 2.8 million adult hospital admissions, identifying 234,024 diverticulitis cases, with 112,014 classified as obese ($BMI > 30$). Chi-square tests showed significant differences in 30- and 60-day readmission rates between obese and non-obese patients ($p < 0.001$). Diverticulitis incidence also varied by obesity ($p = 0.025$). Logistic regression revealed gender and race influenced readmissions, with higher odds in females and African Americans across both 30- and 60-day intervals.

Conclusions The study confirms a strong correlation between obesity and increased readmission rates for diverticulitis, highlighting obesity's significant

impact on the condition's recurrence. It also reveals gender and racial disparities in readmission rates, with females and African Americans experiencing higher rates, especially at 60 days. The ROC curves demonstrate the predictive accuracy of the models, particularly for 30-day readmissions. These findings are crucial for crafting targeted interventions that address the specific needs of these vulnerable groups, aiming to enhance outcomes and reduce healthcare costs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP120V "A Rare Case of Gastroscope Trapped inside an EUS-Hepaticogastrostomy Stent Rescued by Dual-Scope Technique"

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DOI 10.1055/s-0046-1821447

Abstract Text

EUS-HGS stent related adverse events occur in approximately 3 % of procedures, mainly due to stent migration or dysfunction. We report the first documented case of a gastroscopy becoming trapped inside an HGS stent. A 46-year-old woman with stage IIIC ovarian cancer underwent EUS-HGS after failing ERCP. During check-up, the gastroscopy stuck inside stent lumen due to radial force and misalignment. Initial forceps retrieval failed. Another gastroscopy was introduced simultaneously (dual-scope technique) to grasp the stent mesh and gently release the trapped scope without complication. This case highlights a rare complication and demonstrates the effectiveness of the dual-scope technique as a rescue approach in this situation [1–6].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/4c083e41-f1dd-4bb1-98e1-590bc0d28612/Uploads/19978_Dual_scope%20technique.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] The difficult polypectomy: Description of a new dual-endoscope technique NgAnthony J. et al. Gastrointestinal Endoscopy. Volume 55 (Issue 3): 430–432
- [2] Moond V, Loganathan P, Koyani B, Khan SR, Kassab LL, Chandan S, Mohan BP, Broder A, Adler DG. Efficacy and safety of EUS-guided hepaticogastrostomy: A systematic review and meta-analysis. Endosc Ultrasound 2024; 13 (3): 171–182
- [3] Kuwano H, Mochiki E, Asao T, Kato H, Shimura T, Tsutsumi S. Double endoscopic intraluminal operation for upper digestive tract diseases: proposal of a novel procedure. Ann Surg 2004; 239 (1): 22–7
- [4] Tian J, Li Y, Hou Y, Yu T, Zhang L, Wang G, Hou S. Endoscopic ultrasound-guided rendezvous technique with dual endoscopic technique rescue the difficult cannulation after Billroth type II gastrectomy. Gastroenterology Report Volume 13: 2025 goaf036
- [5] Binda C, Dajti E, Giuffrida P, Trebbi M, Coluccio C, Cucchetti A, Fugazza A, Perini B, Gibiino G, Anderloni A, Repici A, Fabbri C. Efficacy and safety of endoscopic ultrasound-guided hepaticogastrostomy: a meta-regression analysis. Endoscopy. 2024; 56 (9): 694–705
- [6] Alsakarneh S, Madi MY, Dahiya DS, Jaber F, Kilani Y, Ahmed M, Beran A, Abdallah M, Al Ta'ani O, Mittal A, Numan L, Goyal H, Bilal M, Kiwan W. Is Endoscopic Ultrasound-Guided Hepaticogastrostomy Safe and Effective after Failed Endoscopic Retrograde Cholangiopancreatography?-A Systematic Review and Meta-Analysis. J Clin Med 2024; 13 (13): 3883

eP121 Implementing sustainability interventions in endoscopy: results from a regional study in the Netherlands

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DOI 10.1055/s-0046-1821448

Aims Gastrointestinal endoscopy is resource-intensive and contributes substantially to healthcare's environmental footprint. While the ESGE position statement on green endoscopy highlights the need for a more sustainable practice, concrete guidance on implementation remains limited¹. This study explored sustainability efforts in endoscopy departments in the south-west of the Netherlands and examined barriers and facilitators influencing their adoption.

Methods Semi-structured interviews were conducted with green team members from eight endoscopy departments. Transcripts were thematically analyzed to map sustainability initiatives and implementation factors. A second interview round validated the initiative list, and sustainability coordinators provided additional hospital-wide information [1].

Results Across the eight hospitals, 73 distinct sustainability initiatives were identified, with departments having implemented a mean of 42 initiatives (range: 38–49). Frequently reported measures included reducing suction tubing and canisters (n = 8), oxygen catheters (n = 8), sterile water bottles (n = 7), and absorption pads (n = 6). All departments used strict triage protocols to prevent unnecessary procedures and addressed patient and staff travel through telemedicine and cycling incentive programs. In general, three interrelated themes affected implementation:

- Institutional and organizational factors: barriers included conflicting policies from other disciplines (n = 6), limited time (n = 5), cost constraints (n = 4), and restrictive hospital rules (n = 4); enablers included hospital-wide alignment (n = 7), supportive leadership (n = 6), and structural resources (n = 4).
- Behavioral and cultural factors: barriers included staff resistance (n = 7), lack of evidence (n = 6), and low prioritization (n = 5); enablers included active green teams (n = 7), visualized before-and-after results (n = 6), and protected time (n = 5).
- System-level factors: barriers included limited influence on industry (n = 3) and national and international regulations (n = 2); enablers included collaboration across endoscopy departments regionally (n = 6), across departments within the hospital (n = 5), and the availability of empirical evidence (n = 5).

Conclusions Endoscopy departments in the south-west of the Netherlands have adopted a wide range of sustainability initiatives, primarily targeting reductions in single-use items, unnecessary procedures, and travel emissions.

Despite this progress, substantial institutional, cultural, and system-level barriers persist. Advancing sustainable endoscopy will require coordinated organizational support, engaged leadership, robust evidence, and strong cross-departmental and inter-hospital collaboration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] de Santiago E.R., Dinis-Ribeiro M., Pohl H., Agrawal D., Arvanitakis M., Baddeley R., Messmann H. 2022; Reducing the environmental footprint of gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) position statement. *Endoscopy* 54 (8): 797–826

eP122 Patient-Reported Barriers and Awareness of Colonoscopy as a Screening Test for Colorectal Cancer: A Cross-Sectional Survey from Sudan

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DOI 10.1055/s-0046-1821449

Aims Quantify patient-reported barriers relevant to **diagnostic colonoscopy** and describe recognition of colonoscopy as a CRC screening test to inform endoscopy service improvement.

Methods Cross-sectional bilingual survey (community and hospital). Adults ≥ 18 years. Analysis restricted a-priori to respondents who **had heard of CRC**. Outcomes: (1) **recognition of colonoscopy** as a screening method (Yes/No/Don't know); (2) prevalence of barrier domains (pain/bleeding concerns, embarrassment, bowel-prep aversion, anaesthesia concerns, access/distance, **cost**, information gaps, "unnecessary if asymptomatic," no doctor advice, time constraints, personal/psychological factors). Likert items dichotomised (Agree/Strongly agree = barrier present). Descriptives and exploratory comparisons (► **Table 1**).

► **Table 1** Cohort characteristics, primary outcome, and barrier prevalence

Variable	Value
Age, median (IQR), years	58 (53–62)
Male	51 %
Health insurance	53 %
Recognises colonoscopy as a CRC screening method	62.5 %

Analysis set: respondents who had heard of colorectal cancer (n = 208).

Results N = 304; analysis set n = 208 (heard of CRC). Median age 58 (IQR 53–62); 51 % male; health-insurance 53 %. **Recognition of colonoscopy** as a screening method: 62.5 %. Most prevalent barriers: **doctor did not advise screening 73 %, unaware of benefits 72 %, screening expensive 61 %, unnecessary if asymptomatic 59 %, fear of diagnosis 46 %, pain/bleeding concerns 45 %, distance/unavailability 42 %, embarrassment 30 %, time constraints 30 %**. Exploratory comparisons showed lower recognition among those endorsing "I do not deserve screening" (52 % vs 64 %) (► **Table 2**).

► **Table 2** Barrier domains (Agree/Strongly agree)

Barrier domain	Prevalence
Doctor did not advise screening	73 %
Unaware of benefits of screening	72 %
Screening is expensive / unaffordable	61 %
Screening unnecessary if asymptomatic	59 %
Fear of diagnosis	46 %
Pain / bleeding concerns	45 %
Distance / unavailability of services	42 %
Embarrassment	30 %
Time constraints / too busy	30 %

Note: Barrier items measured on a 5-point Likert scale; Agree/Strongly agree treated as barrier present.

Conclusions Fewer than two-thirds recognise colonoscopy as a screening test; **information, access, and cost** barriers dominate. Endoscopy services should implement standardised pre-assessment education, referrer prompts, cost/transport pathways, and targeted counselling on pain/anaesthesia to improve booking conversion and reduce DNAs for diagnostic colonoscopy [1–4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] von Wagner C, Good A, Wright D, Rachet B, Obichere A, Bloom S et al. Inequalities in participation in colorectal cancer screening: a systematic review. *Br J Cancer* 2011; 105 (5): 677–683
- [2] Hassan C, East J, Radaelli F, Spada C, Benamouzig R, Bisschops R et al. Bowel preparation for colonoscopy: ESGE Guideline—Update 2019. *Endoscopy*. 2019; 51 (8): 775–794
- [3] Kaminski MF, Thomas-Gibson S, Bugajski M, Bretthauer M, Rees CJ, Dekker E et al. Performance measures for lower GI endoscopy: ESGE Quality Improvement Initiative. *Endoscopy*. 2017; 49 (4): 378–397
- [4] Koo JH, Leong RWL, Ching J, Yeoh K-G, Wu D-C, Mordani A et al. Knowledge of, attitudes toward, and barriers to participation of colorectal cancer screening tests in the Asia-Pacific region: a multicenter study. *Gastrointest Endosc* 2012; 76 (1): 126–135. doi:10.1016/j.gie.2012.03.168

eP123 Ectopic Peri-anastomotic Gastric Variceal Bleeding due to Segmental Portal Hypertension after Roux-en-Y Reconstruction: A Case Report

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DOI 10.1055/s-0046-1821450

Background Segmental (sinistral) portal hypertension is a rare and often under-recognized cause of upper gastrointestinal bleeding, usually secondary to splenic or portal branch obstruction. We describe a unique case of ectopic peri-anastomotic gastric variceal bleeding after subtotal gastrectomy and Roux-en-Y reconstruction, successfully managed with endoscopic band ligation.

Case Presentation A 76-year-old man, with no relevant medical history, underwent subtotal gastrectomy for gastric adenocarcinoma in July 2024. The patient remained asymptomatic until October 2024, when he developed postprandial fullness, nausea and weight loss. In April 2025, he underwent conversion from Billroth II procedure to a Roux-en-Y due to symptomatic gastric stump gastritis. Pre-surgical CT scan was unremarkable. In September 2025, a routine postoperative surveillance endoscopy was performed. The examination revealed large esophageal and gastric varices (GOV2), as well as peri-anastomotic ectopic gastric varices (IGV2). During the procedure, one of the IGV2 developed sudden spurting bleeding. Hemostasis was achieved with a single band

ligation, as cyanoacrylate was unavailable. The patient completed a 5-day continuous infusion of octreotide and received prophylactic ceftriaxone. No rebleeding occurred nor transfusion was required. CT angiography demonstrated a patent portal vein with a markedly thinned left portal branch and atrophy of hepatic segments II–III, consistent with localized (sinistral) portal hypertension. The spleen and the splenic vein were unremarkable. He was discharged on carvedilol 3.125 mg twice daily, adjusted due to bradycardia [1, 2].

At one-month follow-up, the patient remained asymptomatic and free of recurrent bleeding. Transient elastography (FibroScan) confirmed the absence of chronic liver disease (F0).

Discussion Ectopic gastric varices secondary to segmental portal hypertension are extremely uncommon, particularly after gastric surgery. In this case, focal obstruction of the left portal branch likely resulted in localized venous hypertension and collateral veins formation at the gastrojejunal anastomosis. The absence of cirrhosis and normal spleen size supported a diagnosis of left-sided (segmental) portal hypertension probably due to the surgical procedure. Endoscopic band ligation, though less commonly used for ectopic varices, proved to be an effective alternative when cyanoacrylate was unavailable.

Conclusion This case highlights a rare cause of variceal bleeding following Roux-en-Y reconstruction, secondary to segmental portal hypertension. Endoscopic band ligation provided effective hemostasis and may represent a valuable therapeutic option in similar challenging scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] de Franchis R, Bosch J, Garcia-Tsao G, Reiberger T, Ripoll C, Baveno VII Faculty. Baveno VII – Renewing consensus in portal hypertension. *J Hepatol*. 2022; 76 (4): 959–974. doi:10.1016/j.jhep.2021.12.022 Epub 2021 Dec 30. Erratum in: *J Hepatol*. 2022 Jul;77(1):271. 10.1016/j.jhep.2022.03.024 PMID: 35120736 PMID: PMC11090185
- [2] Tranah TH, Nayagam JS, Gregory S, Hughes S, Patch D, Tripathi D, Shawcross DL, Joshi D. Diagnosis and management of ectopic varices in portal hypertension. *Lancet Gastroenterol Hepatol*. 2023; 8 (11): 1046–1056. doi:10.1016/S2468-1253(23)00209-1 Epub 2023 Sep 9 PMID: 7683687

eP124 Endoscopic prediction of *Helicobacter pylori* infection: time to Biopsy-sparing Diagnostic Model

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DOI 10.1055/s-0046-1821451

Aims *Helicobacter pylori* (*H. pylori*) infection is one of the most prevalent chronic bacterial infections worldwide [1]. The literature describes several endoscopic signs may predict *H. pylori* status [2, 3]. However, random biopsies according to Sydney system are still widely used for its determination. Aim is to evaluate the diagnostic performance of endoscopic characteristics in predicting *H. pylori* infection.

Methods This was a monocentric prospective study including all consecutive patients who underwent upper-GI endoscopy in one-year timeframe. Every procedure was performed by trained endoscopists in order to describe regular arrangement collecting venules (RAC), fundic gland polyps (FGPs), linear streaks, hematin spots and diffuse redness. *H. pylori* infection was histologically investigated.

Results A total of 421 patients were enrolled, according to inclusion criteria (F: 222, 52.7 %, median age 54.1 y.o.). The presence of RAC both in greater curvature and in lesser curvature, FGPs and diffuse redness were significantly associated with higher prevalence of *H. pylori* infection ($p < 0.0001$). Considering the interaction effect by the optical evidence of intestinal metaplasia, RAC and FGPs maintained their significance with an OR of 0.05 (0.02–0.13) and 0.11 (0.03–0.53), respectively. All the characteristics described showed a high negative predictive value ($> 90\%$). Lastly, according to a probabilistic model, a ROC curve was built with AUROC 0.893 (95 % CI: 0.854–0.932).

Conclusions The proposed endoscopic assessment has a high predictive capability for *H. pylori* infection, whereas the presence of RAC and FGPs are the most important and reliable indicators of *H. pylori* status. Our findings may represent a first step toward avoiding unnecessary random biopsies, promoting a more accurate endoscopic examination focused on the careful assessment of the gastric mucosa.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Ebigbo A et al. Regular arrangement of collecting venules and the Kimura-Takemoto classification for the endoscopic diagnosis of *Helicobacter pylori* infection: Evaluation in a Western setting. *Dig Endosc* 2021. doi:10.1111/den.13808
- [2] Gracés-Duran R et al. Association between a regular arrangement of collecting venules and absence of *Helicobacter pylori* infection in a European population. *Gastrointest Endosc* 2019. doi:10.1016/j.gie.2019.05.027
- [3] Li L et al. Regular arrangement of collecting venules under endoscopy for predicting a *Helicobacter pylori*-negative stomach: A systematic review and meta-analysis. *Gastroenterol Hepatol* 2021. doi:10.1016/j.gastrohep.2020.08.003

eP125 Cricopharyngeal Peroral Endoscopic Myotomy (CP-POEM) As A New Emerging Minimally Invasive Treatment for Cricopharyngeal Bar – Experience of a Tertiary Centre of a South European Country

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DOI 10.1055/s-0046-1821452

Introduction Cricopharyngeal bars represent an uncommon and frequently underrecognized cause of oropharyngeal dysphagia, resulting from dysfunction or fibrosis of the cricopharyngeal muscle. Conventional management options include open surgical myotomy or endoscopic dilation. Cricopharyngeal peroral endoscopic myotomy (CP-POEM) has emerged as a minimally invasive technique [1].

Case Report We report two cases of symptomatic cricopharyngeal bar successfully treated with CP-POEM, with mean age of 76 ± 11.3 years-old and Eckardt score of 5.5 ± 3.5 . One patient was under anticoagulation with apixaban due to history of ischemic stroke and atrial fibrillation. One of the cases underwent botulinum toxin therapy prior to CP-POEM with temporary symptomatic response. All procedures were performed using a triangle-tip(TT)-knife (Olympus) with SprayCoag 2.5 mode for submucosal tunnelling and Endocut Q 2.0 for cricopharyngeal myotomy (Vio3, ERBE). Hypopharyngeal mucosotomy was closed using through-the-scope clips. Mean procedure time was 103.5 ± 26.2 minutes. In one case, due to space conflict and significant cricopharyngeal bar hypertonia, it was necessary to remove the cap trapped in the distal portion of the tunnel with foreign body forceps. In both cases, a temporary subcutaneous emphysema was recorded with capnoperitoneum requiring percutaneous drainage in one case. A single-dose of intravenous corticosteroids after the procedure facilitated extubation of patients due to a significant edema of the hypopharynx and arytenoids. There were no complications after the procedure. At 3.5 ± 3.5 months follow-up, both patients were completely asymptomatic (Eckardt score of 0) with improvement of overall quality of life. We present endoscopic and imaging iconography.

Conclusion CP-POEM is a minimally invasive endoscopic option that appears to be effective and safe for patients with symptomatic cricopharyngeal bars. In both cases, CP-POEM resulted in rapid and sustained symptom resolution, without major complications. This technique should be considered as first-line approach with improvement in symptom control and lower morbidity than conventional techniques. Larger studies with longer follow-up are warranted to confirm long-term outcomes in broader clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Al Ghamdi SS et al. Peroral endoscopic myotomy for management of cricopharyngeal bars (CP-POEM): a retrospective evaluation. *Endoscopy*. 2022; 54 (5): 498–502

eP126 Diagnostic yield of bile cultures during ERCP in patients with acute cholangitis

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Aims Acute cholangitis is a potentially life-threatening condition that requires early empirical antibiotic therapy. In a context of increasing antimicrobial resistance, systematic bile culture sampling during ERCP could optimize antibiotic treatment. The aim of this study is to describe the microbiological profile of acute cholangitis in our setting and to evaluate the clinical impact of bile cultures on therapeutic decision-making.

Methods A prospective, descriptive, observational study was conducted at a tertiary center between 2022 and 2025. Patients diagnosed with acute cholangitis according to the Tokyo Guidelines who underwent ERCP with bile culture were included. Demographic, etiological, microbiological, and antimicrobial treatment variables were collected.

Results A total of 151 patients were included (57 % male). According to the Tokyo classification, 29 (19 %) presented with severe, 100 (66 %) with moderate, and 17 (13 %) with mild cholangitis. Fifty-five percent (55 %) had a naïve papilla, 20 % had prior ERCP without a stent, and 25 % had prior ERCP with a biliary stent. The most frequent etiology was lithiasis (82 patients, 54 %), followed by malignant stricture (46 patients, 31 %).

Bile cultures were positive in 129 cases (85 %); of these, 20 % were severe, 67 % moderate, and 13 % mild cholangitis. Conversely, in patients with severe cholangitis 90 % had positive cultures, in 86 % of the moderate, and 77 % of the mild. Most positive cultures were polymicrobial (59 %), with a predominance of Gram-negatives (57 %), mainly Enterobacteriaceae and enterococci. Other relevant microorganisms were bacteria of the SPICE group found in 32 patients (25 %) and *Candida* in 12 (9 %).

The proportion of polymicrobial cultures did not differ significantly among patients with naïve papilla, prior ERCP without stent, and prior ERCP with stent ($p > 0.05$).

Among patients with positive cultures, 92 % (119 patients) had received prior antibiotics. Following microbiological results, treatment was modified in 58 % of cases (primarily via de-escalation or targeted therapy) and in 42 % via escalation or broadening of antibiotic coverage. Blood cultures were obtained in 76 patients with positive bile cultures, resulting positive in 45 (60 %) and concordant with bile culture in only 43 cases (57 %).

Conclusions Systematic bile culture collection during ERCP is a simple and efficient procedure, with a high diagnostic yield (85 %) and greater sensitivity than blood cultures. Polymicrobial infection is frequent, particularly in patients with prior ERCP, although no significant differences were observed between groups. Bile cultures allow for antibiotic therapy adjustment in a considerable number of patients, both allowing de-escalation and contributing to reduce risk of resistance development and also adjusting therapy in case of resistant or atypical microorganisms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP127 Diagnostic performance of a deep learning-based tool for the detection and staging of rectal cancers on endoscopic ultrasound examinations: a pilot study

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DOI 10.1055/s-0046-1821454

Aims Colorectal cancer is the third most common cancer in men and the second in women. Accurate loco-regional staging, primarily based on magnetic resonance imaging (MRI) and rectal endoscopic ultrasound (R-EUS), is essential for treatment planning and relies on assessing tumor depth (T) and regional lymph nodes (N) according to the TNM system. In situ (Tis) and submucosal (T1) tumors may be suitable for minimally invasive endoscopic resection, whereas up to one-third of T2 tumors present mesorectal lymph node metastases, requiring MRI for more accurate staging. Only a few studies have explored artificial intelligence, particularly deep learning (DL), for EUS-based detection and staging of rectal tumors.

Methods This prospective, single-center pilot study evaluated the diagnostic performance of a DL-based tool for detecting and staging rectal tumors on R-EUS images. The model used a convolutional neural network (CNN) with a ResNet backbone pretrained on ImageNet for image classification and segmentation. Performance was assessed using accuracy, precision, recall, F1-score, and spatial agreement metrics between model and expert segmentations (Dice similarity coefficient, DSC). The model was tested for its ability to distinguish Tis–T1 from T2–T3 tumors, and separately, Tis from all other stages.

Results Fifty patients were prospectively enrolled from May 2023 to December 2024. Tumor segmentation showed a median DSC of 0.65 (IQR 0.17). Pathological tissue detection achieved an accuracy of 0.77 (precision 0.85, recall 0.77, F1-score 0.81). For classifying Tis–T1 vs. T2–T3, accuracy was 0.64 (precision 0.88, recall 0.64, F1-score 0.74). For distinguishing Tis from other stages, accuracy reached 0.80 (precision 0.83, recall 0.89, F1-score 0.86). Mesorectal lymph node segmentation yielded a median DSC of 0.62 (IQR 0.17).

Conclusions The DL-based tool may assist less-experienced operators in identifying candidates for minimally invasive endoscopic resection. The semi-supervised training produced diagnostic performance comparable to expert assessment, supporting the feasibility of DL-enhanced R-EUS for loco-regional staging of rectal cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP128 Endoscopic papillectomy for ampullary tumours: a multicentre retrospective study

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DOI 10.1055/s-0046-1821455

Aims Although endoscopic papillectomy is an established minimally invasive alternative to surgical resection for ampullary lesions, its technical aspects are not well defined. This study aimed to evaluate technical and clinical factors influencing safety and outcomes [1–19].

Methods A multicenter, retrospective analysis of consecutive patients who underwent endoscopic papillectomy in six tertiary Polish centers between 2011 and 2023. Primary outcomes included en bloc resection rate, tumour histology, recurrence rate, and adverse events; multivariate regression models were used to identify its independent predictors.

Results A total of 192 patients were included. En bloc resection was achieved in 66.1 % of lesions. Larger tumour size (for 1 mm increase OR 1.06; 95 % CI 1.02–1.11; $p=0.002$) and submucosal injection (OR 5.24; 95 % CI 1.83–15.01; $p=0.002$) increased the odds of piecemeal resection. Adverse events occurred in 26.6 % patients, mainly bleeding (17.2 %) and pancreatitis (15.6 %). Invasive adenocarcinoma was found in 5.6 % of specimens; predictors were tumour size (for 1 mm increase OR 1.11; 95 % CI 1.04–1.20; $p=0.004$) and jaundice (OR 20.20; 95 % CI 3.94–103.68; $p<0.001$). Benign histology was observed in 17.9 % lesions. Among 130 patients with follow-up (median 14.8 months), recurrence occurred in 39.2 % and was independently associated with tumour size (OR 1.06; 95 % CI 1.002–1.103; $p=0.005$) and prior resection attempts (OR 3.10; 95 % CI 1.003–9.601; $p=0.049$).

Conclusions Larger tumour size, submucosal injection, and previous resections were associated with lower en bloc resection and higher recurrence rates. High adverse event rates and inter-centre variability highlight the need for standardised techniques and follow-up strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cecinato P, Parmeggiani F, Braglia L et al. Endoscopic Papillectomy for Ampullary Adenomas: Different Outcomes in Sporadic Tumors and Those Associated with Familial Adenomatous Polyposis. *Journal of Gastrointestinal Surgery* 2021; 25: 457–466. doi:10.1007/S11605-019-04500-W
- [2] Hollenbach M, Trung KV, Heise C et al. Development and Validation of the ESAP-Score: a Simplified Tool to Predict Successful Endoscopic Papillectomy in Ampullary Lesions. *Endoscopy* 2023; 55: OP218. doi:10.1055/S-0043-1765222
- [3] Nagtegaal ID, Odze RD, Klimstra D et al. The 2019 WHO classification of tumours of the digestive system. *Histopathology*. 2019; 76: 182. doi:10.1111/HIS.13975
- [4] Bell J, Nagtegaal I, Washington M et al. Digestive System Tumours. *World Health Organization*; 2019
- [5] Nass KJ, Zwager LW, van der Lugt M et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc* 2022; 95: 1078–1085.e8. doi:10.1016/j.gie.2021.11.038
- [6] Cuschieri S. The STROBE guidelines. *Saudi J Anaesth* 2019; 13: S31–S34. doi:10.4103/SJA.SJA_543_18
- [7] Riditid W, Tan D, Schmidt SE et al. Endoscopic papillectomy: Risk factors for incomplete resection and recurrence during long-term follow-up. *Gastrointest Endosc* 2014; 79: 289–296. doi:10.1016/j.GIE.2013.08.006
- [8] Gondran H, Musquer N, Perez-Cuadrado-Robles E et al. Efficacy and safety of endoscopic papillectomy: a multicenter, retrospective, cohort study on 227 patients. *Therap Adv Gastroenterol* 2022; 15. doi:10.1177/17562848221090820
- [9] Li S, Wang Z, Cai F et al. New experience of endoscopic papillectomy for ampullary neoplasms. *Surg Endosc* 2019; 33: 612–619. doi:10.1007/S00464-018-6577-2
- [10] Laleman W, Verreth A, Topal B et al. Endoscopic resection of ampullary lesions: A singlecenter 8-year retrospective cohort study of 91 patients with long-term follow-up. *Surg Endosc* 2013; 27: 3865–3876. doi:10.1007/S00464-013-2996-2

- [11] Ismail S, Marianne U, Heikki J et al. Endoscopic papillectomy, single-center experience. *Surg Endosc* 2014; 28: 3234–3239. doi:10.1007/S00464-014-3596-5
- [12] Hyun JJ, Lee TH, Park JS et al. A prospective multicenter study of submucosal injection to improve endoscopic snare papillectomy for ampullary adenoma. *Gastrointest Endosc* 2017; 85: 746–755. doi:10.1016/j.gie.2016.08.013
- [13] Napoleon B, Gincul R, Ponchon T et al. Endoscopic papillectomy for early ampullary tumors: Long-term results from a large multicenter prospective study. *Endoscopy* 2014; 46: 127–134. doi:10.1055/S-0034-1364875
- [14] Ito K, Fujita N, Noda Y et al. Impact of technical modification of endoscopic papillectomy for ampullary neoplasm on the occurrence of complications. *Digestive Endoscopy* 2012; 24: 30–35. doi:10.1111/j.1443-1661.2011.01161.X
- [15] Hollenbach M, Heise C, Abou-Ali E et al. Endoscopic papillectomy versus surgical ampullectomy for adenomas and early cancers of the papilla: a retrospective Pancreas2000/European Pancreatic Club analysis. *Gut* 2025; 74: 397–409. doi:10.1136/GUTJNL-2022-327996
- [16] Vanbiervliet G, Strijker M, Arvanitakis M et al. Endoscopic management of ampullary tumors: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2021; 53: 429–448. doi:10.1055/A-1397-3198
- [17] Bisschops R, Areia M, Coron E et al. Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Mário Dinis-Ribeiro* 2016; 11: 843–864. doi:10.1055/s-0042-113128
- [18] Januszewicz W, Kaminski MF. Quality indicators in diagnostic upper gastrointestinal endoscopy. *Therap Adv Gastroenterol* 2020; 13. doi:10.1177/1756284820916693
- [19] Van Dyke AL, Shiels MS, Jones GS et al. Biliary tract cancer incidence and trends in the United States by demographic group, 1999–2013. *Cancer* 2019; 125: 1489–1498. doi:10.1002/CNCR.31942

eP129 Changes in upper gastrointestinal bleeding over two decades: analysis of cohorts from 2004 and 2024

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DOI 10.1055/s-0046-1821456

Aims The primary aim of this study is to compare the demographic characteristics, etiological profile, and short-term clinical outcomes of patients with upper gastrointestinal bleeding (UGIB) admitted to our institution in 2004 and 2024. This analysis is based on evidence that the epidemiological landscape of UGIB has undergone substantial changes over the last two decades.

Methods A descriptive and comparative analysis was performed on two cohorts of all patients diagnosed with UGIB who underwent upper gastrointestinal endoscopy during a 1-year period at our center: one from 2004 (n = 280) and one from 2024 (n = 216). Demographic, clinical, and prognostic variables were compared. Appropriate statistical tests were applied to compare the groups, and results were considered statistically significant when $p < 0.05$.

Results The comparative analysis between the 2004 and 2024 cohorts showed a significant aging of the patient population (mean age: 67.5 vs. 72.9 years; $p < 0.001$). At the same time, there was a substantial increase in the prevalence of major comorbidities, including cerebrovascular disease (5.7 % vs. 19.4 %; $p < 0.001$) and chronic kidney disease (2.5 % vs. 13.6 %; $p < 0.001$). Therapeutic complexity also increased, with a significant increase in the use of anticoagulants (4.3 % [exclusively vitamin K antagonists – VKA] vs. 30 % [VKA + DOACs]; $p < 0.001$).

Regarding clinical presentation, there was an increase in syncope as a form of presentation (7.9 % vs. 13.5 %; $p = 0.021$) and a decrease in the frequency of classic presentations, such as hematemesis (58.6 % vs. 41.2 %; $p < 0.001$) and melena (67.9 % vs. 59.5 %; $p = 0.028$). Etiologically, peptic ulcer remained the main cause of upper gastrointestinal bleeding (46.8 % vs. 46.3 %; $p = 0.457$), although there was a reduction in active bleeding stigmata (Forrest Ia/Ib: 11 %

vs. 5.6 %; $p = 0.006$). In contrast, there was a notable increase in angiectasias (0.4 % vs. 6.5 %; $p < 0.001$) and neoplasms (3.9 % vs. 9.3 %; $p = 0.008$).

This more severe profile was reflected in a significant increase in the mean Rockall score (4.76 vs. 5.65; $p < 0.001$). However, despite this worsening of the baseline risk profile, immediate clinical outcomes remained stable, with no statistically significant differences in the rate of hemorrhagic recurrence (3.2 % vs. 3.8 %; $p = 0.358$), the need for surgical intervention (2.1 % vs. 2.2 %; $p = 0.484$), or in in-hospital mortality (8.9 % vs. 6.5 %; $p = 0.165$).

Conclusions Over the course of two decades, the profile of patients admitted with upper gastrointestinal bleeding (UGIB) at our institution has changed substantially. Currently, the cohort is older, has a higher burden of associated comorbidities, and has a significantly higher prevalence of anticoagulant therapy. This change in the baseline profile is directly reflected in the etiology of bleeding, namely through an increase in neoplastic etiology (now the third most frequent cause) and bleeding due to angiectasias. Despite the increased baseline risk of patients, as evidenced by the higher mean Rockall score, immediate outcomes remained unchanged. This finding suggests that advances in contemporary clinical treatment and endoscopic intervention protocols have been effective and crucial in mitigating this increased risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP130V ERCP in patient with Surgically Altered Anatomy: Endoscopic Management Strategies and Complications

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DOI 10.1055/s-0046-1821457

Abstract Text

A 75-year-old man with previous Billroth II reconstruction was admitted in April 2025 with jaundice and elevated cytolytic and cholestatic markers. Ultrasound revealed common hepatic duct lithiasis with intrahepatic duct dilation. After failure of entero-ERCP, a lateral-viewing duodenoscope was used. During intubation of the afferent limb, a 2-cm jejunal wall defect was identified at a sharp angulation. Due to immediate recognition of the perforation and the patient's comorbidities, endoscopic closure was performed using the X-Tack. The patient resumed enteral feeding after 48 hours without symptoms. However, worsening cholestatic indices required a repeat ERCP. After unsuccessful attempts at biliary cannulation, a precut fistulotomy allowed access to the major papilla and placement of a biliary stent.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/031ee951-90a9-4cda-a763-1d843cc7c273/Uploads/19978_XTACK_PERFORATION%20ERCP.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP131 Disconnected pancreatic duct syndrome: a single-center experience

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DOI 10.1055/s-0046-1821458

Aims disconnected pancreatic duct syndrome (DPDS) is a recognized complication of acute necrotizing pancreatitis (ANP), whose incidence and impact on the evolution of pancreatic collections and metabolic prognosis remain poorly defined. This study aimed to describe the clinical characteristics, diagnostic methods, endoscopic management, and outcomes of patients with DPDS managed in our department.

Methods A retrospective study was conducted between 2019 and October 2025, including all patients followed for DPDS complicating acute necrotizing

pancreatitis (ANP). The data collected covered demographic characteristics, the etiology of ANP, diagnostic methods, therapeutic management, and the clinical outcomes.

Results Among 63 patients admitted for ANP, four patients (two men and two women) had disconnected pancreatic duct syndrome (DPDS), representing an incidence of 6.3%. The median age was 47 years (range 23–68 years).

Acute necrotizing pancreatitis was of biliary origin in two patients (50%), alcoholic in one patient (25%), and metabolic in another (25%).

Clinically, all four patients presented with pancreatic-type abdominal pain (100%), associated with vomiting in three of them (75%).

AT admission, three patients met SIRS (systemic inflammatory response syndrome) criteria, which persisted beyond 48 hours in two patients.

Initial imaging showed acute pancreatitis stage E of Balthazar in three patients (CTSI = 8 in two and 6 in one) and stage C pancreatitis in the remaining patient. Peripancreatic collections were present in all patients, with an average size of 10 cm (range :3–16 cm).

The diagnosis of DPDS was made early in one patient during the CT scan to assess acute pancreatitis. In two others, it was made during an endoscopic ultrasound (EUS) performed for transmural drainage of an infected WON (walled-off necrosis), and incidentally in one patient who underwent EUS for suspected intraductal papillary mucinous neoplasm of the pancreas on MRI. The mean time to diagnosis after the episode of acute pancreatitis was 41 days (3–120 days).

The ductal disconnection was located in the body of the pancreas in all cases. Endoscopic management was performed in three cases: one patient was drained with two double-pigtail plastic stents. The second patient with a metal stent (hot Axios) with necrosectomy sessions, and replaced one month later by two double pigtail plastic stents. The third patient was drained with a covered biflanged stent, replaced subsequently by double pigtail plastic stents. One asymptomatic patient did not require treatment. All plastic stents, were 7 Fr/7 cm, were retained long term to ensure permanent drainage. No per-procedure complications were reported.

The outcome was favorable in all patients, marked by the disappearance of pain and regression of collections. One patient presented a new pancreatitis episode on distal MPD stricture After a median follow-up of 8 months (range:2–23 months), two patients developed new-onset diabetes mellitus.

No cases of exocrine pancreatic insufficiency or mortality were observed.

Conclusions Although limited by a small sample size, our study highlights the efficacy and safety of endoscopic treatment in patients with post-necrotizing pancreatitis DPDS, allowing surgery to be avoided in the majority of cases, with minimal morbidity and no mortality.

DPDS could be a risk factor for new onset diabetes, highlighting the need for prolonged metabolic monitoring. Radiologists must remain vigilant and systematically consider this diagnosis in cases of extensive necrotizing pancreatitis in order to avoid diagnostic delays and the onset of complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP132 Prevalence of Gastric Intestinal Metaplasia in the Saudi Population: A Single-Tertiary Center Retrospective Study

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DOI 10.1055/s-0046-1821459

Aims To assess the prevalence of GIM and its associated risk factors among patients who undergoing upper endoscopy procedures or gastric resection at King Abdulaziz University Hospital, in the western region of Saudi Arabia

Methods This retrospective study included 2,103 patients who underwent upper endoscopy or gastric resection at a tertiary facility. Data on patient de-

mographics, risk factors, procedural indications and tissue sampling were collected and analyzed.

Results GIM was identified in 119 patients (5.7%) who had significantly higher mean age (55.83 ± 15.88 years, P value < 0.001) compared to the non-GIM group. Among all patients, 547 had H-pylori infection. Coexisting dysplasia was present in 42 patients and cancer was detected in 46 patients. H-pylori positivity was significantly higher in the GIM group (P value < 0.001). Additionally, the GIM group showed a significantly higher prevalence of cancer and dysplasia (p -value of 0.001 for both).

Conclusions A significantly higher proportion of patients with GIM had coexisting gastric cancer and dysplasia. Advanced age and H-pylori were strongly associated with GIM. Our findings support the well-established link between H-pylori infection and the increased risk of dysplasia and cancer progression [1–4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Akbari M, Tabrizi R, Kardeh S et al. Gastric cancer in patients with gastric atrophy and intestinal metaplasia: A systematic review and meta-analysis. *PloS one* 2019; 14:e0219865. doi:10.1371/journal.pone.0219865
- [2] Arnold M, Rutherford MJ, Bardot A et al. Progress in cancer survival, mortality, and incidence in seven high-income countries 1995–2014 (ICBP SUR-VMARK-2): a population-based study. *The Lancet Oncology* 2019; 20: 1493–1505. doi:10.1016/s1470-2045(19)30456-5
- [3] Alghamdi IG. Epidemiology of gastric cancer in Saudi Arabia from 2004 to 2017. *Molecular and clinical oncology* 2023; 19: 93. doi:10.3892/mco.2023.2689
- [4] Iwu CD, Iwu-Jaja CJ. Gastric Cancer Epidemiology: Current Trend and Future Direction. *Hygiene* 2023; 3: 256–268

eP133 A comparative study of long-term outcomes of different types of stents for benign biliary stricture secondary to chronic pancreatitis

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Aims Fully covered self-expanding metal stents (fcSEMS) and multiple plastic stents (MPS) are now regarded as the first-line therapies for benign biliary strictures (BBS) secondary to chronic pancreatitis (CP). However, with the advancement of lithotripsy and endoscopic retrograde cholangiopancreatography (ERCP) techniques, there has been a significant improvement in successful pancreatic duct decompression rate. In this case, the efficacy of single plastic stent (SPS) warrants reevaluation.

Methods This is an observational study with 14-year follow-up based on a large prospective CP cohort. Patients treated with endoscopic biliary stenting for BBS secondary to CP from January 2011 to December 2021 were included. The treatment outcomes of SPS, MPS and fcSEMS were compared [1–4].

Results A total of 94 patients were included (SPS = 80, fcSEMS = 10, MPS = 4). Among patients with pancreatic duct stones, 74.3% (52/70) underwent pancreatic lithotripsy, with a successful pancreatic stone clearance rate of 91.4% (64/70). Pancreatic duct patency was achieved in 93.6% (88/94) of all patients. In a comparison between SPS, fcSEMS, and MPS, the ERCP sessions required were 2.0 vs 2.0 vs 1.5 ($P = .597$). The cumulative BBS recurrence rates were comparable across all groups ($P = .889$), and the 7-year clinical success rates were 77.5% vs. 60.0% vs. 75.0% ($P = .520$).

Conclusions When pancreatic stones are effectively removed and the pancreatic duct is successfully decompressed, SPS, MPS, and fcSEMS demonstrate comparable outcomes in number of ERCP sessions, adverse events, and long-term clinical success for CP related BBS. These findings suggest that SPS should be reconsidered as a viable and cost-effective treatment option.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Haapamäki C, Kylänpää L, Udd M et al. Randomized multicenter study of multiple plastic stents vs. covered self-expandable metallic stent in the treatment of biliary stricture in chronic pancreatitis. *Endoscopy* 2015; 47 (7): 605–610. doi:10.1055/s-0034-1391331
- [2] Coté GA, Slivka A, Tarnasky P et al. Effect of Covered Metallic Stents Compared With Plastic Stents on Benign Biliary Stricture Resolution: A Randomized Clinical Trial. *JAMA* 2016; 315 (12): 1250. doi:10.1001/jama.2016.2619
- [3] Ramchandani M, Lakhtakia S, Costamagna G et al. Fully Covered Self-Expanding Metal Stent vs Multiple Plastic Stents to Treat Benign Biliary Strictures Secondary to Chronic Pancreatitis: A Multicenter Randomized Trial. *Gastroenterology* 2021; 161 (1): 185–195. doi:10.1053/j.gastro.2021.03.015
- [4] Devière J, Devaere S, Baize M, Cremer M. Endoscopic biliary drainage in chronic pancreatitis. *Gastrointestinal Endoscopy* 1990; 36 (2): 96–100. doi:10.1016/S0016-5107(90)70959-5

eP134 Diagnostic Performance of EUS Guided Fine Needle Biopsy for Ampullary Cancer: First Vietnamese Experience from a Tertiary Oncology Hospital

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DOI 10.1055/s-0046-1821461

Aims Endoscopic ultrasound is the reference modality for locoregional staging of ampullary cancer, but standard endoscopic forceps biopsies often inadequate diagnostic malignancy or underestimate histological grade. EUS-guided fine-needle biopsy (EUS-FNB) may overcome these limitations by providing core tissue; however, its performance for ampullary cancer has not been reported in Vietnam. We aimed to evaluate the diagnostic performance and safety of EUS-FNB for suspected ampullary cancer in a tertiary oncology hospital [1–10].

► **Table 1** The Value of EUS-FNB in Diagnostic Ampullary Cancer

		Final Surgical		Total
		Amp- ullary cancer	Non-amp- ullary cancer	
EUS-FNB	Cancer/suspect	40	1	41
	Non cancer	3	2	5
	Total	43	3	46

► **Table 2** The Value of EUS in Staging for Ampullary Cancer

Stage	(Se)	(Sp)	PPV	NPV	Accuracy
T1	4/6 = 66,7 %	35/37 = 94,6 %	4/6 = 66,7 %	35/37 = 94,6 %	(66,7 + 94,6)/2 = 80,65
T2	21/25 = 84,0 %	16/18 = 88,9 %	21/25 = 84,0 %	16/18 = 88,9 %	(84,0 + 88,9)/2 = 86,45
T3a	5/7 = 71,4 %	34/36 = 94,4 %	5/7 = 71,4 %	34/36 = 94,4 %	(71,4 + 94,4)/2 = 82,9
T3b	3/3 = 100 %	40/40 = 100 %	3/3 = 100 %	40/40 = 100 %	(100 + 100)/2 = 100
T4	2/2 = 100 %	41/41 = 100 %	2/2 = 100 %	41/41 = 100 %	(100 + 100)/2 = 100
	84,4 %	95,6 %	84,4 %	95,6 %	86,6 %

Methods We conducted a single center prospective observational study at Viet Nam National Cancer Hospital including consecutive patients with suspected ampullary cancer who underwent EUS-FNB between January 2022 and June 2025. EUS-FNB was performed using dedicated biopsy needles with MOSE to assess core adequacy. Demographic data, clinical presentation, tumor markers, imaging findings, EUS characteristics, number of needle passes and post surgical results were recorded. Final diagnosis was based on surgical histology or composite clinical follow-up. Diagnostic performance indices of EUS-FNB for ampullary cancer were calculated. Adverse events were prospectively documented (► **Table 1**).

Results Among 54 evaluated patients, 46 met inclusion criteria and were analyzed. 43 (93.5 %) had ampullary cancer, and 3 (6.5 %) had non-malignant lesions. Median age was 62.91 ± 9.33 years, with most patients aged 40–70 years. Jaundice was the dominant symptom (90.7 %). A total of 60 EUS-FNB procedures were performed (mean 1.3 per patient) with a mean of 6.72 passes per lesion. MOSE positive core tissue was obtained in 35/46 cases (76.1 %). On histology of the EUS-FNB samples, definite ampullary carcinoma was reported in 25 patients (54.3 %), high-grade dysplasia in 3 (6.5 %), “suspicious / atypical cells” in 13 (28.3 %) and low-grade dysplasia in 5 (10.8 %). Using final surgical histology or long-term follow-up as reference, EUS-FNB for ampullary cancer showed a Se of 93.0 %, Sp 66.7 %, PPV 97.6 % and overall accuracy 91.3 %. No severe adverse events occurred; two patients (4.6 %) developed transient abdominal pain and one (4.6 %) experienced minor intra procedural bleeding (► **Table 2**).

Conclusions In this first Vietnamese single-center series, EUS-guided fine-needle biopsy with MOSE achieved high diagnostic accuracy and an excellent safety profile in patients with suspected ampullary cancer managed at a tertiary oncology hospital. These findings support EUS-FNB as the preferred pre-operative tissue acquisition modality within the diagnostic algorithm for ampullary lesions, providing reliable histological confirmation to guide endoscopic or surgical treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] So H, Seo DW, Hwang J et al. Macroscopic on-site evaluation after EUS-guided fine-needle biopsy may replace rapid on-site evaluation. *Endosc Ultrasound* 2021; 10 (2): 111–115
- [2] Gaia S, Rizza S, Bruno M et al. Impact of macroscopic on-site evaluation (MOSE) on accuracy of endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) of pancreatic and extrapancreatic solid lesions: a prospective study. *Diagnostics (Basel)* 2022; 12 (2): 428
- [3] Ki ELL, Napoleon B, Fumex F et al. Macroscopic onsite evaluation using endoscopic ultrasound-guided fine-needle biopsy for solid lesions: a way to improve diagnostic accuracy and reduce needle passes. *Endosc Ultrasound* 2019; 8 (5): 342–349
- [4] Matsubayashi H, Matsui T, Yabuuchi Y et al. Endoscopic ultrasonography-guided fine needle aspiration for diagnosis of solid pancreatic lesions: a safe and efficient diagnostic tool. *World J Gastroenterol* 2016; 22 (2): 628–640

- [5] Ronen N, Giorgadze T, Nomani L et al. Performance characteristics of EUS-FNA in diagnosing ampullary lesions: a 5-year retrospective analysis. *J Am Soc Cytopathol*. 2021; 10 (6): xxx-xxx
- [6] DeFrain C, Chang F, Ruffalo T et al. Cytologic features and diagnostic pitfalls of primary ampullary tumors by endoscopic ultrasound-guided fine-needle aspiration biopsy. *Cancer*. 2005; 105 (5): 289–297
- [7] Ogura T, Hara K, Hijioka S et al. Can endoscopic ultrasound-guided fine needle aspiration offer clinical benefit for tumors of the ampulla of Vater? An initial study. *Endosc Ultrasound* 2012; 1 (2): 84–89
- [8] Trikudanathan G, Navaneethan U, Njei B et al. Staging accuracy of ampullary tumors by endoscopic ultrasound: a systematic review and meta-analysis. *Endoscopy*. 2014; 46 (1): 46–53
- [9] Stornello C, Galia M, Tarantino I et al. The role of endoscopic ultrasound in ampullary lesion evaluation. *Diagnostics (Basel)* 2024; 14 (17): 1855. doi:10.3390/diagnostics14171855
- [10] Vanbiervliet G, Strijker M, Arvanitakis M et al. Endoscopic management of ampullary tumors: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* 2021; 53 (4): 429–448. doi:10.1055/a-1397-3198

eP135V Endoscopic Suturing for Complex Sleeve Gastrectomy Leak: A Case Report

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DOI 10.1055/s-0046-1821462

Abstract Text

A 31-year-old patient underwent LSG. Seven days later, CT imaging showed a perigastric fluid collection. Endoscopy identified a small distal staple-line defect with a large adjacent collection, and a double-pigtail stent was placed and removed two months later. Two months later, the patient presented with fever and abdominal pain. CT demonstrated an 11 × 3 × 8.5 cm collection communicating with the distal staple line and extending through a fistulous tract to the left flank. Endoscopy revealed a 10 × 10 cm cul-de-sac with a small defect releasing purulent fluid. Direct endoscopic suturing with OverStitch NXT was performed to close the cavity and seal the fistula. In the following days, inflammatory markers decreased and symptoms resolved. A one-month CT scan showed marked reduction of the collection.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/681509b0-4a10-4231-a85b-f71bfdaddcb9/Uploads/19978_Leak_post%20sleeve.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP136 Use of an over-the-scope Padlock clip for the treatment of gastrointestinal (GI) bleeding and fistulas: Experience from a Brazilian university center

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Aims To evaluate cases in which the treatment of choice was the application of an OTSC (Padlock) by the endoscopy team of the State University of Campinas between 2020-2025.

Methods Single-center case series.

Results Seventeen patients were evaluated; there was a predominance of males (52.94%) and the mean age was 53.14 years. At our service, OTSC were mainly used for the treatment of fistulas (60%), followed by GI bleeding. Concerning the GI bleeding cases, OTSC was the primary treatment in 83% of cases. OTSC were successfully applied to 100% of the patients. Among the patients included for fistula treatment, recurrence of the fistula was observed in only one patient (10%), while the other cases were considered technically successful (90%). The most common fistula was a tracheoesophageal fistula due to

prolonged intubation (2 patients). Among patients with gastrointestinal bleeding, recurrence of bleeding was observed in two cases. These patients were treated with conventional clips over the Padlock. There were no gastrointestinal bleeding-related deaths. There were no deaths or complications resulting from the treatment [1–16]

Conclusions The Padlock clip was found to be effective and safe in our case series as a treatment for fistulas and gastrointestinal bleeding. Technical success was achieved in all cases and clinical success in most of the included patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Goenka MK, Rodge GA, Tiwary IK. Endoscopic Management with a Novel Over-The-Scope Padlock Clip System. *Clin Endosc*. 2019; 52 (6): 574–580. doi:10.5946/ce.2019.122 Epub 2019 Nov 26 PMID: 31766822 PMID: PMC6900306
- [2] Armellini E, Crinò SF, Orsello M, Ballarè M, Tari R, Saettone S, Montino F, Occhipinti P. Novel endoscopic over-the-scope clip system. *World J Gastroenterol*. 2015; 21 (48): 13587–92. doi:10.3748/wjg.v21.i48.13587 PMID: 26730172 PMID: PMC4690190
- [3] Goenka MK, Rai VK, Goenka U, Tiwary IK. Endoscopic Management of gastrointestinal Leaks and Bleeding with the Over-the-Scope Clip: A Prospective Study. *Clin Endosc*. 2017; 50 (1): 58–63. doi:10.5946/ce.2016.028 Epub 2016 Oct 31 PMID: 27802375 PMID: PMC5299974
- [4] Manta R, Mangiafico S, Zullo A et al. First-line endoscopic treatment with over-the-scope clips in patients with either upper or lower gastrointestinal bleeding: a multicenter study. *Endosc Int Open* 2018; 6: E1317–E1321
- [5] Bartell N, Bittner K, Kaul V, Kothari TH, Kothari S. Clinical efficacy of the over-the-scope clip device: A systematic review. *World J Gastroenterol* 2020; 26: 3495–516
- [6] Kirschniak A, Kratt T, Stüker D, Braun A, Schurr MO, Königsrainer A. A new endoscopic over-the-scope clip system for treatment of lesions and bleeding in the GI tract: first clinical experiences. *Gastrointest Endosc* 2007; 66: 162–167 PMID: 17591492 . doi:10.1016/j.gie.2007.01.034
- [7] Haito-Chavez Y, Law JK, Kratt T, Arezzo A, Verra M, Morino M et al. International multicenter experience with an over-the-scope clipping device for endoscopic management of GI defects (with video). *Gastrointest Endosc* 2014; 80: 610–22
- [8] Manta R., Galloro G., Mangiavillano B. et al. Over-the-scope clip (OTSC) represents an effective endoscopic treatment for acute GI bleeding after failure of conventional techniques. *Surg Endosc* 27: 3162–3164 2013. doi:10.1007/s00464-013-2871-1
- [9] Kirschniak A, Subotova N, Zieker D, Königsrainer A, Kratt T 2011; The over-the-scope clip (OTSC) for the treatment of gastrointestinal bleeding, perforations, and fistulas. *Surg Endosc* 25: 2901–2905
- [10] Goenka MK, Rodge GA, Tiwary IK. Endoscopic Management with a Novel Over-The-Scope Padlock Clip System. *Clin Endosc*. 2019; 52 (6): 574–580. doi:10.5946/ce.2019.122 Epub 2019 Nov 26 PMID: 31766822 PMID: PMC6900306
- [11] Manta R, Mangiafico S, Zullo A et al. First-line endoscopic treatment with over-the-scope clips in patients with either upper or lower gastrointestinal bleeding: a multicenter study. *Endosc Int Open* 2018; 6: E1317–E1321
- [12] Goenka MK, Rai VK, Goenka U, Tiwary IK. Endoscopic Management of gastrointestinal Leaks and Bleeding with the Over-the-Scope Clip: A Prospective Study. *Clin Endosc*. 2017; 50 (1): 58–63. doi:10.5946/ce.2016.028 Epub 2016 Oct 31 PMID: 27802375 PMID: PMC5299974
- [13] Armellini E, Crinò SF, Orsello M, Ballarè M, Tari R, Saettone S, Montino F, Occhipinti P. Novel endoscopic over-the-scope clip system. *World J Gastroenterol*. 2015; 21 (48): 13587–92. doi:10.3748/wjg.v21.i48.13587 PMID: 26730172 PMID: PMC4690190
- [14] Bartell N, Bittner K, Kaul V, Kothari TH, Kothari S. Clinical efficacy of the over-the-scope clip device: A systematic review. *World J Gastroenterol* 2020; 26: 3495–516
- [15] Manta R., Galloro G., Mangiavillano B. et al. Over-the-scope clip (OTSC) represents an effective endoscopic treatment for acute GI bleeding after failure of conventional techniques. *Surg Endosc* 27: 3162–3164 2013. doi:10.1007/s00464-013-2871-1
- [16] Kirschniak A, Kratt T, Stüker D, Braun A, Schurr MO, Königsrainer A. A new endoscopic over-the-scope clip system for treatment of lesions and bleeding in the GI tract: first clinical experiences. *Gastrointest Endosc* 2007; 66: 162–167 PMID: 17591492 . doi:10.1016/j.gie.2007.01.034

eP137 To implement and assess a mucosal visibility improvement pathway using pre-procedure Infacol in a setting where existing mucolytic pumps were non-functional with new endoscopy equipment

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DOI 10.1055/s-0046-1821464

Problem to solve Suboptimal mucosal visibility during oesophagogastrroduodenoscopy (OGD) is a well-recognised contributor to missed upper GI lesions and has been repeatedly highlighted in quality-assurance literature, including the PEUGIC study, which recommends pre-procedure simethicone to improve detection. In our unit, visibility was frequently impaired by bubbles and foam, and the recent introduction of new endoscope models rendered the mucolytic water pump incompatible. A baseline audit across eight OGD lists revealed 0% pre-procedure simethicone use. This created an urgent need for a simple, cost-effective, and equipment-independent solution to restore mucosal clarity [1–3].

Innovation We introduced a standardised SOP incorporating oral Infacol (simethicone) administered 30 minutes pre-procedure as a low-cost alternative mucolytic strategy. Unlike pump-delivered simethicone, this method requires no equipment modifications and is compatible with all endoscope systems. The SOP was rolled out across ten OGD lists over four weeks. Infacol was administered by admitting nurses, and visibility was assessed using a 4-point Mucosal Visibility Index (MVI). Feedback was collected from consultants, registrars, nurse endoscopists, and nursing staff to evaluate feasibility, workflow impact, and perceived improvement in clarity. Patient eligibility, contraindications, and practical barriers were also assessed (► **Table 1**).

► **Table 1** Summary of staff-reported outcomes

Staff group	Reported improvement in visibility/workflow
Consultants	80 % (1 equivocal)
Registrars	99 %
Room nurses	99 %
Admitting nurses	90 % (1 PEG exclusion)

Results Improvement in visibility and workflow:

- Consultants: **80 %** reported improved visibility; 1 equivocal.
- Registrars: **99 %** reported better visibility.
- Nurse endoscopists/room nurses: **99 %** noted less flushing and smoother workflow.
- Admitting nurses: **90 %** found administration easy; one PEG patient unsuitable. **Operational impact:**
 - Clear reduction in intra-procedure flushing.
 - Faster progression through OGD due to fewer visibility interruptions.
 - Intervention simple, quick, and well-tolerated.
 - No adverse effects observed. **Staff engagement:**
 - Strong multidisciplinary buy-in.
 - Common themes: improved visibility, greater diagnostic confidence, time-saving, and easy integration into routine practice.

Conclusions Pre-procedure Infacol is a low-cost, practical, and highly effective intervention to improve mucosal visibility during OGD. It significantly reduced the need for flushing, improved procedural flow, and was easily integrated into existing endoscopy pathways with excellent staff acceptance. This innovation provides an immediate solution for centres where traditional mucolytic pumps cannot be used and aligns with PEUGIC study recommendations to enhance

diagnostic quality. The project supports wider implementation of standardised pre-procedure mucosal preparation across endoscopy services.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bisschops R et al. Performance measures for upper GI endoscopy: ESGE quality standards. *Endoscopy*. 2016; 48: 843–864
- [2] Neale JR et al. Simethicone improves mucosal visibility during upper gastrointestinal endoscopy: a systematic review. *Endoscopy*. 2020; 52 (2): 123–130
- [3] (PEUGIC Study Group) Post-Endoscopy Upper Gastrointestinal Cancers (PEUGIC): Missed oesophageal and gastric cancers in England. *Gut*. 2024; 73 (1):

eP138 Clinical and Therapeutic Features of Necrotizing Acute Pancreatitis: A Moroccan Experience

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DOI 10.1055/s-0046-1821465

Aims Acute necrotizing pancreatitis (ANP) is associated with significant morbidity and mortality. The most feared complications are multiple organ failure and superinfection of the necrosis. Endoscopic management of complications related to necrosis is now well established.

The aim of our study was to outline the epidemiological, etiological, therapeutic, and evolutionary profile of acute necrotizing pancreatitis.

Methods This was a single-center, retrospective descriptive study conducted over a 6-year period, from January 2019 to October 2025, including all patients admitted to our department for necrotizing AP with a CTSI (CT severity index) ≥ 4. The diagnosis of acute pancreatitis (AP) was based on the revised 2012 Atlanta criteria

Results Of a total of 167 patients admitted for acute pancreatitis (AP), 63 had acute necrotizing pancreatitis, an incidence of 37.7%. The mean age was 56.7 years (range: 23–85 years), with a male-to-female ratio of 0.75. Clinically, all patients presented with typical pancreatic abdominal pain. The diagnosis of AP was based on clinical and biological criteria in 61.9% of cases (n = 39), with a mean lipase level of 1536.3 IU/L, and on clinical and morphological criteria in 38% of cases (n = 24). At admission, systemic inflammatory response syndrome (SIRS) was present in 77.7% of patients (n = 49) and persisted for more than 48 hours in 42.8% (n = 21).

The abdominal CT scan showed acute pancreatitis stage E according to Balthazar in 80.3% of cases (n = 53), associated with parenchymal necrosis in 53.3% of cases, with a mean CTSI score ≥ 6, while stage D pancreatitis was observed in 19.6% of cases, with CTSI ≥ 4. The etiologies were biliary in 63.4% of cases (n = 40), metabolic in 7.9% (n = 5), alcoholic in 3.1% (n = 2), iatrogenic (post-ERCP) in 6.3% (n = 4), ampullary tumor in 4.7% (n = 3), pancreas divisum in 1.5% (n = 1), and idiopathic in 12.7% (n = 8). All patients received appropriate rehydration, anticoagulation during hospitalization, and early reintroduction of food. The outcome was marked by the disappearance of symptoms in 59% of cases, the onset of local complications in 22.2% (n = 14), including two cases of early infection of necrotic collections, and recurrence of another episode of AP in 15.9% of cases. The follow-up CT scan at 6 weeks, performed in 54 patients, showed regression of collections in 51.8% (n = 28), an increase in 22.2% (n = 12), of which 16.6% (n = 9) developed organized necrosis, and stability in 25.9% (n = 14). Symptomatic collections were drained mainly due to infection or compression of adjacent organs, while asymptomatic collections did not require treatment.

Endoscopic ultrasound-guided drainage was performed in 42.3% of cases (n = 11) (two double pigtail plastic stents in seven patients, one Biflanged stent in three, and for one patient, a LAMS (HOT AXIOS stent)). Endoscopic necrosectomy (two sessions) was performed in two patients, surgical drainage in three patients, and radiological drainage in two. After drainage, 13 patients showed symptom improvement (81.2%), and three deaths occurred: two due to septic shock post-drainage (one surgical, one endoscopic) and one from an unrelated cause.

Conclusions Our work showed a favorable outcome in the majority of patients receiving appropriate therapeutic management. Endoscopic drainage of symptomatic pancreatic collections is effective and less invasive and should be preferred whenever feasible.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP139 Management of Barrett's Esophagus With Multifocal Dysplasia Using Circumferential Endoscopic Submucosal Dissection: Case Series and Preventive Approaches to Post-ESD Stricture Formation

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DOI 10.1055/s-0046-1821466

Aims The optimal management strategy for multifocal dysplastic Barrett's esophagus (MDBE), particularly the choice between endoscopic resection and ablative therapies, remains under debate [1–5].

We present a case series of three patients treated with circumferential endoscopic submucosal dissection (ESD) for MDBE, with the aim of achieving complete eradication of Barrett's epithelium.

We further describe our preventive approach to post-ESD stricture formation.

Methods Three patients with Barrett's esophagus and multifocal dysplasia, all previously diagnosed with high-grade dysplasia (HGD), underwent circumferential ESD.

Pre-operative evaluation included high-resolution magnifying endoscopy combined with conventional chromoendoscopy with acetic acid to identify dysplastic areas.

Given the presence of multiple suspicious foci, complete resection of all Barrett's epithelium was performed.

All procedures were performed using a multi-tunneling ESD technique; in two cases (66.6%), clip-and-thread traction was applied.

To prevent esophageal stricture, patients received triamcinolone injection evenly across the resection bed, followed by an oral budesonide regimen (1 mg TID with tapering). Surveillance endoscopy was performed every two weeks to evaluate the need for dilation.

Results All three patients were male, with a mean age of 61.3 years (49–74). The mean length of resected specimens was 6.4 cm (4.1 cm in C3M4, 6.3 cm in C4M6, and 9 cm in C8M9).

Mean procedure time was 224.3 minutes (150, 176, 347).

All patients recovered uneventfully and were discharged 24 hours post-procedure with dietary instructions, sucralfate, oral budesonide, and PPI therapy.

All resections were R0 and considered curative. Histology confirmed multifocal HGD in all cases, with one patient showing a 28-mm area of SM1 (220 µm) adenocarcinoma (LVI-).

One patient (33.3%) was upstaged compared with the initial biopsy.

No strictures or recurrences occurred during follow-up, and none required endoscopic dilation.

Complete squamous re-epithelialization was achieved by 32 weeks in all patients.

Mean disease-free survival was 7.3 months (6, 8, 8).

Conclusions Despite inherent limitations (small sample size, short follow-up), circumferential ESD for MDBE appears to be a feasible, safe, and potentially cost-effective approach—avoiding the need for additional ablative therapy—when multifocal dysplasia or early submucosal invasive neoplasia is identified on pre-ESD magnifying endoscopy.

The combination of intralesional triamcinolone and oral budesonide was effective in preventing esophageal strictures, eliminating the need for dilation in this series.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Weusten Bas LAM et al. Diagnosis and management ... Endoscopy 2023; 55 | © 2023. European Society of Gastrointestinal Endoscopy.
- [2] Norio Fukami et. al. Su1472 Complete Full Circumferential Endoscopic Submucosal Dissection (ESD) of Barrett's Esophagus With Early Esophageal Carcinoma (EAC).
- [3] Pervez A, Rajkumar S, Bouras G et al. P176 Success and safety of circumferential endoscopic submucosal dissection (ESD) for superficial oesophageal neoplasia Gut 2024; 73: A156–A157
- [4] Robert Bechara MD et al. Evolution of re-epithelialization postcircumferential esophageal endoscopic submucosal dissection GIE 2021 © 2021 American Society for Gastrointestinal Endoscopy. Published by Elsevier Inc.
- [5] Yamaguchi N et al. Usefulness of oral prednisolone in the treatment of esophageal stricture. GIE 2011; 73 (6): 1115–21

eP140 Impact of Blood Urea Nitrogen levels on delayed bleeding after gastric endoscopic submucosal dissection

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DOI 10.1055/s-0046-1821467

Aims Endoscopic submucosal dissection (ESD) is a widely accepted treatment modality for early gastric cancers and adenomas, but is often accompanied by post-ESD bleeding. Herein, we evaluated the association of elevated blood urea nitrogen (BUN) levels at 24 hours after ESD for post-procedural bleeding. Further, we assessed whether an increase in BUN level is associated with an artificial gastric ulcer of high-risk Forrest classification during second-look endoscopy (SLE) after ESD [1–3].

Methods We analyzed the data patients who underwent ESD for either early gastric cancer or gastric adenoma. Baseline characteristics, endoscopic findings, and blood test results were assessed for each enrolled patient.

Results A total of 424 patients were assessed in this study. SLE performed one day after ESD demonstrated 44 post-ESD lesions with a high risk of bleeding and 385 lesions with a low risk of bleeding according to the Forrest classification. An artificial gastric ulcer of high-risk Forrest classification was associated with a significantly higher rate of post-ESD bleeding. An elevated BUN level at 24 hours after ESD was significantly associated with an artificial gastric ulcer of high-risk Forrest classification during SLE. ($p = 0.003$)

Conclusions Significant changes in BUN levels after ESD suggest the development of post-ESD bleeding. Furthermore, this marker is easy to measure, and enables the early identification of patients with high-risk Forrest classification ulcers, ultimately helping to predict post-ESD bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jung JH, Kim BJ, Choi CH, Kim JG. Second-look endoscopy with prophylactic hemostasis is still effective after endoscopic submucosal dissection for gastric neoplasm. World J Gastroenterol 2015; 21 (48): 13518–23
- [2] Kim DS, Jung Y, Rhee HS et al. Usefulness of the Forrest classification to predict artificial ulcer rebleeding during second-look endoscopy after endoscopic submucosal dissection. Clin Endosc 2016; 49: 273–281
- [3] Kumar NL, Claggett BL, Cohen AJ, Naylor J, Saltzman JR. Association between an increase in blood urea nitrogen at 24 hours and worse outcomes in acute nonvariceal upper GI bleeding. Gastrointest Endosc 2017; 86 (6): 1022–1027

eP141 Application of the Lyon scoring system in patients with typical and/or atypical symptoms poorly responsive to proton pump inhibitors: Comparison between typical and atypical symptom groups

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DOI 10.1055/s-0046-1821468

Aims In symptomatic patients despite empiric trials of proton pump inhibitors (PPIs) with no prior GERD evidence, endoscopy and ambulatory reflux monitoring are recommended off therapy. The novel Lyon scoring system based on the Lyon consensus 2.0 can stratify symptoms into phenotypes associated with the likelihood of GERD diagnosis and response to anti-reflux treatment. We applied the Lyon scoring system in patients with typical and/or atypical symptoms poorly responsive to a standard dose of PPIs and compared the Lyon score and phenotypes between typical and atypical symptom groups.

Methods In 141 patients (52.9 ± 14.9 years, M/F = 60/80) with typical (heartburn, regurgitation or esophageal chest pain) or atypical (globus, sore throat or throat clearing) symptoms poorly responsive to an empiric trial of standard dose of proton pump inhibitors, ambulatory pH-impedance monitoring was performed off antisecretory therapy using manometric localization of the LES to position the pH sensor 5 cm proximal to the LES. All patients underwent endoscopy off medication before esophageal reflux testing. The Lyon scoring system reported by Gyawali CP, et al., published in 2024, was applied and stratified the symptom groups into phenotypes. Symptom groups are subclassified as the typical symptom group (n = 79), the overlap symptom group with both typical and atypical symptoms (n = 26), and the atypical symptom group (n = 36). The phenotypes of no GERD, isolated permeability defect and reflux hypersensitivity were classified as the group likely to respond poorly to the anti-reflux therapy, whereas the phenotypes of inconclusive or borderline GERD, conclusive GERD and severe GERD were classified as the group likely to respond well to the anti-reflux therapy.

Results The prevalence (% (n)) of phenotypes including no GERD, isolated permeability defect, reflux hypersensitivity, inconclusive or borderline GERD, conclusive GERD and severe GERD is as follows; 65.8% (52), 3.8% (3), 13.9% (11), 3.8% (3), 11.4% (9), and 1.3% (1) in the typical symptom group, respectively; 61.5% (16), 3.8% (1), 11.5% (3), 3.8% (1), 15.4% (4), and 3.8% (1) in the overlap symptom group, respectively; and 69.4% (25), 5.6% (2), 22.2% (8), 2.8% (1), 0% and 0% in the atypical symptom group, respectively. The sex ratio did not significantly differ in the symptom groups (P = 0.540). The mean age of the atypical symptom group tended to be lower than that of the overlap symptom group (49.9 ± 14.9 vs 57.0 ± 13.1 years, P = 0.053). The mean age of the Lyon score was 2.1 (range 0-11). The proportion of the group likely to respond poorly to the anti-reflux therapy was greater in the atypical symptom group, compared with the overlap symptom group (P = 0.023) and the typical symptom group (P = 0.067).

Conclusions No GERD and reflux hypersensitivity are the main phenotypes in patients with typical and/or atypical symptoms poorly responsive to PPIs. The likelihood to respond to the anti-reflux therapy is the lowest in the atypical symptom alone group.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP142 The grapes of wrath: gastric lesions as the first finding of metastatic melanoma

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DOI 10.1055/s-0046-1821469

Abstract Text

Metastatic melanoma is a highly aggressive disease, with a high affinity for gastrointestinal tract metastasis, that amount up to 60 % in autopsy reports. However, gastric metastasis are uncommon, leading up to less than 150 cases in some metaanalysis [1–3].

We present the case of a 83-year-old woman that was admitted into our Internal Medicine Department due to weight loss and anemia due to iron deficiency, without evidence of a gastrointestinal bleeding. As a part of the diagnostic study, an esophagogastroduodenoscopy (EGD) was performed. Located at the proximal region of the greater curvature, an exophytic nodular lesion was found. It was composed of several, smaller, ulcerated nodules, resembling a bunch of grapes. The mucosa surrounding the ulceration was apparently normal, leading to submucosal tumour as a first diagnosis. (Figure 1). The analysis via microscope showed epithelial cells grouped in bundles and immunohistochemical staining was positive for Sox10, vimentin, HMB-45, Melan-A and S-100 leading to the histopathological diagnosis of melanoma.

Completing the study, a computerized tomography was performed. There, pulmonary, hepatic and gastric metastasis were described, as well as a lesion in the right breast that was compatible with the primary melanoma. The hepatic lesion was the largest with a diameter of 10cm located on the right lobe, while the gastric lesions found on the EGD also were present on the study. (Figure 2)

After the diagnosis, pembrolizumab, a PD-1/PD-L1 inhibitor was started. However, the patient passed away three months after the diagnosis.

Gastric metastasis of melanomas are a seldom finding, characterized by bundles of ulcerated lesions surrounded by normal mucosa. Although it is frequent for these lesions to present melanosis, our lesion was amelanotic. Positivity for S-100 and HMB-45 confirms the histopathologic diagnosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hirano K, Nomura K, Ochiai Y, Hayasaka J, Suzuki Y, Mitsunaga Y, Odagiri H, Masui A, Kikuchi D, Hoteya S. Metastatic Gastric Tumors: Clinical and Endoscopic Features. *Cureus*. 2024; 16 (4): e58678
- [2] Soares Santos DF, Costa M, Carvalho P, Santos RM, Carvalho A. Gastrointestinal Metastatic Melanoma: The Key for Diagnosis. *GE Port J Gastroenterol* 2021; 30 (1): 73–75
- [3] Sachdeva S, Dalal A, Kumar A, George R. Multifocal gastric metastasis of malignant melanoma: An ominous endoscopic appearance: Gastric metastasis of malignant melanoma. *Dig Liver Dis* 2020; 52 (12): 1512

eP143 Correlation Between Fecal Calprotectin Levels and the Diagnostic Value of Colonoscopy for Digestive Diseases

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DOI 10.1055/s-0046-1821470

Aims Fecal calprotectin (FC), a protein released by neutrophils, is a reliable and non-invasive biomarker of intestinal inflammation. Its primary value lies in its ability to differentiate functional bowel disorders from organic diseases, thereby guiding the indication for endoscopic evaluation. This study aims to assess the diagnostic value of FC and its role in determining the need for colonoscopy.

Methods A retrospective study was conducted, including patients who underwent fecal calprotectin measurement prior to a total colonoscopy over a five-year period, from January 2019 to July 2025.

Results Among 1,336 patients who underwent colonoscopy, 71 were included in this study. A slight female predominance was observed (56%; sex ratio F/M = 1.2), with a median age of 42 years.

Regarding medical history, diabetes mellitus and previous appendectomy were each present in 9.5 % of cases (n = 7), while a family history of inflammatory bowel disease (IBD) and chronic smoking were reported in 4 % (n = 3).

Clinically, the main presenting symptoms were Koenig's syndrome in 56 % (n = 40), mucoid diarrhea in 45 % (n = 32), alternating diarrhea/constipation in 17 % (n = 12), and rectal bleeding in some cases.

Biochemically, FC levels were > 1000 µg/g in 16.9 % (n = 12), between 250–1000 µg/g in 53.5 % (n = 38), and < 50 µg/g in a single patient.

Endoscopically, 59 % (n = 42) of colonoscopies were consistent with IBD findings: Crohn's disease was diagnosed in 45 % of patients (n = 32), most commonly involving the ileum or ileocolic region, with perianal involvement observed in 9.8 % (n = 7). Ulcerative colitis was identified in 14 % (n = 10), predominantly with left-sided or pancolonic distribution. In 7 % of patients (n = 5), nonspecific inflammatory lesions were identified, including erosive ileitis, terminal ulcerative ileitis, nodular ileitis, and erosive rectosigmoiditis, without histopathological confirmation. Two additional cases demonstrated ulceroinfiltrative masses suggestive of neoplastic processes. Conversely, 29 % (n = 21) of colonoscopies were completely normal.

Conclusions This study highlights a significant correlation between fecal calprotectin levels and colonoscopy findings, with 71 % of examinations revealing endoscopic abnormalities. These results confirm the diagnostic relevance of FC testing, particularly for IBD screening, while also suggesting a high sensitivity in detecting colorectal carcinoma. However, although elevated FC levels are often associated with severe endoscopic lesions, they do not provide absolute predictive value.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP144 Collagenous sprue – a very rare and challenging diagnosis

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DOI 10.1055/s-0046-1821471

Aims Collagenous sprue is a very rare cause of malabsorption, characterized by severe diarrhea and weight loss. The first description of this disease dates back to 1947. The diagnosis can be challenging because collagenous sprue resembles celiac disease both endoscopically and histologically. The main difference between these two diseases is the presence, in collagenous sprue, of a thick subepithelial collagen band beneath the basement membrane of the small bowel and duodenal mucosa. We present the case of a 76-year-old male patient, with a history of hypertension and dyslipidemia, evaluated for watery diarrhea, vomiting, abdominal pain, and weight loss. The diagnosis of collagenous sprue was established after 6 months of investigations, during which the patient developed severe malnutrition with cachexia.

Methods Clinical findings: cachexia, pale skin, asthenia, diffuse abdominal pain; hemodynamically stable. Laboratory results: fecal calprotectin = 336, hemoglobin = 10.7 g/dL, MCV = 102, WBC = 11,000, fibrinogen = 559, ferritin = 668, CTRF = 180, INR = 1.34, elevated CRP, low total serum proteins, low vitamin B12. Anti-tissue transglutaminase antibodies IgG and IgA negative. Extended stool culture negative. Abdominal CT scan: changes consistent with pancolitis. Upper GI endoscopy: antral hyperemia and edematous duodenal mucosa. Colonoscopy: whitish and flattened villi in the terminal ileum; normal appearance of the colonic mucosa [1–14].

Results Digestive tract biopsies showed gastric mucosa with features of active chronic gastritis, non-atrophic and non-metaplastic, *Helicobacter pylori* negative; moderate chronic duodenitis with marked villous atrophy, eosinophilia, focal lymphocytosis, and thickening of the subepithelial collagen band; colonic mucosa without abnormalities; ileal mucosa with moderate-to-marked villous atrophy, increased focal eosinophilia, and thickening of the subepithelial collagen band. The differential diagnosis included gluten-sensitive enteropathy (celiac disease), collagenous sprue, or an autoimmune etiology.

We initiated corticosteroid therapy and a gluten-free diet, the only effective treatment described in the literature for this rare condition. Two weeks after starting treatment, symptoms improved significantly. The patient became clinically stable and gained weight after completing therapy. A follow-up gastroscopy performed at 3 months showed normal duodenal mucosa; however, biopsies revealed moderate villous atrophy with heterogeneous polymorphous inflammation in the lamina propria, isolated neutrophils, frequent eosinophils (> 50/HPF), no aggregates, no crypt abscesses, no eosinophils in the muscularis mucosae, no epithelial erosions, no thickened subepithelial collagen band, and no evidence of *Giardia* infection.

Conclusions This case highlights a rare cause of chronic diarrhea and illustrates the diagnostic difficulty associated with collagenous sprue. Fewer than 100 cases have been reported worldwide.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zhao X, Johnson RL. Collagenous Sprue: A Rare, Severe Small-Bowel Malabsorptive Disorder. *Archives of Pathology & Laboratory Medicine* 2011; 135 (6): 803–9. doi:10.1043/2010-0028-RS.1
- [2] Lan N, Shen B, Yuan L, Liu X. Comparison of Clinical Features, Treatment, and Outcomes of Collagenous Sprue, Celiac Disease, and Collagenous Colitis. *Journal of Gastroenterology and Hepatology* 2017; 32 (1): 120–127. doi:10.1111/jgh.13592
- [3] Vakiani E, Arguelles-Grande C, Mansukhani MM et al. Collagenous Sprue Is Not Always Associated With Dismal Outcomes: A Clinicopathological Study of 19 Patients. *Modern Pathology : An Official Journal of the United States and Canadian Academy of Pathology, Inc* 2010; 23 (1): 12–26. doi:10.1038/modpathol.2009.151
- [4] Rubio-Tapia A, Talley NJ, Gurudu SR, Wu TT, Murray JA. Gluten-Free Diet and Steroid Treatment Are Effective Therapy for Most Patients With Collagenous Sprue. *Clinical Gastroenterology and Hepatology : The Official Clinical Practice Journal of the American Gastroenterological Association*. 2010; 8 (4): 344–349.e3. doi:10.1016/j.cgh.2009.12.023.
- [5] Maguire AA, Greenon JK, Lauwers GY et al. Collagenous Sprue: A Clinicopathologic Study of 12 Cases. *The American Journal of Surgical Pathology* 2009; 33 (10): 1440–9. doi:10.1097/PAS.0b013e3181ae2545.
- [6] Zhao X. Collagenous Sprue: A Rare, Severe Small-Bowel Malabsorptive Disorder. *Johnson RL. Archives of Pathology & Laboratory Medicine* 2011; 135 (6): 803–9. doi:10.1043/2010-0028-RS.1.
- [7] Maguire AA, Greenon JK, Lauwers GY et al. Collagenous Sprue: A Clinicopathologic Study of 12 Cases. *The American Journal of Surgical Pathology* 2009; 33 (10): 1440–9. doi:10.1097/PAS.0b013e3181ae2545.
- [8] Rubio-Tapia A, Talley NJ, Gurudu SR, Wu TT, Murray JA. Gluten-Free Diet and Steroid Treatment Are Effective Therapy for Most Patients With Collagenous Sprue. *Clinical Gastroenterology and Hepatology : The Official Clinical Practice Journal of the American Gastroenterological Association*. 2010; 8 (4): 344–349.e3. doi:10.1016/j.cgh.2009.12.023
- [9] Vakiani E, Arguelles-Grande C, Mansukhani MM et al. Collagenous Sprue Is Not Always Associated With Dismal Outcomes: A Clinicopathological Study of 19 Patients. *Modern Pathology : An Official Journal of the United States and Canadian Academy of Pathology, Inc* 2010; 23 (1): 12–26. doi:10.1038/modpathol.2009.151
- [10] Lan N, Shen B, Yuan L, Liu X. Comparison of Clinical Features, Treatment, and Outcomes of Collagenous Sprue, Celiac Disease, and Collagenous Colitis. *Journal of Gastroenterology and Hepatology* 2017; 32 (1): 120–127. doi:10.1111/jgh.13592
- [11] van Gils T, van de Donk T, Bouma G et al. The First Cases of Collagenous Sprue Successfully Treated With Thioguanine. *BMJ Open Gastroenterology*. 2016; 3 (1):e000099. doi:10.1136/bmjgast-2016-000099
- [12] Desruisseaux C, Bensoussan M, Désilets E et al. Adding Water to the Mill: Olmesartan-Induced Collagenous Sprue—a Case Report and Brief Literature Review. *Canadian Journal of Gastroenterology & Hepatology*. 2016; 2016:4837270. doi:10.1155/2016/4837270
- [13] Nielsen JA, Steephen A, Lewin M. Angiotensin-II Inhibitor (Olmesartan)-Induced Collagenous Sprue With Resolution Following Discontinuation of Drug. *World Journal of Gastroenterology* 2013; 19 (40): 6928–30. doi:10.3748/wjg.v19.i40.6928

[14] Nielsen OH, Riis LB, Danese S, Bojesen RD, Soendergaard C. Proximal Collagenous Gastroenteritides: Clinical Management. A Systematic Review. *Annals of Medicine* 2014; 46 (5): 311–7. doi:10.3109/07853890.2014.899102

eP145 Utilization of proton pump inhibitors in patients with overt gastrointestinal bleeding: impact on short- and long-term mortality and rebleeding — a 3-year prospective monocentric Moroccan study

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Aims Proton pump inhibitors (PPIs) are widely prescribed in acute gastrointestinal bleeding (AGIB), but inappropriate overuse or underuse remains common. Their true effect on short- and long-term outcomes is still debated, especially in low-resource settings where PPI stewardship is limited. No prior Moroccan study has assessed PPI utilization patterns in AGIB.

Aim To evaluate PPI utilization on admission and at discharge in patients presenting with overt AGIB, and to determine their impact on short-term (1-month) and long-term outcomes in a tertiary Moroccan center.

Methods A prospective monocentric study was conducted at CHU Mohammed VI Marrakech from January 2022 to January 2025, including 240 patients admitted with overt AGIB. Data collected included PPI use, antithrombotic therapy, clinical severity, endoscopic findings, and short- and long-term outcomes. Univariate and multivariate analyses identified predictors of mortality and rebleeding.

Results PPI utilization 40 % of patients were already on PPI at admission. 72 % were discharged on PPI. Overall PPI overutilization rate: 32 % (patients without clear indication). Underutilization rate: 21 % (patients with clear indication but no PPI at discharge). Characteristics of patients on PPI at admission Compared with those not on PPI, patients on PPI were: older (median 69 vs 63 years) had higher comorbidity burden (higher CCI) more likely to be on antithrombotics more likely to require blood transfusion But they had: fewer stigmata of recent hemorrhage reduced need for endoscopic therapy Outcomes 1-month rebleeding: similar whether PPI was used on admission or not. 1-month mortality: slightly higher in PPI users, but PPI itself was *not* an independent predictor on multivariate analysis.

Independent predictors of 1-month mortality
Higher Charlson Comorbidity Index

Severe bleeding
Need for blood transfusion

Stigmata of recent hemorrhage
Independent predictors of 1-month rebleeding

Anticoagulant use on admission
Severe bleeding
SRH on endoscopy

Long-term outcomes

PPI use at discharge did not predict long-term mortality or rebleeding. Anticoagulant therapy at discharge predicted long-term mortality, while antiplatelet therapy was protective against long-term rebleeding.

Conclusions In this 3-year Moroccan monocentric cohort, PPI overutilization and underutilization were both frequent, reflecting the absence of standardized PPI stewardship. However, PPI use had no significant impact on short-term or long-term mortality or rebleeding.

These findings highlight the need for a PPI utilization stewardship program to optimize prescribing practices, reduce unnecessary costs, and minimize adverse effects associated with inappropriate long-term PPI exposure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP146 Prophylactic antibiotics reduce post-ERCP infectious complications in distal malignant biliary obstruction: A prospective monocentric study from Marrakech

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Aims Distal malignant biliary obstruction (DMBO) frequently requires ERCP with biliary stenting. Early post-procedural infectious complications—mainly cholangitis and cholecystitis—remain clinically relevant despite advances in technique. Current guidelines recommend prophylactic antibiotics only in selected high-risk situations, and data specific to DMBO are scarce. This study aimed to evaluate the effect of prophylactic antibiotics on early infectious complications following ERCP in a DMBO-only population.

Methods We conducted a prospective, monocentric study at CHU Mohammed VI Marrakech, including 165 consecutive patients who underwent initial ERCP with stent placement for DMBO between 2022 and 2024. Patients were categorized according to the administration or not of prophylactic antibiotics before ERCP. The primary outcome was the incidence of infectious complications (cholangitis or cholecystitis) within 5 days. A multivariable logistic regression model was used to identify independent predictors.

Results Early infectious complications occurred in 3.6 % of patients receiving prophylactic antibiotics versus 10.3 % in those without prophylaxis, corresponding to an absolute risk reduction of 6.7 % ($p = 0.029$) and a number needed to treat (NNT) of 15. Rates of post-ERCP pancreatitis showed no significant difference between groups (approximately 6–10 %, $p > 0.3$). In multivariable analysis, absence of prophylactic antibiotics remained independently associated with infectious complications (OR 2.45, 95 % CI 1.22–4.92). Compared with previous literature—mostly small retrospective DMBO series showing no clear benefit—this prospective study provides stronger evidence supporting prophylaxis. Results also align with data from hilar obstruction studies and meta-analyses reporting reduced bacteremia after antibiotic prophylaxis.

Conclusions In this prospective Moroccan cohort, prophylactic antibiotics significantly reduced early infectious complications after ERCP for DMBO without increasing post-procedure pancreatitis. These findings support the systematic use of prophylactic antibiotics in patients undergoing ERCP for DMBO, even when complete drainage is anticipated. Larger multicenter prospective trials are warranted to refine prophylactic strategies and update guideline recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP147 Determinants of Endoscopic Success in Large and Complex Common Bile Duct Stones: A 9-Year Monocentric Experience

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Aims Endoscopic sphincterotomy with stone extraction is the standard therapy for common bile duct stones (CBDS). However, the presence of large stones (> 15 mm) or extensive choledochal lithiasis may compromise technical success and increase the need for additional procedures. Evidence on predictors of endoscopic success remains limited and heterogeneous. This study evaluated the outcomes of ERCP in patients with large versus non-large stones and identified factors associated with treatment success.

Methods We conducted a monocentric retrospective analytical study over 9 years (2016–2025) at our tertiary center. A total of 867 ERCPs performed for CBDS were included. Large stones were defined as obstructive stones > 15 mm; choledochal lithiasis as ≥ 3 stones. Patients were divided into two groups:

Group I (n = 143): single large obstructive stone > 15 mm
Group II (n = 724): one or two stones or choledochal lithiasis
Primary outcomes included success after first attempt, overall endoscopic success, need for reintervention, additional techniques, and early complications. Predictors of success were determined by univariate and multivariate analyses.

Results Large stones represented 16.5 % of the cohort (143/867).

Success after first ERCP: 55.2 % in Group I vs. 81 % in Group II ($p < 0.001$).

Reintervention: 14.7 % vs. 8 % ($p = 0.009$).

Use of additional techniques: 46.2 % vs. 16.1 %.

Overall success after adjuncts/reintervention: 88.7 % vs. 92.5 % ($p = 0.125$).

Early complications: 10.5 % vs. 5.1 % ($p = 0.017$).

Univariate predictors of reduced overall success: older age, acute cholangitis, bile duct strictures, and duct dilation > 15 mm. Multivariate analysis showed two independent predictors:

Acute cholangitis (OR 0.295; 95 % CI 0.164–0.532; $p < 0.001$)

Bile duct stricture (OR 0.53; 95 % CI 0.922–1.051; $p = 0.001$)

Conclusions In this large monocentric 9-year cohort, large stones required more reinterventions and adjunctive procedures but did not significantly reduce the final success rate of ERCP when advanced extraction techniques were available. The main determinants of reduced success were acute cholangitis and bile duct strictures, rather than stone size alone.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP148 Endoscopic Management of Colonic Biliary Ileus: A Case from a Regional Hospital

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DOI 10.1055/s-0046-1821475

Introduction: We present the case of a 78-year-old woman with a history of hypertension and colonic diverticulosis, admitted for diffuse abdominal pain, distension, and constipation lasting five days. Physical examination revealed a distended abdomen with reduced bowel sounds and diffuse tenderness, without signs of peritoneal irritation. Laboratory tests were unremarkable. Abdominal X-ray showed dilated bowel loops. CT scan revealed extensive intrahepatic and choledochal pneumobilia, a contracted gallbladder in continuity with the right colon, and inflammatory changes with diffuse thickening of the sigmoid colon. A transition point was noted at the rectosigmoid junction, where an impacted stone was suspected, without evidence of neoplasia [1].

Endoscopic Findings and Management: Colonoscopy revealed large diverticula in the sigmoid colon and a round, dark-pigmented lesion occupying nearly the entire lumen, consistent with an impacted biliary stone. Due to its location and size, complete extraction was not feasible initially. Using a Dormia basket, the stone was fragmented and removed. Following the procedure, a significant release of fecal content was observed, and the patient's intestinal transit normalized, with resolution of the presenting symptoms.

Conclusions : The primary therapeutic goal in biliary ileus is to relieve the intestinal obstruction. Although colonic impaction of ectopic gallstones is uncommon, the presence of luminal narrowing—such as in areas of diverticulosis, as seen in our patient—can favor stone lodging at that level.

Abdominal CT findings of pneumobilia, cholecysto-colonic fistula, and ectopic gallstone provided the definitive diagnostic evidence in this case.

Endoscopic treatment represents a first-line, non-surgical strategy. Therefore, it is essential to be familiar with the specialized instruments—often infrequently used—that are available in our endoscopy units, as they can be crucial in resolving complex scenarios such as the one presented here.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

[1] Augustin G, Bruketa T, Kunjko K et al. Colonic gallstone ileus: a systematic literature review with a diagnostic-therapeutic algorithm. *Updates Surg* 2023; 75 (5): 1071–1082. doi:10.1007/s13304-023-01537-0

eP149 Endoscopic Management of Common Bile Duct Stones: Clinical Outcomes and Safety in Symptomatic Patients Undergoing ERCP

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DOI 10.1055/s-0046-1821476

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is the standard treatment for common bile duct stones (CBDS). Identifying predictors of procedural success and complications is essential to improve risk stratification. This study evaluated the efficacy, safety, and independent predictors of outcomes in patients undergoing ERCP for symptomatic CBDS.

Methods A retrospective cohort study was conducted over a one-year period, including all consecutive patients undergoing ERCP for symptomatic CBDS. Clinical presentation, stone characteristics, procedural techniques, technical success, duct clearance, and post-ERCP complications were recorded. Variables associated with incomplete duct clearance and complications were analyzed using univariate and multivariate logistic regression.

Results A total of 102 patients were included (mean age 52 ± 12.5 years; 59 % female). Clinical presentation consisted of biliary colic in 80 cases, acute cholangitis in 18, and biliary pancreatitis in 4. The mean stone size was 12.5 mm, and bile duct dilation was present in 81 % of patients (mean diameter 15 mm). Selective biliary cannulation was achieved in 91 % of cases; sphincterotomy was performed in 92 % and temporary biliary stenting in 12 %. Complete duct clearance during the index ERCP was obtained in 85 %, with an overall therapeutic success rate of 90 %. Complications occurred in 10 % of procedures, including post-ERCP pancreatitis (6 %), perforation (3 %), and minor bleeding (1 %), with no procedure-related mortality. In multivariate logistic regression, stone size ≥ 15 mm (OR 3.2; 95 % CI 1.3–7.8; $p = 0.01$) and difficult cannulation (OR 2.9; 95 % CI 1.1–7.3; $p = 0.02$) were independent predictors of incomplete duct clearance, while female sex (OR 2.7; $p = 0.03$) and bile duct dilation ≥ 15 mm (OR 3.5; 95 % CI 1.3–9.1; $p = 0.01$) were independently associated with post-ERCP complications.

Conclusions ERCP shows high efficacy and an acceptable safety profile in CBDS. Stone size, cannulation difficulty, bile duct dilation, and sex independently affect outcomes. Incorporating these factors into pre-procedural assessment may improve risk stratification and clinical decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP150 High-Risk Profiles for Recurrent Gastrointestinal Bleeding in Patients with Digestive Angiodysplasias: Insights from a Prospective Cohort

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Aims Digestive angiodysplasias are a leading vascular cause of gastrointestinal bleeding, yet prospective studies evaluating predictors of recurrence are rare. Identifying high-risk patients is crucial to guide surveillance and therapy.

Methods We conducted a prospective cohort study including adults aged ≥ 18 years with at least one endoscopically confirmed angiodysplasia and minimum follow-up of 12 months. Exclusion criteria were hereditary hemorrhagic telangiectasia, portal hypertensive gastropathy, radiation-induced vascular lesions, inflammatory bowel disease, and incomplete records. Lesions were discovered either incidentally or during overt bleeding. Recurrent bleeding was defined as new hematochezia or melena, hemoglobin drop ≥ 2 g/dL, need for transfusion, or endoscopic evidence. Follow-up included scheduled visits and structured telephone contact.

Results Among 65 patients, 15.4 % experienced recurrent bleeding. Recurrence was higher in patients with chronic kidney disease versus those without (21.2 % vs 9.4 %, $p = 0.08$), in patients with initial overt bleeding versus incidental discovery (21 % vs 4 %, $p = 0.04$), and in those receiving anticoagulants versus not (22 % vs 14 %, $p = 0.11$). In multivariable logistic regression, chronic kidney disease, anticoagulant therapy, higher age, multiplicity of lesions, and active stigmata were positively associated, while argon plasma coagulation showed a protective trend. Trends aligned with international evidence despite lack of statistical significance.

Conclusions This prospective study identifies clinically meaningful high-risk profiles for recurrent bleeding in digestive angiodysplasias. Standardized definitions and structured follow-up enhance originality. Findings support development of predictive models to optimize patient monitoring and treatment strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP151 Pharmacogenetic Determinants of Azathioprine Response: Impact of TPMT G460A and MTHFR C677T Variants in Tunisian Patients With Inflammatory Bowel Disease

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DOI 10.1055/s-0046-1821478

Aims Azathioprine (AZA) is widely used in inflammatory bowel disease (IBD), but inter-individual variability in efficacy and toxicity limits its optimal use. Genetic variants affecting thiopurine metabolism, particularly in TPMT and MTHFR, may contribute to these differences. This study assessed the influence of TPMT G460A (rs1800460) and MTHFR C677T (rs1801133) polymorphisms, along with non-genetic factors, on AZA outcomes in Tunisian IBD patients.

Methods A retrospective cohort of 62 IBD patients treated with AZA for ≥ 3 months was analyzed. Clinical and demographic data were collected from standardized records. Genotyping of TPMT G460A and MTHFR C677T was performed by PCR-RFLP. Associations with AZA efficacy and toxicity were evaluated using chi-square or Fisher's exact tests and multivariate logistic regression for variables with $p < 0.1$. Statistical significance was set at $p < 0.05$.

Results The TPMT G460A variant was identified in one patient only, limiting analysis; subsequent evaluation focused on the MTHFR C677T polymorphism (CC 45.2 %, CT 40.3 %, TT 14.5 %). No significant association was found between C677T genotype and AZA efficacy ($p = 0.47$) or toxicity ($p = 0.61$). Non-genetic factors—including age, sex, BMI, smoking status, disease subtype, corticosteroid response, and concomitant treatments—were also not associated with outcomes. Multivariate regression identified no independent predictors of AZA response or adverse effects. These findings likely reflect both the low prevalence of TPMT variants in this population and the absence of additional thiopurine-metabolizing gene variants (e.g., TPMT2, TPMT3A, NUDT15) in the analysis.

Conclusions While no significant determinants of AZA efficacy or toxicity were identified, this study highlights the low frequency of common TPMT variants in Tunisian IBD patients and underscores the need for broader pharmacogenetic screening. These results provide a basis for larger, multi-gene studies to optimize individualized thiopurine therapy in North African populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP152 Impact of Endoscopist Fatigue on Colorectal Lesion Detection: Prospective Evaluation of Colonoscopy Timing

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Aims Colonoscopy is the gold standard for colorectal cancer prevention, yet small, flat, and sessile serrated polyps are frequently missed. Operator vigilance is crucial, and fatigue during prolonged sessions may reduce detection, particularly of subtle lesions. This study evaluated whether colonoscopy timing during the day affects polyp detection.

Methods We conducted a prospective study of 47 consecutive patients undergoing screening or surveillance colonoscopy with adequate bowel preparation (Boston score ≥ 6) between January 2025 and September 2025. Procedures were classified as early session (first half of the program) or late session (after ≥ 3 consecutive exams). For each patient, polyps were recorded for number, size, morphology (Paris classification), location, and histology. Comparative analysis assessed detection differences between early and late sessions.

Results 25 early and 22 late session colonoscopies were analyzed. Early session colonoscopies detected 65 polyps (mean 2.6 per patient), including 33 adenomas, 20 sessile serrated lesions, and 12 hyperplastic polyps. Late session colonoscopies detected 28 polyps (mean 1.3 per patient), mainly small, flat, with 60 % in the right colon. Detection of small, flat, and sessile serrated lesions decreased by ~ 50 % in late sessions. Procedure times and adverse events were similar. The reduction in detection during late sessions was statistically significant ($p = 0.02$).

Conclusions Colonoscopy timing significantly affects lesion detection, with late-session procedures yielding fewer polyps, particularly small, flat, and sessile serrated lesions in the right and transverse colon. Awareness of endoscopist fatigue is essential for session planning, training, and quality assurance. Limiting consecutive procedures, scheduling breaks, and rotating operators may improve detection and patient safety. Larger multicenter studies are warranted to validate these findings and guide practical recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP153 Impact of Systematic Patient Position Changes on Colorectal Lesion Detection: Prospective Study of 56 Patients

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DOI 10.1055/s-0046-1821480

Aims Colonoscopy is the gold standard for colorectal cancer prevention, yet small, flat, and sessile serrated polyps are frequently missed. Patient positioning affects colonic distension and mucosal visualization. This study evaluated whether systematic changes in patient position—including left lateral, right lateral, ventral, and dorsal decubitus—improve polyp detection

Methods We conducted a prospective study of 56 consecutive patients undergoing screening or surveillance colonoscopy with adequate bowel preparation (Boston score ≥ 6) between January 2025 and September 2025. Initial inspection was performed in the left lateral decubitus position. During evaluation of the transverse and right colon, positions were systematically changed to optimize mucosal exposure. All detected polyps were resected and analyzed histologically. The number of polyps detected before and after position change, their size, morphology, location, and histology were recorded.

Results The cohort had a mean age of 60 years, 54 % men, and mean Boston score 7.4. Initial left lateral inspection detected 72 polyps. Systematic position changes yielded 18 additional polyps (20 % of total), predominantly small (< 5

mm), flat (Paris IIa), and located mainly in the right colon (55%) and transverse colon (30%). Histology revealed adenomas (50%), sessile serrated lesions (33%), and hyperplastic polyps (17%). No adverse events occurred, and procedure time was not significantly prolonged.

Conclusions Systematic patient position changes during colonoscopy significantly increase polyp detection, particularly small, flat, and sessile serrated lesions in the right and transverse colon. This safe, simple, and cost-effective strategy can enhance post-colonoscopy quality and colorectal cancer prevention. Multicenter studies are warranted to validate these findings and inform training and procedural recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP154 Impact of a Total Back-to-Back Second-Look Colonoscopy on Detection of Missed Colorectal Lesions: A Prospective Study of 67 Patients

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DOI 10.1055/s-0046-1821481

Aims Back-to-back colonoscopy studies have shown that a substantial proportion of colorectal lesions are missed during a single examination, with adenoma miss rates reported between 17% and 28% in the literature. Small, flat, serrated, and right-sided lesions are particularly prone to being overlooked and contribute to interval post-colonoscopy colorectal cancer. We aimed to evaluate the incremental diagnostic yield of a complete second-look colonoscopy performed immediately after a standard high-definition examination.

Methods This prospective study included 67 consecutive adults undergoing screening or surveillance colonoscopy with adequate bowel preparation (Boston score ≥ 6). After a first complete inspection, an immediate second pass from rectum to cecum was performed under identical conditions. All detected lesions were characterized by size, morphology, and location, and resected. The primary outcome was the proportion of lesions identified exclusively during the second inspection.

Results The first pass detected 93 polyps; the second pass revealed 30 additional lesions, corresponding to a miss rate of 24.4%, consistent with previously published back-to-back studies. Missed lesions were significantly smaller (mean 4 mm), predominantly flat (Paris IIa), and mostly located in the proximal colon. Histology included tubular adenomas, sessile serrated lesions, and hyperplastic polyps. Subtle borders and pale coloration were common features of missed lesions. The incremental yield was consistent across endoscopists and independent of bowel cleanliness within the inclusion threshold.

Conclusions Immediate back-to-back colonoscopy substantially improves detection of clinically relevant lesions, particularly serrated and right-sided polyps associated with interval cancer. Selective application of second-look inspection may benefit high-risk patients and provide a valuable quality assessment tool for endoscopy units. Emphasizing slow, meticulous mucosal inspection remains essential to reduce post-colonoscopy colorectal cancer risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP155 Patient Perception of Repeated Endoscopic Examinations in IBD

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DOI 10.1055/s-0046-1821482

Aims Patients with inflammatory bowel disease (IBD), including Crohn's disease and ulcerative colitis, often require repeated endoscopic evaluations for disease monitoring, dysplasia surveillance, and mucosal healing assessment. Despite its clinical necessity, endoscopy can cause anxiety, procedural discomfort,

and negatively impact quality of life. Understanding patient perceptions is essential to optimize monitoring strategies and enhance patient-centered care.

Methods This prospective multicenter study included 200 consecutive IBD patients undergoing colonoscopy or sigmoidoscopy at tertiary centers between January 2023 and December 2025. Eligible patients were adults with confirmed IBD and at least one prior endoscopy. Patients with cognitive impairment, language barriers, or recent major surgery were excluded. Following each procedure, patients completed a validated questionnaire assessing anxiety, procedural discomfort, burden of bowel preparation, perceived necessity of the procedure, and willingness for future endoscopies. Data on disease type, activity (CDAI or partial Mayo score), prior endoscopies, age, sex, sedation, and complications were collected.

Results Among participants, 108 (54%) had Crohn's disease and 92 (46%) ulcerative colitis; mean age was 38.7 years, 52% female. Prior endoscopies ranged from 1 to 10 (median 3). Moderate-to-high pre-procedure anxiety was reported by 64%, higher in patients with active disease (VAS 7.2 vs 4.5, $p < 0.01$), females, and younger patients. Anxiety slightly decreased in patients with > 3 prior endoscopies. Bowel preparation was the most burdensome step for 52% of patients, especially during active disease (VAS 6.9 vs 5.1, $p = 0.02$). Procedural discomfort was moderate in 65% and high in 14%, with sedation reducing discomfort significantly (VAS 4.3 vs 6.6, $p < 0.01$).

Despite discomfort, 81% expressed willingness to adhere to future endoscopic monitoring if adequately informed. No significant differences were observed between Crohn's disease and ulcerative colitis in perceptions or tolerance.

Conclusions In conclusion, repeated endoscopies are perceived as necessary but are associated with anxiety and discomfort, particularly due to bowel preparation and anticipation. This multicenter study identifies high-risk patient profiles and highlights the importance of tailored strategies—optimized preparation, sedation, structured education, and patient-centered scheduling—to improve adherence, satisfaction, and overall quality of care. Incorporating patient perspectives into monitoring protocols supports shared decision-making and long-term treatment engagement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP156 EPAGE Criteria in Real-World Practice: Are We Missing Significant Upper GI Pathology?

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DOI 10.1055/s-0046-1821483

Aims The use of upper gastrointestinal endoscopy (UGIE) continues to rise, often beyond evidence-based indications. The EPAGE criteria were developed to standardize and rationalize endoscopy indications, but their real-world performance remains uncertain. This study evaluated the applicability of EPAGE criteria in daily practice and assessed the association between indication appropriateness and clinically significant endoscopic findings.

Methods We conducted a retrospective study including all UGIE procedures performed at Sahloul University Hospital (Sousse, Tunisia) from May to July 2023. Indications were classified according to EPAGE categories ("necessary and appropriate," "appropriate," "uncertain," "inappropriate," or "non-applicable") using the official EPAGE software. Exams with indications not covered by EPAGE were excluded. Significant endoscopic lesions were recorded, and their association with EPAGE categories was statistically analyzed.

Results Among 290 UGIE procedures, 42 (14.5%) were excluded; **248 examinations** were analyzed (mean age 59.2 years; sex ratio M/F = 0.7). The most frequent indications were upper GI bleeding (28.3%), dyspepsia (24.2%), and iron-deficiency anemia (15.3%). EPAGE classification rated indications as **necessary/appropriate in 60.5%, appropriate in 23.4%, uncertain in 3.9%,**

inappropriate in 12.9 %, and **non-applicable in 15.5 %**. Clinically significant lesions were found in **79 %** of cases with necessary/appropriate indications. A significant association was observed between EPAGE appropriateness and endoscopic yield ($p = 0.02$). However, even in **inappropriate or uncertain indications**, significant lesions were detected in **40 %** of examinations, including 5 peptic ulcers and 3 neoplastic lesions.

Conclusions While most UGIE indications met EPAGE criteria, the substantial proportion of significant findings among procedures deemed inappropriate or uncertain suggests that current EPAGE recommendations may lack sensitivity in real-world clinical settings. These results support the need for **updating and refining EPAGE criteria** to better match contemporary diagnostic practices.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP157 Optimization of Endoscopy Training: Strategies to Improve the Practical and Theoretical Teaching of Endoscopic Techniques

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DOI 10.1055/s-0046-1821484

Aims Digestive endoscopy is a rapidly expanding specialty, essential for the diagnosis and treatment of gastrointestinal diseases. It occupies a central place in the daily practice of gastroenterologists. The need for high-quality training has increased due to the growing complexity of techniques and the volume of patients requiring endoscopic interventions. Therefore, the need to standardize and improve digestive endoscopy training is crucial to meet increasing clinical demands. A simulation center represents an opportunity to provide structured and progressive training for young gastroenterologists.

The main challenges include the absence of animal models and reliance on simulators for practical training, heterogeneous exposure of residents to clinical cases during intensive rotations, and difficulty for residents to acquire standardized practical skills in a structured setting.

The objectives were to evaluate the effectiveness of an optimized educational program on residents' skills, identify weaknesses and opportunities for improvement in the current curriculum, and propose recommendations to strengthen the quality of training.

Methods This is a prospective single-center study including 18 residents in training who underwent two evaluations three months apart using a competency assessment grid based on direct observation with immediate feedback. The assessment grid was developed based on previously validated grids created by experts in digestive endoscopy. It is composed of five parts subdivided into multiple items allowing evaluation of cognitive, integrative, and technical skills.

The educational program included theoretical training with interactive courses, video analysis of diagnostic and interventional endoscopy, endoscopy staff meetings on various topics such as tumors, inflammatory diseases, polypectomy, hemostasis, APC, and foreign body extraction, and case studies focused on multiple pathologies. Practical training in the simulation center used high-fidelity simulators to learn basic techniques and manage simulated complications, with realistic scenarios for colonoscopy and upper endoscopy and real-time feedback from instructors. Intensive supervised clinical rotations allowed participation in real procedures to reinforce skills acquired in simulation, with post-procedure feedback sessions using the assessment grid.

Evaluation included an initial test to assess baseline competence, practical simulator tests after each session to measure progression, and satisfaction surveys among residents and instructors.

Results Results showed improvement in all evaluated items. Residents in the first year progressed from maximal to significant supervision, while third- and fourth-year residents progressed from significant supervision to minimal supervision and competence. Improvement was less marked in integrative skills.

Technical skills showed a 35 % average increase in practical scores after simulation training, with significant improvement in recognizing anomalies and manipulating endoscopic equipment. Resident satisfaction was high: 50 % found simulators effective for learning basic techniques, 90 % considered intensive rotations essential, and 80 % emphasized the need to introduce animal-model simulation. Instructors observed that residents were more confident and precise in their technical skills and highlighted the need to expand simulator access for advanced scenarios and to integrate animal-model simulation into training.

Conclusions In conclusion, a training program combining simulation and intensive supervised clinical rotations significantly improves technical and theoretical skills in young endoscopists. This single-center model can serve as a reference for other training centers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP158 Diagnostic performance of FIB-4 and APRI for non-invasive detection of advanced fibrosis in chronic hepatitis B: a FibroScan-based study

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DOI 10.1055/s-0046-1821485

Aims Non-invasive tools are increasingly used to stratify fibrosis in chronic hepatitis B (CHB). Liver stiffness measurement (LSM) by transient elastography (FibroScan) is widely adopted, while blood-based scores such as FIB-4 and APRI are simple and inexpensive. We aimed to evaluate the diagnostic performance of FIB-4 and APRI for the detection of advanced fibrosis in CHB, using FibroScan as the reference.

Methods We retrospectively included CHB patients who underwent FibroScan examination at F.Hached University Hospital (Sousse, Tunisia). Demographic, clinical and laboratory data were collected. Fibrosis stages were classified as F0–F1, F2, F3 and F4 based on LSM; advanced fibrosis was defined as F3–F4. FIB-4 and APRI scores were calculated from routine blood tests. Receiver operating characteristic (ROC) curves were constructed to assess the ability of FIB-4 and APRI to detect advanced fibrosis. Area under the ROC curve (AUC), optimal cut-offs, and diagnostic performance at classical thresholds were reported.

Results Eighty CHB patients were analyzed; **advanced fibrosis (F3–F4)** was present in **22/80 (27.5 %)** and absent in 58/80 (72.5 %). Mean FIB-4 and APRI values were significantly higher in patients with advanced fibrosis compared with those without (FIB-4: **4.86 vs 1.88**, APRI: **1.50 vs 0.46**).

For the detection of advanced fibrosis, AUC was **0.91** for FIB-4 and **0.94** for APRI. The optimal cut-off for FIB-4 was **2.57**, yielding a sensitivity of **100 %** and a specificity of **85.5 %**. The optimal APRI cut-off was **0.65**, also providing a sensitivity of **100 %** and a specificity of **85.5 %**.

At classical thresholds, FIB-4 ≥ 1.45 showed **100 % sensitivity** and **60.0 % specificity** (PPV 50.0 %, NPV 100 %) for advanced fibrosis, whereas FIB-4 ≥ 3.25 provided **59.1 % sensitivity** and **85.5 % specificity** (PPV 61.9 %, NPV 83.9 %). An APRI ≥ 1.0 yielded **59.1 % sensitivity**, **90.9 % specificity** (PPV 72.2 %, NPV 84.7 %).

Conclusions Both FIB-4 and APRI demonstrated excellent diagnostic performance for the detection of advanced fibrosis, with AUCs above 0.90 and high accuracy at optimized cut-offs. Classical rule-in thresholds (FIB-4 ≥ 3.25 and APRI ≥ 1.0) provided good specificity, whereas lower cut-offs offered very high sensitivity and NPV. These findings support the use of FIB-4 and APRI as simple triage tools to identify CHB patients who warrant confirmatory assessment by transient elastography.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP159 Evaluation of Accessibility to Diagnostic and Interventional Digestive Endoscopy in the Southern Region in a Low-Resource Setting: Experience from a Reference Center

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DOI 10.1055/s-0046-1821486

Aims Digestive endoscopy is essential for the diagnosis and treatment of gastrointestinal diseases. However, regions in the southern part of the country, characterized by predominantly rural populations and geographic challenges, face significant barriers in accessing specialized care. The reference center plays a crucial role in providing this care. This descriptive study analyzes patient characteristics, indications for endoscopic procedures, and obstacles encountered, with the aim of proposing adapted solutions.

Methods This is a cross-sectional descriptive study conducted over six months, from September 2024 to March 2025, including 512 patients who underwent endoscopic procedures at the center, originating from both urban and rural areas of the southern region in a low-resource setting. Collected data included demographic information (age, sex, urban/rural origin), health coverage (social security schemes, private insurance, uninsured patients), type of procedures performed (colonoscopy, upper endoscopy, endoscopic ultrasound, ERCP, capsule endoscopy), indications (diagnostic or interventional), and delays and obstacles (average waiting time for an appointment, distance traveled, and financial costs). Data sources included medical records, hospital registries, patient questionnaires, and interviews with healthcare professionals.

Results The study included 512 patients, with a mean age of 51 years (range 19–85), with a predominance of males (58%). Most patients (68%) came from rural areas, mainly from Ouarzazate (20%), Zagora (18%), Taroudant (15%), Al Haouz (10%), and El Kelaâ des Sraghna (5%), while 32% came from urban areas such as Agadir, Ida-Outanane, Marrakech, and Guelmim. Colonoscopy accounted for 45% of procedures, mainly indicated for rectal bleeding (40%), colorectal cancer screening (25%), chronic diarrhea (15%), and polypectomies (10%). Upper endoscopy represented 35% of procedures, mainly for epigastric pain (30%), upper gastrointestinal bleeding (50%), suspected gastritis or ulcer (10%), and foreign body management (5%). Endoscopic ultrasound was performed in 10% of cases, primarily for pancreatic or biliary tumors (40%), cysts (30%), and suspected submucosal tumors (20%). ERCP accounted for 7% of interventions, mainly for bile duct stones (60%), cholangitis (20%), and biliary stent placement (20%). Capsule endoscopy, performed in 3% of cases, was mainly used for unexplained iron-deficiency anemia (60%) and obscure gastrointestinal bleeding (30%).

Regarding health coverage, 60% of patients were affiliated with social security schemes, 20% with other national programs, 10% had private insurance, and 10% were uninsured. Average waiting times varied by procedure, with four weeks for colonoscopy, six weeks for endoscopic ultrasound, and one to two weeks for ERCP. The average distance traveled to access care was 210 km, ranging from 30 to 950 km. Seventy-five percent of patients reported financial difficulties related to indirect costs, including transportation and accommodation.

Conclusions In conclusion, the center serves as a major reference point for patients from the southern region in a low-resource setting, with most patients originating from rural areas. The study highlights major challenges in accessing digestive endoscopy due to geographic, financial, and organizational barriers. These findings align with international data from other low-resource and developing countries and underscore the urgent need to improve service delivery. Solutions such as mobile endoscopy units, strengthening local hospitals, and improving subsidies for indirect care costs could significantly transform access to digestive endoscopy in the region.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP160 Refining endoscopic screening: non-invasive prediction of esophageal varices and high-risk varices in chronic hepatitis B

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DOI 10.1055/s-0046-1821487

Aims Endoscopic screening for esophageal varices is recommended in patients with advanced chronic liver disease, but many patients have no or only low-risk varices. Simple non-invasive markers could help to better select candidates for endoscopy. We aimed to assess the prevalence of esophageal varices and to evaluate the performance of liver stiffness measurement (LSM), platelet count, FIB-4 and APRI for predicting esophageal varices and high-risk varices in chronic hepatitis B (CHB).

Methods We conducted a retrospective study including adult CHB patients who underwent both FibroScan and upper gastrointestinal endoscopy at F. Hached University Hospital. LSM (kPa), platelet count and routine laboratory parameters were collected. FIB-4 and APRI were calculated. Esophageal varices were graded (1–3). High-risk varices were defined as grade ≥ 2 and/or the presence of red wale signs. Advanced fibrosis was defined as F3–F4 by LSM. Receiver operating characteristic (ROC) curves were used to evaluate the ability of LSM, platelets, FIB-4 and APRI to predict any varices and high-risk varices.

Results Eighty CHB patients were analyzed. Esophageal varices of any grade were found in 18/80 (22.5%) patients, and high-risk varices in 5/80 (6.3%), all in patients with advanced fibrosis. Compared with patients without varices, those with varices had lower platelet counts (mean 103 vs 180 × 10⁹/L, $p < 0.001$), higher FIB-4 scores (5.38 vs 1.93, $p < 0.001$) and higher APRI values (1.52 vs 0.53, $p < 0.001$). LSM tended to be higher in patients with varices (16.5 vs 9.9 kPa, $p = 0.10$).

For the prediction of any varices, the area under the ROC curve (AUC) was 0.73 for LSM, 0.87 for FIB-4, 0.83 for APRI and 0.84 for platelet count. Optimal cut-offs for detecting any varices were approximately 4.9 for FIB-4 (sensitivity 68.8%, specificity 96.4%), 0.65 for APRI (sensitivity 87.5%, specificity 74.5%) and 7.3 kPa for LSM (sensitivity 87.5%, specificity 67.3%).

For high-risk varices, discrimination was very good, with AUCs of 0.96 for FIB-4, 1.00 for APRI and 0.75 for LSM, although based on a small number of events ($n = 5$). In this setting, thresholds around 7.0 for FIB-4, 2.7 for APRI and 12 kPa for LSM all achieved 100% sensitivity and high specificity.

Conclusions In this cohort of CHB patients, esophageal varices were present in about one quarter and high-risk varices in a small but clinically relevant proportion. Non-invasive markers, particularly FIB-4, APRI and platelet count, showed good to excellent performance for predicting esophageal varices and high-risk varices, and may help refine the selection of patients requiring screening endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP161 Diagnostic yield of colonoscopy in isolated constipation compared with other lower gastrointestinal indications

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DOI 10.1055/s-0046-1821488

Aims Constipation is a common indication for colonoscopy, but the diagnostic yield of the procedure in patients with isolated constipation, in the absence of alarm features, remains debated. We aimed to compare the prevalence of colonic neoplastic and structural lesions in patients undergoing colonoscopy for isolated constipation versus other lower gastrointestinal indications.

Methods We conducted a retrospective single-centre study including consecutive adult patients who underwent colonoscopy Sahloul hospital. Indications and findings were extracted from colonoscopy reports. *Isolated constipation* was defined as constipation without associated melena, rectorrhagia, diarrhea or anemia. The “other indications” group included patients with at least one of these features. Primary outcomes were the detection of colonic polyps and tumors. Diagnostic yields were compared using χ^2 tests.

Results A total of **120 colonoscopies** were analyzed; approximately **73 %** of patients were aged 50 years or older. Constipation was the main indication, and **isolated constipation** accounted for about **65 %** of procedures, while the remaining **35 %** were performed for other indications (including anemia, melena, rectorrhagia and/or diarrhea).

The overall polyp detection rate was **23.2 %**, and colorectal tumors were found in **4.6 %** of examinations. In patients with **isolated constipation**, polyps were detected in **14.4 %** of procedures and tumors in **2.0 %**. In contrast, among patients with **other indications**, the polyp detection rate reached **35.7 %**, and tumor detection **9.5 %**. Both polyp and tumor yields were significantly lower in isolated constipation compared with other indications ($p < 0.001$ and $p = 0.020$, respectively). The rate of complete colonoscopy did not differ significantly between groups (around **71 %** vs **66 %**, $p = 0.44$).

Conclusions In this cohort, colonoscopy performed for isolated constipation had a substantially lower yield for polyps and colorectal tumors than colonoscopy performed for other lower gastrointestinal indications, although neoplastic lesions were not absent. These findings support a more selective use of colonoscopy in patients with isolated constipation and highlight the importance of alarm features such as anemia, bleeding and diarrhea in guiding the indication.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP162 The occurrence of papillary stenosis after intraductal radiofrequency ablation after endoscopic papillectomy: a single center experience

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DOI 10.1055/s-0046-1821489

Aims Intraductal radiofrequency ablation (ID-RFA) has been introduced as a therapeutic option for residual or recurrent ampullary tumors after endoscopic papillectomy. However, papillary stenosis is a common adverse event. We evaluated the incidence of papillary stenosis following ID-RFA and investigated potential risk factors.

Methods We conducted a retrospective review of patients who underwent ID-RFA for residual or recurrent ampullary tumors after papillectomy at a single tertiary center (May 2019–October 2024). ID-RFA was performed using an 18- or 22-mm ELRA catheter (Taewoong, Seoul, South Korea) placed in the lower common bile duct under fluoroscopic guidance, with 10 W at 75 °C delivered by a VIVA Combo generator (STARmed, Seoul, South Korea). Clinical outcomes and the occurrence of papillary stenosis were analyzed, and risk factors were assessed using univariate analysis [1–3].

Results A total of 14 patients (median age, 60 years; range, 43–83; 6 females) underwent ID-RFA. Two were excluded due to surgical resection after ID-RFA or incomplete ablation, leaving 12 patients for analysis. During follow-up, no tumor recurrence was observed. Papillary stenosis developed in 8 patients (66.7 %). Comparisons between patients with and without stenosis showed no significant differences in the interval between papillectomy and ID-RFA (9.8 ± 13.3 vs. 5.5 ± 4.2 months, $P = 0.542$), ablation duration (120 ± 56 vs. 150 ± 60 s, $P = 0.410$), or stent placement duration (45.1 ± 8.4 vs. 30.0 ± 16.2 days, $P = 0.55$).

Conclusions ID-RFA is an effective treatment for residual or recurrent ampullary tumors following endoscopic papillectomy, with no recurrences observed in this cohort. However, papillary stenosis was a frequent adverse event, occurring in two-thirds of patients. No significant risk factors were identified. Larger, comparative studies are required to establish optimal strategies for stent type and placement duration to minimize this complication.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tringali A, Matteo M, Orlandini B et al. Radiofrequency ablation for intraductal extension of ampullary adenomatous lesions: proposal for a standardized protocol. *Endosc Int Open* 2021; 09: E749–E755. doi:10.1055/a-1387-7880
- [2] Napoleon B, Gincul R, Ponchon T et al. Endoscopic papillectomy for early ampullary tumors: long-term results from a large multicenter prospective study. *Endoscopy* 2014; 46: 127–134
- [3] Vanbiervliet G, Strijker M, Arvanitakis M et al. ESGE Guidelines. Endoscopic management of ampullary tumors: European Society of Gastrointestinal. *Endoscopy (ESGE) Guideline. Endoscopy* 2021; 53: 429–448

eP163 Lower gastrointestinal bleeding: diagnostic value of colonoscopy

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DOI 10.1055/s-0046-1821490

Aims Rectal bleeding and melena are classical alarm symptoms that warrant colonoscopic evaluation to exclude colorectal neoplasia and other organic lesions. However, the diagnostic value of colonoscopy in this setting may vary according to patient profile and local practice. We aimed to describe colonoscopic findings in patients undergoing colonoscopy for lower gastrointestinal bleeding.

Methods We conducted a retrospective study including only adult patients who underwent colonoscopy for *lower gastrointestinal bleeding* (rectal bleeding and/or melena) at Sahloul University Hospital. Demographic data, indications and endoscopic findings were extracted from colonoscopy reports. The main lesions of interest were colorectal polyps, colorectal tumors, diverticulosis, angiodysplasia and hemorrhoids. The diagnostic value of colonoscopy was expressed as the proportion of procedures in which each lesion type was identified.

Results A total of **48 colonoscopies** performed for lower gastrointestinal bleeding were included. **Colorectal polyps** were detected in approximately **31 %** of examinations, and **colorectal tumors** in about **6 %**. **Diverticulosis** was observed in nearly **one quarter** of patients, and **angiodysplasia** in around **6 %** of cases. **Hemorrhoids** were particularly frequent, identified in **almost one out of five** patients, representing a substantial proportion of likely or contributory causes of bleeding. Most colonoscopies were complete, allowing full colonic evaluation in the majority of cases and accurate characterization of the underlying etiology of bleeding.

Conclusions In this cohort of patients undergoing colonoscopy specifically for lower gastrointestinal bleeding, nearly one third had colorectal polyps, a non-negligible proportion had colorectal cancer, and hemorrhoidal disease was very commonly identified. These findings confirm the **high diagnostic value** of colonoscopy in the setting of lower gastrointestinal bleeding and highlight hemorrhoids, alongside neoplastic and diverticular lesions, as major etiologies. They support colonoscopy as a first-line investigation in this clinical context.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP164 Rethinking colonoscopy for isolated constipation: limited diagnostic value in a 153-patient series

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DOI 10.1055/s-0046-1821491

Aims Isolated constipation in the absence of alarm features is a frequent indication for colonoscopy, but the appropriateness and diagnostic value of the procedure in this setting remain controversial. We aimed to evaluate the diagnostic yield of colonoscopy in patients undergoing the examination for isolated constipation and to assess the impact of age on the detection of colonic lesions.

Methods We conducted a retrospective single-centre study including adult patients who underwent colonoscopy for *isolated constipation* at Sahloul University Hospital. Isolated constipation was defined as constipation in the absence of rectal bleeding, melena, diarrhea or anemia as recorded in the colonoscopy report. Demographic data, colonoscopy completeness and endoscopic findings were collected. Colonoscopies were classified as **abnormal** if at least one significant organic lesion was present: colorectal polyp, colorectal tumor, diverticulosis, angiodysplasia or hemorrhoids; otherwise, they were considered **normal**. Patients were stratified by age (< 50 vs ≥ 50 years). Comparisons were performed using χ^2 or Fisher's exact test.

Results A total of **153 colonoscopies** performed for isolated constipation were included. Among these patients, **112 (73.2%)** were aged ≥ 50 years and **41 (26.8%)** were < 50 years. Colonoscopy was complete in **71.2%** of cases. Overall, the examination was normal in **108/153 patients (70.6%)** and abnormal in **45/153 (29.4%)**. The main lesions identified were:

Colorectal polyps: **22/153 (14.4%)**

Colorectal tumors: **3/153 (2.0%)**

Diverticulosis: **17/153 (11.1%)**

Angiodysplasia: **3/153 (2.0%)**

Hemorrhoids: **1/153 (0.7%)**.

Colorectal polyps and tumors combined were found in **25/153 patients (16.3%)**, and all colorectal tumors occurred in patients aged ≥ 50 years. The proportion of abnormal colonoscopies was **17.1% (7/41)** in patients < 50 years

versus **33.9% (38/112)** in those ≥ 50 years ($p = 0.068$), and colorectal polyps and/or tumors were observed in **9.8% (4/41)** of patients < 50 years and **18.7% (21/112)** of those ≥ 50 years ($p = 0.22$). These differences did not reach statistical significance.

Conclusions In this 153-patient series of colonoscopies for isolated constipation, over **70%** of examinations were normal and colorectal polyps and cancer were uncommon, especially in patients < 50 years, with all cancers occurring in those aged ≥ 50 years. As age-related differences were not statistically significant, colonoscopy for isolated constipation appears to have limited diagnostic value, and its use should be more selective and guided by individual risk and the presence of true alarm features.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP165 Characteristics and outcomes of colorectal EMR in elderly and very elderly patients versus younger patients in the cradle of the Mediterranean diet

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DOI 10.1055/s-0046-1821492

Aims The evidence guiding the use of Endoscopic mucosal resection (EMR) in elderly and very elderly patients remains limited. It's known that the Mediterranean diet (MD) has healthy properties, and Cilento is an area in southern Italy, considered the cradle of the MD, with a high number of long-living individuals [1–23].

The primary outcome was to evaluate the safety and efficacy of EMR in these patients. Furthermore, we aimed to identify specific variables correlated with age to contribute to a more tailored approach in this growing patient group, particularly in our geographic area (► **Table 1**).

► **Table 1**

	Age < 65 y (n = 145)	Age ≥ 65 y (n = 257)	P value	Age < 80 y (n = 344)	Age ≥ 80 y (n = 58)	P value
Women	59 (40,7%)	85 (33,1%)	0.115	125 (36,3%)	18 (31,0%)	0.527
Mean age, y (Standard deviation)	55,7 (7,3)	74,2 (6,4)	<0.001*	64,9 (9,7)	83,3 (3)	<0.001*
Number of polyps	167	305		402	70	
Location of polyps			0.983			0.958
Rectus	16 (9,6%)	28 (9,2%)	1.000	36 (9%)	8 (11,4%)	0.601
Sigma	62 (37,1%)	112 (36,8%)	0.956	146 (36,3%)	28 (40%)	0.493
Descending	18 (10,8%)	32 (10,5%)	1.000	43 (10,7%)	7 (10%)	1.000
Transverse	19 (11,4%)	34 (11,2%)	1.000	46 (11,4%)	7 (10%)	0.951
Ascending	35 (21%)	72 (23,7%)	0.467	93 (23,13%)	14 (20%)	0.763
Cecum	17 (10,2%)	26 (8,6%)	0.739	38 (9,5%)	6 (8,6%)	1.000
Pathology of polyps			0.195			0.076
Hyperplastic	27 (17,9%)	31 (11,5%)	0.077	20 (6,1%)	7 (11,7%)	0.160
Serrated	4 (2,6%)	11 (4,1%)	0.588	14 (4,0%)	1 (1,6%)	0.484
Adenomatous	115 (76,16%)	215 (79,6%)	0.459	284 (86,1%)	46 (76,7%)	0.079
Adenocarcinoma	5 (3,3%)	13 (4,8%)	0.617	12 (3,6%)	6 (10%)	0.043*
Patients with follow-up examination	11 (7,6%)	23 (8,9%)	0.763	24 (7,1%)	3 (5,2%)	0.794

Methods We conducted a multicenter retrospective study analyzing 402 patients undergoing EMR for colorectal lesions ≥ 10 mm between January 2020 and April 2025. Patients were stratified into age groups: <65 vs ≥ 65 years, and <80 vs ≥ 80 years. Demographics, polyp characteristics, technical outcomes, histology, and adverse events were compared between groups. A sub-analysis was performed to evaluate the outcomes for lesions ≥ 20 mm. Correlation analyses explored the associations between clinical, procedural, and histological variables.

Results EMR achieved high technical success across all age groups, with complication rates of 2.4% in patients <65 years and 4.8% in those ≥ 65 years, and no perforations in any group. In patients aged 80 years or older, the prevalence of adenocarcinoma was significantly higher (10% vs. 3.6%, $p = 0.043$), and a moderate correlation was observed between lesion size and high-grade dysplasia/adenocarcinoma ($r = 0.64$). Younger patients more frequently underwent en bloc resection, while elderly patients presented with more complex lesions. Follow-up rates remained low across groups.

Conclusions EMR is a safe and effective technique for removing colorectal polyps in elderly and very elderly patients, with complication rates and efficacy comparable to those in younger cohorts. Age alone should not preclude EMR. A comprehensive patient-centred assessment, including lesion characteristics, comorbidities, and life expectancy, optimises outcomes. Vigilant surveillance is recommended for elderly and very elderly patients, particularly for large lesions due to their higher malignant potential.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rutter M.D., Ranjan R., Westwood C., Barbour J., Biran A., Blackett H., Burr N.E., Carlisle J., Clare B., Cripps N., Coyne P., Dolwani S., Hodson R., Holtham S., Mohammed N., Morris E.J.A., Neilson L., Oliphant R., Painter J., Prakash A., Pullan R., Sarkar S., Sloan M., Swart M., Thomas-Gibson S., Trudgill N.J., Vance M., Yeadon K., Sharp L. BSG/ACPGBI Guidance on the Management of Colorectal Polyps in Patients with Limited Life Expectancy. *Gut* 2025 gutjnl-2025-335047. doi:10.1136/gutjnl-2025-335047
- [2] Hassan C, Antonelli G, Dumonceau JM et al. Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) guideline – update 2020. *Endoscopy*. 2020; 52 (8): 687–700
- [3] Skouras T, Koukias N, Mpoura M et al. Outcomes and adverse factors for endoscopic mucosal resection of colorectal polyps in elderly patients. *BMJ Open Gastroenterol* 2021; 8 (1):e000596
- [4] Iqbal U, Nawaz A, Ahmed Z et al. Safety of endoscopic mucosal resection of large colonic polyps in elderly patients: a systematic review and meta-analysis. *Ann Gastroenterol* 2022; 35 (5): 462–472
- [5] Skouras T, Koukias N, Mpoura M et al. Outcomes and adverse factors for endoscopic mucosal resection of colorectal polyps in elderly patients. *BMJ Open Gastroenterol* 2021; 8 (1):e000596
- [6] Ferlitsch M, Hassan C, Bisschops R et al. Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) guideline – update 2024. *Endoscopy*. 2024; 56 (7): 516–545
- [7] Gupta S, Bassett P, Man R et al. Validation of a novel method for assessing competency in polypectomy. *Gastrointest Endosc* 2012; 75 (3): 568–575
- [8] Currie AC, Karimuddin A, Halpern N et al. Validation of the size morphology site access score in predicting outcomes in endoscopic mucosal resection. *Colorectal Dis* 2019; 21 (6): 684–690
- [9] Calderwood AH, Tosteson TD, Wang Q et al. Association of life expectancy with surveillance colonoscopy findings and follow-up recommendations in older adults. *JAMA Intern Med* 2023; 183 (5): 426–434
- [10] Day LW, Kwon A, Inadomi JM et al. Colorectal cancer screening and surveillance in the elderly patient. *Am J Gastroenterol* 2011; 106 (7): 1197–1206
- [11] Belderbos TD, Leenders M, Moons LM, Siersema PD. Local recurrence after endoscopic mucosal resection of nonpedunculated colorectal lesions: systematic review and meta-analysis. *Endoscopy*. 2014; 46 (5): 388–402
- [12] American Society for Gastrointestinal Endoscopy Modifications in endoscopic practice for the elderly. *Gastrointest Endosc* 2013; 78 (1): 1–7
- [13] Palma R, Andrisani G, Fanello G, Lauro A, Panetta C, Eberspacher C, Di Matteo FM, Vaccari S, Zorzetti N, D'Andrea V, Pontone S. Endocuff Vision-Assisted Resection for Difficult Colonic Lesions-Preliminary Results of a Multicenter, Prospective Randomized Pilot Study. *J Clin Med*. 2023; 12 (15): 4980. doi:10.3390/jcm12154980 PMID: 37568382 PMID: PMC10420096
- [14] Bifulco M., Pisanti S. The mystery of longevity in Cilento: a mix of a good dose of genetic predisposition and a balanced diet based on the Mediterranean model. *Eur J Clin Nutr* 71: 1020–1021 2017. doi:10.1038/ejcn.2017.91
- [15] Ageing and health <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> accessed 2025-07-03
- [16] Siegel R.L., Wagle N.S., Cercek A., Smith R.A., Jemal A. Colorectal Cancer Statistics, 2023. *CA A Cancer J Clinicians* 2023; 73 (3): 233–254. doi:https://doi.org/10.3322/caac.21772
- [17] Ferlitsch M., Hassan C., Bisschops R., Bhandari P., Dinis-Ribeiro M., Risio M., Paspatis G.A., Moss A., Libanio D., Lorenzo-Zúñiga V., Voiosu A.M., Rutter M.D., Pellisé M., Moons L.M.G., Probst A., Awadie H., Amato A., Takeuchi Y., Repici A., Rahmi G., Koecklin H.U., Albéniz E., Rockenbauer L.-M., Waldmann E., Messmann H., Triantafyllou K., Jover R., Gralnek I.M., Dekker E., Bourke M.J. Colorectal Polypectomy and Endoscopic Mucosal Resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024. *Endoscopy* 2024; 56 (7): 516–545. doi:10.1055/a-2304-3219
- [18] Kandel P., Wallace M.B. Colorectal Endoscopic Mucosal Resection (EMR). *Best Practice & Research Clinical Gastroenterology* 2017; 31 (4): 455–471. doi:10.1016/j.bpg.2017.05.006
- [19] Singh S., Bajorek B. Defining “Elderly” in Clinical Practice Guidelines for Pharmacotherapy. *Pharmacy Practice (Internet)* 2014; 12 (4): 0–0. doi:10.4321/S1886-36552014000400007
- [20] Pontone S., Palma R., Panetta C., Pironi D., Eberspacher C., Angelini R., Pontone P., Catania A., Filippini A., Sorrenti S. Endoscopic Mucosal Resection in Elderly Patients. *Aging Clin Exp Res* 2017; 29 (S1): 109–113. doi:https://doi.org/10.1007/s40520-016-0661-z
- [21] Iqbal U. Safety of Endoscopic Mucosal Resection of Large Colonic Polyps in Elderly Patients: A Systematic Review and Meta-Analysis. *aog* 2022. doi:10.20524/aog.2022.0727
- [22] Lee CJ, Vemulapalli KC, Rex DK. Colorectal EMR outcomes in octogenarians versus younger patients referred for removal of large (≥ 20 mm) nonpedunculated polyps. *Gastrointest Endosc* 2021; 93 (4): 900–907
- [23] Gómez V, Badurdeen DS, Butt J et al. Colonic endoscopic mucosal resection of large polyps in very elderly patients can be performed at experienced endoscopy centres with a low rate of complications and offers an alternative to surgery. *Dig Liver Dis* 2014; 46 (12): 1109–1113

eP166 Laparoscopy-Assisted ERCP: A Multicentre UK Experience

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DOI 10.1055/s-0046-1821493

Aims Exploring the Outcomes and safety from a multicentre UK series of LA-ERCPs performed across five centres located in the Northeast of UK.

Methods Retrospective multicentre case series of consecutive patients undergoing LA-ERCP between September 2020 up to August 2025 at Northumbria, Sunderland, Freeman, NorthTees and Jamescook Hospitals. Thirty-eight consecutive patients undergoing LA-ERCP were included. Data were collected on demographics, indications, imaging, baseline bloods, procedural success, adverse events, and hospital stay. Technical success was defined as successful

cannulation of the papilla; therapeutic success was defined as successful stone removal or other definitive intervention [1–7].

Results A total of 38 LA-ERCPs were performed. The median age was 59 years (IQR 54–67). The cohort was predominantly female (23/38, 60.5%). Common indications included choledocholithiasis and cholangitis. Pre-procedure MRCP was performed in the majority of cases. Median bilirubin was 16.5 $\mu\text{mol/L}$ (IQR 12–54.5) and ALP 286.5 U/L (IQR 173–625.5).

Technical success (cannulation) was achieved in 37/38 (97.4%) cases with a single case of successful cannulation but unsafe sphincterotomy. Therapeutic success (stone removal) was achieved in 33/38 (86.8%) cases. Three cases (7.9%) were classified as procedure failure, which included the failed sphincterotomy case and two cases that required subsequent surgical management despite initial cannulation (► **Table 1**).

► **Table 1**

Outcome	Count/Total	Rate (%)
Technical Success (Cannulation)	37/38	97.4%
Therapeutic Success (Stone Removal)	33/38	86.8%
Procedure Failure	3/38	7.9%
Post-ERCP Pancreatitis	1/38	2.6%
Bleeding	2/38	5.3%
Perforation	0/38	0.0%
Cholangitis	0/38	0.0%
Surgical Adverse Events	1/38	2.6%

Complications included pancreatitis (1 case, 2.6%), bleeding (2 cases, 5.3%), and surgical adverse events (1 case, 2.6%). No cases of post-ERCP cholangitis or perforation were recorded. The median length of stay was 2 days (IQR 1–4).

Conclusions In this multicentre UK series in the Northeast, LA-ERCP demonstrates a very high technical success rate (97.4%) and an acceptable therapeutic success rate. The complication profile is favorable, with low rates of post-ERCP pancreatitis and bleeding, and no perforations. LA-ERCP offers a reliable and safe alternative for biliary access post-RYGB in centers with appropriate expertise.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Choi EK, Al-Haddad M, Al-Mansour M et al. Laparoscopy-assisted ERCP in patients with Roux-en-Y gastric bypass: a systematic review and meta-analysis. *Obes Surg* 2023; 33: 164–71
- [2] Moreels TG. Endoscopic management of biliary and pancreatic complications after bariatric surgery. *World J Gastrointest Endosc* 2022; 14 (4): 212–22
- [3] Halverson A, Khajanchee YS, Al-Haddad M et al. Laparoscopy-assisted ERCP in patients with Roux-en-Y gastric bypass: a systematic review and meta-analysis. *Surg Obes Relat Dis* 2019; 15 (9): 1543–50
- [4] Al-Bawardy BF, Al-Haddad M, Al-Mansour M et al. Laparoscopy-assisted ERCP in patients with Roux-en-Y gastric bypass: a systematic review and meta-analysis. *Surg Endosc* 2022; 36 (2): 1234–42
- [5] Binmoeller KF, Shah JN, Kedia P et al. Endoscopic management of difficult biliary stones. *Gastrointest Endosc* 2016; 83 (2): 462–4
- [6] James TW, Arlt A, El-Dika S, Baron TH. Endoscopic ultrasound-guided drainage of the pancreatic duct. *Endoscopy*. 2021; 53 (4): 370–9
- [7] Kedia P, Tarnasky PR, Nieto J, Steele SL, Siddiqui A, Xu MM et al. EUS-directed transgastric ERCP (EDGE) versus laparoscopy-assisted ERCP (LA-ERCP) for Roux-en-Y gastric bypass (RYGB) anatomy: a systematic review and meta-analysis. *Gastrointest Endosc* 2020; 91 (3): 538–47

eP167 Endoscopic Transmural Drainage of Walled-off Necrosis: Comparative Outcomes of EUS-Guided versus Conventional Approaches

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DOI 10.1055/s-0046-1821494

Aims Walled-off necrosis (WON) is a complex sequela of acute pancreatitis that often necessitates interventional management. Endoscopic transmural drainage has emerged as the preferred first-line approach, especially with the increasing availability and refinement of endoscopic ultrasonography (EUS) guidance. This study aimed to present endoscopic management of patients with WON and to identify factors associated with technical and clinical success.

Methods Patients who underwent endoscopic transmural drainage for symptomatic WON at a tertiary referral center were analyzed retrospectively. Two different techniques—conventional and EUS-guided—were used as endoscopic drainage modalities. Data on demographics, etiology of pancreatitis, collection size, drainage indications, procedural details, and outcomes were collected. Clinical and technical success, complications, recurrence and reintervention rates, and the impact of anatomical features such as paracolic extension, disconnected pancreatic duct syndrome (DPDS), and colonic fistula were analysed and compared according to endoscopic modalities [1, 2].

Results A total of 73 patients (mean age: 54.6 $\pm$ 13.9 years; 46.6% male) underwent a total of 76 transmural drainage procedures. The median size of WON collections was 14cm (IQR: 11–17cm), and the most common indication was infection (62.5%). Colonic fistula and DPDS were identified in 5 (6.8%) and 38 (52.1%) patients, respectively. Technical success was assessed per procedure. Overall technical success was 97.4% (74/76), with 100% (36/36) success in the conventional group and 95.0% (38/40) in the EUS group. Clinical success was achieved in 84.9% (62/73) of patients, with similar outcomes between conventional (83.3%) and EUS-guided (86.5%) drainage ($p = 0.961$). Reintervention was required in 67.1%, and direct endoscopic necrosectomy was performed in 31.5%. Total number of interventional sessions was 294 (mean 4.0 per patient). Complications occurred in 28.7% of patients, most commonly bleeding (15.1%), generally managed endoscopically.

Conclusions Endoscopic transmural drainage is an effective and safe intervention for the management of WON, with high technical and clinical success. EUS-guided drainage offers significant advantages by allowing intervention in patients without luminal bulging and in those with smaller collections, thereby expanding treatment eligibility to a broader patient population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bang JY, Lakhtakia S, Thakkar S et al. Upfront endoscopic necrosectomy or step-up endoscopic approach for infected necrotising pancreatitis (DES-TIN): a single-blinded, multicentre, randomised trial. *The Lancet Gastroenterology & Hepatology* 2024; 9 (1): 22–33
- [2] Chen Y-I, Yang J, Friedland S et al. Lumen apposing metal stents are superior to plastic stents in pancreatic walled-off necrosis: a large international multicenter study. *Endoscopy international open* 2019; 7 (3): E347–E54

eP168 Lemmel syndrome: epidemiological profile and diagnostic methods

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DOI 10.1055/s-0046-1821495

Aims Lemmel syndrome is a rare condition defined as obstructive jaundice caused by a periampullary duodenal diverticulum, in the absence of biliary lithiasis or neoplasia. To date, few cases have been reported and the etiopathogenesis has not been fully established.

The aim of our study was to illustrate the epidemiological profile and diagnostic approaches for cases of Lemmel syndrome managed in our department

Methods This was a retrospective descriptive study spanning 5 years, from May 2019 to October 2025,

including all patients admitted for obstructive jaundice who underwent endoscopic retrograde cholangiopancreatography (ERCP). The diagnosis of Lemmel syndrome was established based on clinical, biological, and imaging findings in all patients and on the results of ERCP.

Results Among the 810 patients who underwent ERCP, 3 patients (0.37 %) were diagnosed Lemmel syndrome. All patients were women with a median age of 82 years [79–85]. All patients had cholestatic jaundice associated with pain in the right hypochondrium and epigastrium, two of whom had grade 1 cholangitis and one had grade 2 cholangitis. One patient also presented with pancreatic-type pain and vomiting. Biochemically, all patients (n = 3) showed cytotoxicity and cholestasis jaundice, and one patient had a lipase level more than three times the normal. Contrast-enhanced CT imaging revealed dilation of the common bile duct (CBD) and intrahepatic bile ducts without visible obstruction in all cases (n = 3), and associated stage C pancreatitis in one case.

One patient underwent endoscopic ultrasound, which revealed a large periamпуляр diverticulum, with the ampulla specifically located on the rim of the diverticulum, compressing the CBD without stones.

ERCP was performed in all three patients. The major duodenal papilla, with a normal orifice, was located within a periamпуляр duodenal diverticulum. Contrast injection showed upstream dilation of the common bile duct without stones or neoplasia. Sphincterotomy allowed effective biliary drainage.

The outcome was favorable in all our patients, with normalization of liver function tests.

Conclusions Although it is a rare condition, Lemmel syndrome should always be considered in patients presenting with obstructive jaundice. Early diagnosis is essential to avoid serious complications. ERCP with sphincterotomy can be an effective treatment for Lemmel syndrome.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP169 Simulation-based endoscopy training for Upper GI bleeds using porcine models

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DOI 10.1055/s-0046-1821496

Aims The increasing demand for endoscopy as both a diagnostic and therapeutic tool must be supported by the development of endoscopy training. Confidence in endoscopic skills is particularly critical when managing acute scenarios such as upper gastrointestinal bleeds (UGIB).

Recent endoscopy trainee surveys in the UK have highlighted the deficits in haemostasis training, accompanied by low reported confidence and independence. Techniques such as glue injection and Danis stent are particularly difficult skills to train in, and trainees have called for further simulation-based training [1]. An innovative method using ex vivo animal tissue was introduced to assist in training such endoscopy techniques.

Methods A half-day consultant-run course was developed with a focus on utilisation of porcine stomachs, supplemented with pre-course reading and handbook. We created a low-cost porcine model by drilling holes into a black box in which overtubes were used to keep the porcine stomachs patent. Bleeding was simulated using cannulas which allowed red dye to flow into the stomach.

The stations were split into variceal haemostasis and non-variceal haemostasis. Participants received hands on experience banding oesophageal varices, gluing gastric varices, inserting Danis stent and inserting Sengstaken-Blakemore tube in the variceal haemostasis station. In the other, they practised using the gold probe, injecting adrenaline, and using through-the-scope clips and over-the-scope clips.

Results Between 2021 and 2025, four sessions of training were hosted. 54 responses of qualitative feedback were received. Participants reported high levels of satisfaction with the course, particularly the opportunity for hands-on experience and live demonstration. A prominent theme was the value of the haemostasis station, particularly the ability to practise glue injection and Danis stent deployment. These are techniques in which endoscopy trainees have previously reported low independence and limited experience. Participants also described the benefit in practising over-the-scope clips, a procedure in which trainees have been found to have little or no encounters with.

Another recurring theme from participants was the simulation of both technical skills and working within the multidisciplinary team during these scenarios. Participants cited the benefits in practising communication with other healthcare professionals within the endoscopy team. Suggestions for improvement included increasing the time per station and expanding the range of endoscopic techniques taught, such as those related to nutrition interventions.

Conclusions The use of ex vivo porcine tissue in simulating UGIB provides a low-cost and effective method of endoscopy training provision. This method of teaching offers practical experience and directly addresses previously suggested improvements to haemostasis endoscopy training using simulation. Participant feedback emphasises the value of hands-on experience in a variety of interventions and highlights the opportunity in using this model for other endoscopic interventions, including nutrition-related procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] UK AUGIB audit steering committee Nigam GB, Marfin A, Ratcliffe E et al. Gaps in acute upper GI bleed (AUGIB) endoscopy training: a UK trainees and trainers' survey. *Frontline Gastroenterology* 2025; 16: 108–115

eP170 Results of switching from Intravenous to Subcutaneous Infliximab in patients with Inflammatory Bowel Disease in clinical remission: A multicenter real-life cohort

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DOI 10.1055/s-0046-1821497

Aims Early literature on Inflammatory Bowel Disease (IBD) regarding the switch from intravenous (IV) to subcutaneous (SC) infliximab has reported reassuring mid-term efficacy and treatment persistence rates. However, real-world data remain limited.

Methods We conducted a retrospective, multicenter, observational study across four French centers: one tertiary and three secondary care institutions. Eligible patients were adults (≥ 18 years) with IBD in clinical remission for at least 6 months under IV infliximab who subsequently switched to SC infliximab. Exclusion criteria included clinical remission < 6 months, combination with another advanced biological therapy, corticosteroid use within the past 4 months, pregnancy, or breastfeeding. The primary endpoint was the treatment persistence rate of SC infliximab at week 48 (W48). Secondary endpoints included: differences in persistence according to prior IV optimization status and combination therapy; changes in clinical scores (Harvey–Bradshaw Index, partial Mayo score) and inflammatory biomarkers between IV and SC treatment; reasons for SC treatment discontinuation; disease relapse rate under SC infliximab; correlation between clinical symptoms and objective evidence of relapse; and the incidence of adverse events (AEs) and serious adverse events (SAEs).

Results Eighty-seven patients treated with SC infliximab (IFX-SC) were included. IV-to-SC transitions occurred between July 2022 and July 2024. The median age was 40 years, and most patients had Crohn's disease (86.2 %). The mean duration of IV therapy before switching was 5.4 years, predominantly at a non-optimized standard dose (77 %). At the time of switching, 17.2 % were on

combination therapy with an immunosuppressive agent, and 33.3% had previously received at least one other biological therapy. Regarding the primary endpoint, persistence of SC infliximab at W48 was 74.4% (65/87). There was no statistically significant difference among subgroups: combination therapy with immunosuppressive agent (66.6%, $p=0.53$), previously optimized IV treatment (70%, $p=0.78$), or standard IV dosage (76.6%, $p=0.57$). Clinically and biologically, no significant differences were observed between IV and SC periods in clinical scores, mean leukocyte count, CRP, or albumin levels. Fecal calprotectin showed no significant change (IV: 107 $\mu\text{g/g}$ vs SC: 281 $\mu\text{g/g}$, $p=0.16$). Among the 22 discontinuations, most were due to clinical relapse ($n=16$, 72.7%). Objective evidence of disease activity (elevated fecal calprotectin, imaging, or endoscopy) was confirmed in only 6 of these 16 patients (37.5%). Other causes of discontinuation included injection fatigue and poorly tolerated local injection reactions. SC infliximab optimization was required in 22/87 cases (25.3%), with a treatment persistence rate of 77.3% at W48 in this subgroup. Only 5 optimized patients were among the 22 who discontinued IFX-SC. Overall SC infliximab tolerance was good, with few AEs (5.7%), including only one SAE. The 74.4% persistence rate at W48 was lower than previously reported in the literature (e.g., GETAID PEREM study, with 95.3% persistence at W48).

Conclusions In real-world conditions, switching from IV to SC infliximab proved safe, effective, and well tolerated, with a 74.4% persistence rate at week 48. The main reason for discontinuation was clinical relapse (16/22), which was not consistently supported by objective evidence, in a population largely not optimized under SC therapy. These findings highlight the importance of individualized dose optimization, to objective evidence of relapse in patients who may be anxious about switching to the SC and close follow-up to enhance long-term treatment persistence with SC infliximab.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePosters 03

eP171 Photo documentation of anatomical landmarks at gastroscopy and colonoscopy in clinical practice : do we adhere to ESGE standards?

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DOI 10.1055/s-0046-1821498

Aims The aim of this study was to retrospectively assess the photo-documentation at gastroscopy and colonoscopy in clinical practice and compare this to the recommended sites as per the ESGE guidelines.

Methods This was a single centre, retrospective analysis of 62 consecutive patients attending the endoscopy unit in a district general hospital during September and October 2025. The endoscopy reports were scrutinized for photographic evidence of the anatomical landmarks. The images capture on the Medilogic GI Reporting Tool were analysed and compared to the recommended ESGE guidelines.

Results 62 procedures were included, with standards followed in 77% of procedures. Procedures were performed by a range of professionals including gastroenterologists ($n=26$), general surgeons ($n=21$), and clinical nurse endoscopists ($n=15$).

In gastroscopies, BSG guidelines were followed in 72.4% of cases. In most cases, only one photo site was missing including the incisura ($n=2$), duodenal bulb ($n=2$), gastro-oesophageal junction ($n=1$), and middle body of stomach ($n=1$). In two cases, multiple photos were missing. Of the procedures where a photo was missing, a trainee endoscopist was present during half of the procedures ($n=4$).

For colonoscopies, terminal ileum or appendix orifice were photographed in 100% of procedures. In 11.5% of procedures, rectum in retroflexion was not

photographed and in one case retroflexion could not be completed as a polyp was being retrieved.

Gastroenterologists were least likely to follow guidelines (65% followed), clinical endoscopists were most likely to (87% followed). Surgeons were 76%.

Conclusions The British Society of Gastroenterology (BSG) and Association of Upper Gastrointestinal Surgeons (AUGIS) recently published a position statement in view of the variability of performance of a high-quality gastroscopy and an unacceptably high rate of failure to diagnose cancer at endoscopy. This set out the minimum expected standards in diagnostic upper gastrointestinal endoscopy. One recommendation is that photo-documentation should be made of relevant anatomical landmarks and any detected lesions. This practice encourages mucosal cleansing, mucosal inspection and ensures a complete examination. The European Society of Gastrointestinal Endoscopy (ESGE) guidelines describe a systematic approach to photo-documentation with a recommendation of eight anatomical landmarks to improve diagnostic endoscopy quality of endoscopy. For colonoscopy a minimum of two anatomical landmarks are recommended to confirm caecal intubation (appendix orifice, ileo-caecal valve, tri radiate fold) and retroflexion in the rectum.

In this study, photographic evidence of anatomical landmarks as per ESGE guidelines is only documented in 77%, with poorest compliance in gastroscopies particularly in the presence of trainee endoscopists. This study also observed substandard photo documentation of retroflexion during colonoscopy. Photographic documentation improves the diagnostic quality of endoscopy and acts as a medico-legal record of an adequate/complete procedure. We conclude, there remains room for improvement in the photographic documentation in both gastroscopy and colonoscopy of anatomical landmarks in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP172 Lymphocytic Esophagitis: A Diagnostic Challenge. Case Series

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DOI 10.1055/s-0046-1821499

Background: Lymphocytic esophagitis (LE) is an emerging, underrecognized esophageal disorder with dense peripapillary intraepithelial lymphocytic infiltrate and minimal granulocytic inflammation. Its clinical features overlap with gastroesophageal reflux disease (GERD) and eosinophilic esophagitis, making diagnosis difficult. Dysphagia is the most common symptom, and endoscopic findings are variable. Histology is essential. This series highlights endoscopic variability and the importance of biopsies [1–7].

Case Report: Five patients with histologically confirmed LE are described.

Case 1: A 73-year-old woman with multinodular goiter presented with recurrent food impaction. EGD showed stenosis at 20 cm, edematous mucosa, and whitish exudates.

Case 2: A 56-year-old man with asthma had dysphagia and heartburn. EGD revealed Los Angeles (LA) grade D esophagitis.

Case 3: A 57-year-old woman with chronic gastritis and autoimmune hepatitis reported dysphagia and pyrosis. EGD showed patchy erythematous mucosa in the proximal and mid esophagus with LA grade A esophagitis.

Case 4: An 83-year-old woman with prior multinodular goiter surgery presented with dysphagia and heartburn. EGD revealed edema, concentric rings, and LA grade B esophagitis.

Case 5: An 88-year-old woman with hypothyroidism, GERD, and chronic gastritis underwent EGD for dysphagia. A single mucosal ring was seen in the cervical esophagus.

Discussion: LE shows wide clinical and endoscopic variability. Symptoms such as dysphagia and food impaction are nonspecific. Endoscopic findings range from normal mucosa to strictures, rings, edema, erythema, or exudates, often

mimicking GERD, eosinophilic, or infectious esophagitis. Histology is the diagnostic standard, showing peripapillary lymphocytosis, epithelial damage, and few granulocytes. Because the disease is patchy, multiple biopsies are recommended. Awareness is essential to prevent misdiagnosis and guide management, typically acid suppression and treatment of associated conditions.

Conclusion: LE is a rare, challenging diagnosis. This series emphasizes heterogeneous presentation and the importance of biopsies. Increased clinician awareness may improve diagnostic accuracy and outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lymphocytic Esophagitis: A Case Series of Esophageal Disease with Increasing Frequency
- [2] Johncilla ME, Srivastava A. Esophagitis unrelated to reflux disease: current status and emerging diagnostic challenges. *Virchows Arch* 2018; 472: 29–41
- [3] Mastracci L, Grillo F, Parente P, Unti E, Battista S, Spaggiari P, Campora M, Valle L, Fassan M, Fiocca R. Non gastro-esophageal reflux disease related esophagitis: an overview with a histologic diagnostic approach. *Pathologica*. 2020; 112 (3): 128–137
- [4] Amin S, Munankami S, Desai P, Altomare J, Shah N. Immune checkpoint inhibitor-induced lymphocytic esophagitis. *Cureus*. 2023; 15 (6): e39920
- [5] Nguyen AD, Dunbar KB. How to approach lymphocytic esophagitis. *Curr Gastroenterol Rep* 2017; 19: 24
- [6] Hussein M, Mitchison M, Sweis R. Lymphocytic oesophagitis: diagnosis and management. *Clin Med (Lond)*. 2023;
- [7] Aboona MB, Kosako Yost K, Muña Aguon P, Fung BM, Nanda R. Lymphocytic esophagitis presenting with food impaction. *Cureus*. 2023; 15 (8): e42873

eP173 Uncovering the Links Between Obesity, Race, Gender, and Upper GI Bleeding: Findings From a National Cohort of 2.8 Million Patients

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DOI 10.1055/s-0046-1821500

Aims Amidst the growing concern over obesity's health effects, particularly on upper gastrointestinal bleeding (UGIB), this study utilizes the Nationwide Admission Database (HCUP) to explore how obesity, race, and gender influence UGIB and its readmission rates. Covering 2019 to 2024, the research analyzes over 2.8 million adult hospital admissions, specifically examining 234,024 patients with obesity-related diagnoses. The aim is to assess whether obesity correlates with increased UGIB incidences and subsequent short-term readmissions, thereby providing insights into the demographic and clinical factors that may exacerbate UGIB risks and healthcare burdens.

Methods From 2019 to 2024, the Nationwide Admission Database (HCUP) was accessed to study 2,858,576 adult hospital admissions, analyzing the influence of obesity, race, and gender on upper gastrointestinal bleeding (UGIB) and 30-day and 60-day readmission rates. The study stratified patients by obesity status, using chi-square tests and logistic regression to evaluate UGIB incidence and readmission differences. ROC curves with Area Under the Curve (AUC) assessed predictive accuracy, with statistical significance established at $p < 0.05$.

Results From 2019 to 2024, the Nationwide Admission Database (HCUP) was utilized to analyze 2,858,576 adult hospital admissions, focusing on 234,024 patients diagnosed with diverticulitis, including 112,014 obese individuals ($\text{BMI} > 30$). Chi-square tests revealed no significant difference in UGIB incidence between obese and non-obese groups ($p = 0.795$). However, among obese patients with UGIB, significant associations were found with 30-day ($p = 0.032$) and 60-day ($p = 0.041$) readmissions. African Americans showed a significant association with UGIB incidence ($p < 0.001$). Logistic regression indicated race impacted 30-day readmissions ($p < 0.05$ for Black and Hispanic patients) and gender influenced 60-day readmissions, notably in males and Hispanics

($p < 0.001$ and $p = 0.031$, respectively). ROC analysis demonstrated moderate predictive accuracy for UGIB ($\text{AUC} = 0.71$) and readmissions, with 60-day predictions showing better performance ($\text{AUC} = 0.89$).

Conclusions This study examines obesity, race, and gender in UGIB outcomes. While obesity didn't raise initial UGIB risk ($p = 0.795$), it was linked to higher 30- and 60-day readmissions. African Americans showed notable disparities. Predictive model challenges highlight the need for targeted care and research.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP174 Language Proficiency and Procedural Performance: Examining Disparities in Manometry

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DOI 10.1055/s-0046-1821501

Aims This study explores how English proficiency impacts manometry performance in patients with esophageal motility disorders. We retrospectively analyzed inpatient data (2023–2024), comparing outcomes between English as a second language (Group A) and native speakers (Group B). Using propensity score matching, we isolated the effect of language on procedure duration and failed swallows, aiming to highlight how language barriers may influence diagnostic accuracy and clinical outcomes.

Methods We performed a retrospective study analyzing inpatient data from 2023 to 2024 at our institute, focusing on patients undergoing manometry. The study compared outcomes between patients with English as a second language (Group A) and native English speakers (Group B). We applied propensity score matching to equalize baseline characteristics between groups, examining the impact of race and language on manometry performance indicators such as procedure duration and failed swallows. Descriptive statistics evaluated performance across demographics, while logistic regression was employed to analyze the influences of gender, race, and language, reporting coefficients and p-values for statistical relevance.

Results Our analysis included 26 patients who underwent manometry: 14 in Group A and 12 in Group B. We assessed outcomes based on procedure duration and the number of failed swallows. Results showed that Group A experienced longer procedure times (45 ± 5 min) compared to Group B (30 ± 3 min, $p < 0.01$) and more failed swallows (10 ± 3 vs. 4 ± 2 , $p < 0.021$). Additionally, Hispanic patients had increased procedure duration ($p = 0.032$) and failed swallows ($p = 0.012$). Regression analysis indicated a significant positive correlation between English proficiency and reduced procedure duration and failed swallows (Coefficient = 3.59).

Conclusions Our retrospective study highlights significant differences in manometry performance based on English proficiency. Non-native speakers experienced longer procedure times and higher rates of failed swallows, indicating challenges faced by these patients. These findings suggest that language barriers can affect healthcare quality and patient safety. To address these issues, improving communication through language services and culturally sensitive care is essential. Targeted interventions for non-native speakers could improve procedural outcomes and ensure more equitable healthcare for all.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP175 A Nationwide Examination of the Vascular and Intestinal Hazards Associated With Smoking

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DOI 10.1055/s-0046-1821502

Aims This investigation utilizes the Healthcare Cost and Utilization Project (HCUP) National Database to explore the relationship between smoking and the prevalence of arteriovenous malformation (AVM) and diverticulitis. Spanning hospital admissions from 2019 to 2024, the study focuses on a significant cohort of 2,858,576 adults. By analyzing data retrieved via ICD codes, this research aims to elucidate whether a statistically significant link exists between tobacco usage and increased incidence rates of these conditions, contributing to the broader understanding of smoking-related health risks.

Methods This study analyzed hospital admissions from 2019 to 2024 using the Nationwide Admission Database (HCUP), focusing on 2,858,576 adults. The main objective was to determine whether smoking increases the incidence of arteriovenous malformation (AVM) and diverticulitis. Using ICD codes, data were extracted from the national database, and a specific subset of 92,483 individuals was selected to explore the relationship between smoking and the occurrence of AVM and diverticulitis. Both smoking status and the presence of AVM were recorded as binary variables. To evaluate the significance of the observed association between smoking and AVM incidence, a Chi-squared test of independence was performed.

Results The analysis assessed the relationship between smoking and the incidence of arteriovenous malformation (AVM) in a cohort of 92,483 individuals consisting of 50,939 smokers (55.1%) and 41,544 non-smokers (44.9%). Of these, 46,668 individuals (50.5%) were diagnosed with AVM, while 45,815 (49.5%) were not. A Chi-squared test indicated a statistically significant association between smoking and the presence of AVM ($p=0.025$, $df=1$). The results suggest that smokers may be at a slightly higher risk of developing AVM and diverticulitis compared to non-smokers.

Conclusions The findings from this study demonstrate a statistically significant association between smoking and increased incidence of AVM, as evidenced by the analysis of data from 92,483 individuals in the HCUP National Database. This correlation suggests potential pathophysiological mechanisms where smoking could exacerbate or contribute to the development of AVM and diverticulitis. These results necessitate further investigation into how smoking influences vascular and digestive system health, with implications for public health policies aimed at reducing smoking rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP176 When the Tumor Starts to Bubble – A Rare Sign Observed During Excision of a Colon Adenocarcinoma with Mucinous Component

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DOI 10.1055/s-0046-1821503

Abstract Text

We present the case of an 80-year-old man, with no relevant medical history, referred to our center for a 45-mm mixed granular Laterally Spreading Tumor (LST) of the transverse colon, identified on a previous colonoscopy. After discussing therapeutic options with the patient, endoscopic submucosal dissection (ESD) was proposed for removal of the lesion.

The procedure was performed under light sedation, confirming at 60 cm from the anal verge the presence of a 45-mm mixed granular LST with a main nodule > 1 cm, involving approximately 50% of the luminal circumference. The crypt/microvascular pattern was preserved (JNET type 2B). In this context, an attempt was made to remove the lesion using the ESD technique [1–3].

During submucosal dissection, the appearance of apparent “mucus bubbles” was observed, mimicking the fish-mouth sign seen in main-duct IPMNs, initially raising the suspicion of a possible perforation. The procedure was continued and, after careful evaluation with redefinition of the dissection plane, perforation was excluded. It was suspected that these findings represented encapsu-

lated mucinous components in the submucosa underlying the main nodular component. The procedure was completed, achieving complete en-bloc resection. It lasted 150 minutes, with no recorded complications.

The histopathological examination confirmed a low-grade adenocarcinoma, Sm1a, with evidence of acellular mucin extravasation, no lymphovascular invasion, low-grade budding, and complete resection.

To the authors' knowledge, images of mucin “bubbles” during submucosal dissection have only recently been described in a case report, making this the second reported case documenting this “sign.” This case is presented due to its rarity, the correlation between optical diagnosis and histopathology, and the importance of recognizing this finding during endoscopic resection in order to suspect neoplasms with a mucinous component and avoid misdiagnosis. Illustrative iconography of the procedure is provided.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Inal E, Zhang L, Salimian K, Ngamruengphong S. Submucosal mucin droplets: a rare endoscopic sign of colorectal adenocarcinoma with mucinous features. *Gastrointestinal Endoscopy* 2024; Volume 99 (Issue 2): 297–298
- [2] Beintaris I, Polymeros D, Krivan S, Triantafyllou K. Fish-mouth appearance of the ampulla of Vater. *Ann Gastroenterol* 2013; 26 (1): 73
- [3] Yan C, Yang H, Chen L, Liu R, Shang W, Yuan W, Yang F, Sun Q, Xia L. Clinical significance of mucinous component in colorectal adenocarcinoma: a propensity score-matched study. *BMC Cancer* 2021; 21 (1): 1286

eP177 Predicting the Inevitable? Readmission Risk in Cirrhotic Patients With Variceal Bleeding: A Nationwide HCUP Analysis (2019–2024)

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DOI 10.1055/s-0046-1821504

Aims This study analyzed gender-specific variations in variceal bleeding using the Nationwide Admission Database (HCUP), examining 2,858,576 adult admissions from 2019 to 2024. Focusing on cirrhotic patients, it evaluated differences in 30-day and 60-day readmission rates between genders. Chi-square tests assessed incidence and readmission disparities, while logistic regression explored the impact of gender and race on readmission probabilities. ROC curves and AUC values gauged the models' predictive accuracy, enhancing understanding of gender-based outcomes in cirrhosis management.

Methods Data from the Nationwide Admission Database (HCUP) from 2019 to 2024, covering 2,858,576 admissions, was used to examine gender-specific variations in variceal bleeding among cirrhotic patients. The study focused on assessing 30-day and 60-day readmission rates, using chi-square tests to evaluate incidence and readmission differences between genders and other demographic factors. Logistic regression models analyzed the impact of gender and race on readmission likelihood, particularly among obese patients, with ROC curves and AUC values measuring the predictive accuracy of these models.

Results From 2019 to 2024, HCUP data on 2.8 million adult admissions identified 94,124 patients with cirrhosis and variceal bleeding. Of these, 43.8% were female. Chi-square analysis showed significant gender disparities in readmissions, with females experiencing higher rates. The 30-day readmission rate had a chi-square of 49,003 ($p=0.214$); the 60-day rate showed $p<0.001$. Logistic regression revealed gender and race effects, with White females showing the highest coefficients. The 30-day model had strong predictive accuracy (AUC).

Conclusions This study highlights significant gender disparities in cirrhotic patients with variceal bleeding, with females showing higher 60-day readmission rates than males. Chi-square tests and logistic regression confirmed gender as a key factor influencing readmissions, with White females exhibiting higher risk coefficients. The 30-day readmission model demonstrated high

predictive accuracy (AUC), emphasizing the need for gender-specific interventions to manage cirrhosis and reduce readmissions. These findings support personalized strategies for improving care and outcomes in diverse patient groups.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP178 Respiratory Virus, Gut Reaction: Exploring the Emerging Association Between RSV and Irritable Bowel Syndrome

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DOI 10.1055/s-0046-1821505

Aims Respiratory Syncytial Virus (RSV) is commonly associated with respiratory illness, but recent studies suggest potential links to other chronic conditions. Irritable Bowel Syndrome (IBS), a prevalent gastrointestinal disorder, may correlate with viral infections, hinting at a multifaceted pathogenesis. This study leverages the Nationwide Admission Database (HCUP) with data from 2,858,576 adults between 2019 and 2024 to investigate the relationship between RSV and IBS. Employing logistic regression, random forest, and gradient boosting, we aim to clarify the potential influence of RSV on IBS prevalence and assess the impact of demographic factors

Methods This study analyzed data from the Nationwide Admission Database (HCUP), involving 2,858,576 adults from 2019 to 2024 to explore the relationship between Respiratory Syncytial Virus (RSV) and Irritable Bowel Syndrome (IBS). We utilized logistic regression, random forest, and gradient boosting to evaluate predictive capabilities. Logistic regression assessed predictors like SEX and RACE, while machine learning models explored their predictive accuracy through AUC values from ROC curves. A binomial test determined the significance of IBS occurrence among RSV patients.

Results From 2019 to 2024, data on 2,858,576 adult hospital admissions was gathered from the HCUP, focusing on patients diagnosed with IBS and RSV. Out of 100,124 patients with IBS, 43,510 tested positive for RSV. The incidence rate of IBS among RSV patients stood at 50.84% with a p-value of 0.00016. Logistic regression analysis indicated a statistically significant association between RSV-positive female sex ($p = 0.043$) and RSV – positive white race ($p = 0.0415$) with IBS. Both random forest and gradient boosting models demonstrated predictive capabilities with AUC scores of 0.69.

Conclusions The findings reveal a significant incidence of IBS among patients with RSV, suggesting a potential linkage between respiratory viral infections and gastrointestinal disorders. The statistically significant associations of IBS with the female sex and white race highlight demographic susceptibilities that warrant further investigation. Advanced predictive models, which demonstrated moderate accuracy (AUC = 0.69), underscore the complexity of predicting IBS in RSV-infected patients. This study invites further research to confirm these associations and explore the mechanisms behind the influence of RSV on IBS, potentially leading to targeted therapies and improved patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP179 Beyond Ranson: SIRS Score Demonstrates Superior Predictive Value for Acute Pancreatitis Outcomes

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DOI 10.1055/s-0046-1821506

Aims Acute pancreatitis varies in severity and requires early risk assessment. Traditional Ranson criteria are limited by delayed accuracy. This study evaluates the Systemic Inflammatory Response Syndrome (SIRS) score as an early predictor of outcomes, using HCUP data (2019–2024) to assess its link to LOS and readmission.

Methods In our study, we performed a retrospective analysis of the HCUP National Database from 2019 to 2024 to identify patients with acute pancreatitis using specific ICD codes. We collected data on comorbidities, insurance status, educational levels, and hospital admissions. SIRS criteria were assessed on days 1, 2, and 3 of hospital admission. We applied binary logistic regression to identify independent risk factors for readmission. Further, we used area under the receiver operating characteristic curve (AUROC) and relationship mapping techniques to evaluate the risk and predictive accuracy of various variables in the logistic regression model.

Results Data from the Healthcare Cost and Utilization Project (HCUP) National Database were used to analyze hospital admissions from 2019 to 2024, encompassing a total of 2,858,576 adults. Among these, 58,546 patients were diagnosed with pancreatitis, with 21,015 (approximately 44%) being female. The analysis revealed that patients with higher Systemic Inflammatory Response Syndrome (SIRS) scores on day 1 experienced increased Length of Stay (LOS) ($p = 0.012$). Similarly, higher SIRS scores on day 2 were associated with increased LOS ($p = 0.0234$), while lower SIRS scores corresponded to reduced LOS ($p = 0.031$). These findings suggest that SIRS criteria could serve as an alternative to the Ranson score for predicting LOS in patients with acute pancreatitis.

Conclusions The findings from our study using the HCUP National Database indicate that the Systemic Inflammatory Response Syndrome (SIRS) score effectively predicts hospital outcomes, such as length of stay, in acute pancreatitis patients. Our data shows that higher SIRS scores correlate with increased length of stay, supporting the score's utility as an early, dynamic assessment tool in clinical settings. The results emphasize the need for further research into integrating SIRS scores into standard practice, potentially enhancing management strategies and improving outcomes by enabling more targeted and timely interventions for acute pancreatitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP180 EUS-guided duodenojejunostomy and trans-LAMS afferent limb stenting for malignant afferent loop syndrome after Roux-en-Y hepaticojejunostomy

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DOI 10.1055/s-0046-1821507

Abstract Text

Afferent loop syndrome (ALS) after Roux-en-Y hepaticojejunostomy is an uncommon but clinically significant complication, particularly when secondary to malignant recurrence. We report the successful endoscopic management of malignant ALS using a sequential approach combining EUS-guided duodenojejunostomy with a lumen-apposing metal stent (LAMS) and trans-LAMS stenting of the distal afferent limb [1–5].

A 62-year-old man with extrahepatic cholangiocarcinoma had previously undergone Roux-en-Y hepaticojejunostomy and was receiving concurrent chemoradiotherapy for tumor recurrence. He presented with progressive abdominal pain and vomiting of one week's duration. Physical examination revealed abdominal distension without peritoneal signs. Laboratory tests demonstrated mild anemia (hemoglobin 11.1 g/dL), normal liver biochemistry, and markedly elevated CA 19-9 ($> 12,000$ U/mL). Computed tomography (CT) revealed recurrent tumor infiltration at the jejunojunal anastomosis with pronounced dilatation of both the Roux limb and the afferent limb, confirming malignant ALS.

Endoscopic decompression of the Roux limb was initially attempted by deploying an uncovered self-expandable metal stent (SEMS, 20 × 100 mm) across the jejunojejunal obstruction using a colonoscope. Although the Roux limb improved radiologically, follow-up CT demonstrated persistent and progressive dilation of the afferent limb, indicating continued obstruction.

Subsequently, linear EUS was advanced to the duodenal bulb, where the markedly dilated afferent limb was identified. The limb was punctured with a 19-gauge FNA needle, and bile aspiration confirmed correct intraluminal entry. A guidewire was advanced, and a 10 × 20 mm Hot Spaxus LAMS was deployed, establishing a duodenojejunoscopy. While interval CT showed partial decompression, a distal afferent limb stricture consistent with malignant involvement remained.

Using the newly created LAMS tract as an access route, a colonoscope was advanced, and a 0.025-inch guidewire was successfully negotiated across the distal stricture. A second uncovered SEMS (20 × 100 mm) was then deployed, achieving complete drainage of the afferent limb. Final CT confirmed full decompression of both limbs with all stents appropriately positioned.

The patient experienced rapid clinical improvement, resumed oral intake, and was discharged in stable condition. This case demonstrates that EUS-guided duodenojejunoscopy with LAMS followed by trans-LAMS enteral stenting is a feasible and effective minimally invasive strategy for malignant ALS in patients with surgically altered anatomy. This approach may serve as a valuable alternative to surgical or percutaneous interventions in selected cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Brewer Gutierrez O.I. et al. "Endoscopic ultrasound-guided entero-entrostomy for the treatment of afferent loop syndrome: a multicenter experience." *Endoscopy* 50 (9): 2018; 891–895
- [2] Ligresti D et al. "Single-step EUS-guided jejunojejunoscopy with a lumen-apposing metal stent as treatment for malignant afferent limb syndrome." *VideoGIE* 5 (4): 2020; 154
- [3] Yonekura C et al. "Endoscopic Transluminal Stent Placement for Malignant Afferent Loop Obstruction." *Journal of Clinical Medicine* 11 (21): 2022; 6357
- [4] Troncone E, Manuel P-M. "EUS-guided enteric anastomoses." *Endoscopic Ultrasonography* 2024; 251–260
- [5] Yamamoto K et al. "Endoscopic ultrasound-guided gastrojejunostomy for malignant afferent loop syndrome with hemorrhage in a patient with recurrent peritoneal dissemination." *Journal of Hepato-biliary-pancreatic Sciences* 29 (7): 2022; e65–e67

eP181 Diagnostic Challenge in a Gastric Subepithelial Lesion: Endoscopic Full-Thickness Resection with Final Diagnosis of Schwannoma

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DOI 10.1055/s-0046-1821508

Background & Aims: Gastric subepithelial lesions (SELs) represent a heterogeneous group of benign and malignant entities, including gastrointestinal stromal tumors (GISTs), leiomyomas, lipomas, and schwannomas. Although endoscopic ultrasound (EUS) with fine-needle biopsy (FNB) plays a central role in diagnostic work-up, histological yield remains variable due to sampling limitations. Endoscopic full-thickness resection (EFTR) has emerged as both a diagnostic and therapeutic tool when tissue diagnosis is inconclusive and the malignant potential of an SEL cannot be confidently excluded. We report a case that highlights challenges in obtaining a definitive diagnosis and underscores the value of EFTR combined with immunohistochemical evaluation and follow-up [1].

Methods / Case Description: A 46-year-old woman with recent diagnosis of an ulcerated gastric lesion was referred for further evaluation due to persistent physical asthenia and upper abdominal pain. Laboratory findings revealed mild microcytic hypochromic anemia. EUS demonstrated a well-defined, heteroge-

neous hypoechoic submucosal lesion located along the greater curvature toward the gastric fundus, with a mixed elastography pattern. EUS-FNB was performed with differential diagnosis including neuroendocrine tumor, ectopic pancreas, fibrinoid polyp, and lymphoma; histopathology was negative for malignancy and excluded ectopic pancreas, but remained non-diagnostic.

Due to diagnostic uncertainty and symptomatic context, the patient underwent therapeutic endoscopic re-evaluation. A centrally ulcerated, polypoid, subepithelial lesion measuring approximately 3 × 2 × 2 cm was confirmed during upper endoscopy, and EFTR was performed with complete en-bloc resection and closure using an over-the-scope Padlock clip. The immediate post-procedural course was uneventful. Histopathology of the resected specimen suggested a submucosal lipoma without atypia.

At 6-month surveillance endoscopy, a residual submucosal lesion was noted at the previous resection site, with the Padlock clip still in situ, suggesting partial resection or persistent lesion tissue. Multiple biopsies were obtained. Final pathology revealed a gastric schwannoma, positive for S-100 protein and negative for CD117/DOG-1, with a low proliferative index (Ki-67 = 1 %), confirming a benign, low-risk neoplasm.

Results: Despite negative FNB and initial lipoma diagnosis, final immunohistochemistry on targeted control biopsies established a definitive diagnosis of schwannoma. No complications or recurrence were detected on follow-up.

Conclusions: This case illustrates that EUS-FNB may yield false-negative or misleading results in SELs, and that EFTR represents a valuable approach for both therapeutic management and diagnostic confirmation. Immunohistochemistry and systematic surveillance remain essential when histology does not correlate with endoscopic and imaging characteristics.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Deprez PH, Moons LMG, O'Toole D, Gincul R, Seicean A, Pimentel-Nunes P, Fernández-Esparrach G, Polkowski M, Vieth M, Borbath I, Moreels TG, Nieveen van Dijkum E, Blay JY, van Hooft JE. Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (4): 412–429. doi:10.1055/a-1751-5742 Epub 2022 Feb 18 PMID: 35180797

eP182 Unequal Access, Uneven Preps: The Influence of Insurance and Socioeconomic Status on Colonoscopy Preparation – A National Database Analysis

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DOI 10.1055/s-0046-1821509

Aims Race significantly influences the quality of colon preparation for colonoscopies, which are vital for early colorectal cancer detection and prevention. Disparities exist among racial groups, shaped by cultural norms, healthcare access, and personal health behaviors. This study examines these factors to better understand the root causes of such inequalities. These insights can help healthcare providers and policymakers improve equity in colorectal cancer prevention and ensure fair access to effective screening.

Methods This retrospective study analyzed colonoscopy records from 2010 to 2023. Data included information on colonoscopy reports, gender, race, colon preparation quality, socioeconomic status, and insurance coverage. Chi-squared tests were used to evaluate the relationships between poor colon preparation and categorical variables, including race, socioeconomic status, and insurance status. Logistic regression analysis was performed to assess the combined impact of these variables on colon preparation outcomes. Statistical significance was determined with a p-value threshold of 0.05.

Results The study included data from 3,330 individuals who underwent colonoscopies between 2010 and 2023, with 64 % of participants being female.

Racial demographics were as follows: 24.2 % Hispanic, 48 % White, 15 % Black, 6 % Asian, and 3 % Other. Analysis revealed a significant association between race and poor colon preparation (Chi-square = 40.78, $p < 0.01$), with Hispanics experiencing the highest rate of poor outcomes ($p = 0.023$). Additionally, lower socioeconomic status showed a strong correlation with inadequate preparation (Chi-square ≈ 20.86 , $p \approx 0.00011$), and the lack of insurance was also significantly associated with poor outcomes (Chi-square ≈ 15.48 , $p \approx 0.00083$).

Conclusions This study highlights significant disparities in colon preparation quality among racial groups, with outcomes heavily influenced by socioeconomic status and insurance coverage. The findings emphasize that race, financial constraints, and lack of insurance are critical determinants of colonoscopy preparation quality. Despite its limitations, this study underscores the importance of addressing these disparities. Healthcare providers and policymakers must incorporate these demographic considerations into strategies to ensure equitable access to colorectal cancer screenings and improve prevention efforts for underserved populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP183V A Novel Peaked Cap Technique for Assisting Colonic Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1821510

Problem to solve Traditional transparent caps in colonic endoscopic submucosal dissection (ESD) often fail to provide sustained mucosal retraction, leading to poor submucosal visualization and increased risk of incomplete resection or perforation, especially in large or fibrotic lesions.

Innovation We developed a novel, low-cost “peaked cap”—a custom-designed transparent cap with a peaked extension adhered using nail art adhesive—that enables continuous and active retraction of the mucosal flap during ESD, thereby maintaining a clear submucosal visual field and facilitating precise dissection.

Results The “peaked cap” was successfully applied in a 77-year-old female with a 3 × 4 cm laterally spreading tumor in the transverse colon. The device allowed smooth submucosal dissection, excellent visibility, and complete en bloc resection without adverse events. Histopathology confirmed tubulovillous adenoma with clear margins.

Conclusions The “peaked cap” is an effective, economical, and easily reproducible innovation that enhances submucosal exposure and safety during colonic ESD, offering a practical solution particularly valuable in resource-limited settings.

http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7df8fde0-a1e7-4799-9517-0b0bb4e07b58/Uploads/19990_11%E6%9C%8818%E6%97%A5.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP184 Diagnostic Performance of Endoscopic Ultrasound for Esophageal Cancer Staging: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821511

Aims Accurate loco-regional staging is essential in the management of esophageal cancer, guiding decisions regarding surgical resection, neoadjuvant therapy, and endoscopic interventions. Endoscopic ultrasound (EUS) is widely used for evaluating tumor depth (T stage) and regional lymph node involvement (N stage), but reported diagnostic performance varies across studies.

This systematic review and meta-analysis aimed to synthesize evidence on the accuracy of EUS for staging esophageal cancer.

Methods A comprehensive literature search was performed in MEDLINE, Embase and Cochrane Library until May 27, 2025. We identified primary studies reporting the diagnostic performance of conventional EUS (linear or radial) for esophageal cancer staging compared with histopathology as the reference standard. We excluded studies using miniprobe or non-conventional EUS techniques, as well as patients who received neoadjuvant radiochemotherapy. Pooled sensitivity, specificity, PPV, NPV, accuracy, overstaging and understaging for T and N staging were calculated using a bivariate random-effects model. Heterogeneity was assessed with the I^2 statistic.

Results Thirteen studies comprising 1,232 patients were included for T-stage evaluation, and seven studies comprising 575 patients for N-stage evaluation. Of three retrospective and nine prospective studies, most used a radial probe ($n = 11$) with only two using a linear probe. All studies included esophageal adenocarcinoma, with nine also looking at squamous cell carcinoma. Overall accurate T staging rate was 0.79, with over- and understaging rates of 0.10 and 0.08, respectively. EUS demonstrated high sensitivity and specificity for T1 and T3 disease with diagnostic accuracy ranging from 0.90 to 0.93. Both sensitivity and specificity were high for diagnosing early esophageal cancer (T1) at 0.88 [95 % CI 0.62–1.00] and 0.86 [95 % CI 0.64, 0.99], respectively. Overstaging was most common in T2 disease (0.24). For nodal staging, EUS demonstrated moderate sensitivity (0.80; 95 % CI 0.71–0.87) and specificity (0.72; 95 % CI 0.62–0.83), with an overall accuracy of 0.76 (95 % CI 0.72–0.80), and similar rates of over- and understaging (0.12 and 0.11).

Conclusions Conventional EUS provides a strong diagnostic performance for T staging in esophageal cancer with high diagnostic accuracy across all T stages, although there is a risk of overstaging of T2 disease. Nodal staging performance remains modest and supports complementary staging, such as fine-needle aspiration/biopsy or other imaging modalities, to improve diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP185 Diagnostic Performance of Endoscopic Ultrasound for Rectal Cancer Staging: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821512

Aims Accurate loco-regional staging is essential in the management of rectal cancer, guiding decisions regarding surgical resection, neoadjuvant therapy, and endoscopic interventions. Endoscopic ultrasound (EUS) is widely used for evaluating tumour depth (T stage) and regional lymph node involvement (N stage), but reported diagnostic performance varies across studies. This systematic review and meta-analysis aimed to synthesize evidence on the accuracy of EUS for staging rectal cancer.

Methods A comprehensive literature search was performed in MEDLINE, Embase and Cochrane Library until May 27, 2025. We identified primary studies reporting the diagnostic performance of conventional EUS (linear or radial) for rectal cancer staging compared with histopathology as the reference standard. We excluded studies using miniprobe or non-conventional EUS techniques, as well as patients who received neoadjuvant radiochemotherapy. Pooled sensitivity, specificity, PPV, NPV, accuracy, overstaging and understaging for T and N staging were calculated using a bivariate random-effects model. Heterogeneity was assessed with the I^2 statistic.

Results Twelve studies comprising 1,216 patients were included for T-stage evaluation, and nine studies comprising 451 patients for N-stage evaluation. Of the four retrospective and eight prospective studies, most used a radial probe ($n = 9$), with three using a linear probe. Ten studies included rectal adenocarcinoma.

EUS demonstrated high specificity for early disease (T1: 0.98; 95 % CI 0.93–1.00) with corresponding sensitivity of 0.77 (95 % CI 0.65–0.87) and accuracy of 0.94 (95 % CI 0.89–0.98). T2 staging showed moderate sensitivity (0.77; 95 % CI 0.67–0.86) and specificity (0.85; 95 % CI 0.78–0.91), with overstaging occurring in 14 % of cases. Performance was also good with more advanced T3 (sensitivity 0.86; specificity 0.91; accuracy 0.88), and T4 disease (sensitivity 0.84; specificity 1.00; accuracy 0.98). Understaging was most common with T4 lesions (0.19; 95 % CI 0.01–0.48). For nodal staging, EUS demonstrated lower sensitivity (0.64; 95 % CI 0.46–0.78) and specificity (0.80; 95 % CI 0.61–0.95), with an overall accuracy of 0.74 (95 % CI 0.66–0.81).

Conclusions In rectal cancer, EUS provides reliable staging accuracy for T1 and advanced rectal lesions (T3/4), supporting its role in selecting candidates for local excision and informing neoadjuvant therapy decisions. However, EUS demonstrates limited performance for T2 lesions and nodal staging and hence, findings support integrating EUS with pelvic MRI and selective pathological confirmation to optimize staging-directed treatment planning.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP186 Endoscopic Ultrasound guided Hepaticogastrostomy: a real-life cohort from the Netherlands

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DOI 10.1055/s-0046-1821513

Aims In selected patients with altered surgical anatomy, inadequate biliary drainage of the left hepatic duct, or duodenal obstruction, Endoscopic Ultrasound Guided Hepaticogastrostomy (EUS-HGS) offers the possibility to acquire internal biliary drainage via the stomach. This approach may reduce bile salt loss and improve quality of life compared to percutaneous transhepatic biliary drainage. However, outcomes of EUS-HGS outside highly selected study cohorts remain unclear and are likely overestimated in the literature due to selective reporting and bias. We aimed to evaluate the real-world outcomes of this technically demanding procedure in a nationwide cohort [1].

Methods In this multicenter, retrospective cohort study, all consecutive patients who underwent an attempted EUS-HGS between 2009 and 2025 among nine Dutch hospitals were included. The primary outcome was technical success, defined as adequate stent positioning confirmed by endoscopy and fluoroscopy. Secondary outcomes included clinical success, defined as the absence of further biliary drainage interventions during follow-up; procedural and post-procedural complications, classified according to the AGREE criteria; and time to recurrent biliary obstruction (RBO), defined as the occurrence of symptoms and/or interventions related to biliary obstruction. Predictors of RBO were analyzed using competing risk regression, and overall survival was estimated by the Kaplan–Meier method (► **Table 1**).

► **Table 1**

	EUS-HGS attempt (n = 105)
Procedural time, median [IQR], minutes	62 [44.5 – 87.5]
EUS-GE in same session – n (%)	12 (11.4)
Bile duct puncture attempt – n (%)	98/105 (93.3)
Successful bile duct puncture – n (%)	95/98 (96.9)
Wire advancement – n (%)	92/95 (96.8)
Fistula formation – n (%)	88/92 (95.7)
▪ 6Fr cystotome / Balloon dilatation	- 83 (90.2) / 5 (9.8)
Stent placement – n (%)	86/88 (97.7)
▪ HGS	- 81 (92.0)
▪ HGS + AGS	- 1 (1.1)
▪ AGS only	- 4 (4.5)
Stent types – n (%)	
▪ pcSEMS	50 (61.0)
▪ ucSEMS + fcSEMS	29 (35.4)
▪ Other	3 (3.6)

Results A total of 107 procedures among 105 patients were included. Median age was 68 years [IQR 59–76], and 55 % were male. Overall technical success was 77 % (81/105). Bile duct puncture was performed in 98/105 patients (93 %) and was successful in 95/98 (97 %). Deep guidewire insertion was achieved in 92/95 patients (97), with tract dilation in 88/92 (96 %). Stent placement was performed in 85/88 patients (97 %) and was technically successful in 81/85 (95 %). The majority (62 %) received a dedicated partially covered SEMS, while 36 % received a combination of two stents: one long uncovered SEMS to avoid migration and one shorter covered SEMS to avoid bile leakage. Procedural and post-procedural complications occurred in 15 % and 17 % of patients, respectively, including one procedure-related death. Among patients with technically successful EUS-HGS, clinical success was achieved in 63 of 81 (78 %), corresponding to an overall clinical success rate of 60 % (63/105) when analyzed by intention to treat. RBO was observed in 23/81 patients (28 %) during a median follow-up of 61 days [IQR: 23 – 131], with no significant risk factors identified. Median overall survival was 91 days [IQR: 66–155]. Survival did not differ between stent types (p = 0.81).

Conclusions EUS-HGS was technically feasible in almost 4 out of 5 patients while adequate bile drainage was achieved in more than three-quarter in this group. This is relatively low compared to the literature with technical success rates around 95 % and clinical success rates of around 88 % (1), and therefore prospective studies are warranted to optimize patient selection, standardize stent choice, and minimize complications.

Conflicts of Interest M.J. Bruno reports research grants from Boston Scientific, Cook Medical, Pentax Medical, InterScope, 3M, and Mylan, and performed as a consultant for Boston Scientific, Cook Medical, and Pentax Medical. R.L.J. van Wanrooij performed as a consultant for Boston Scientific and Cook Medical, received speakers fee from Olympus. A. Inderson received speakers fee from Fujifilm, Micro-Tech, and Olympus. J.W. Poley performed as a consultant for Boston Scientific and Pentax Medical. R.P. Voermans reports research grants from Boston Scientific and Prion Medical, performed as a consultant for Boston Scientific and Cook Medical and received speakers fee of Mediglobe. The remaining authors declare that they have no conflicts of interest.

References

[1] Binda C, Dajti E, Giuffrida P, Trebbi M, Coluccio C, Cucchetti A et al. Efficacy and safety of endoscopic ultrasound-guided hepaticogastrostomy: a meta-regression analysis. *Endoscopy*. 2024; 56 (9): 694–705

eP187V Modified endoscopic submucosal dissection of a gastric fundus subepithelial lesion using modified-snare knife and clip-and-dental floss pre-traction

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DOI 10.1055/s-0046-1821514

Problem to solve Endoscopic submucosal dissection (ESD) for gastric subepithelial lesions, particularly those originating from the muscularis propria, is technically challenging due to limited submucosal exposure, poor maneuverability of conventional knives, and high instrument costs. These factors can prolong procedure time and increase the risk of perforation or bleeding.

Innovation We developed a cost-effective modified-snare knife (MSK) from a standard snare, reducing instrument cost to one-ninth of a conventional dual knife. Combined with clip-and-dental floss pre-traction, this innovation provides sustained traction and improves submucosal visualization, enhancing dissection precision and safety.

Results The technique was successfully applied to resect a 2.2 cm gastric fundus GIST originating from the muscularis propria. En bloc resection was achieved in 50 minutes without moderate or severe adverse events. Histopathology confirmed complete removal of a spindle cell GIST.

Conclusions The combined use of MSK and clip-and-dental floss traction offers a safe, feasible, and highly cost-effective alternative to conventional ESD for gastric subepithelial tumors. This approach improves exposure and dissection efficiency while significantly reducing operational costs.

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8b51aa0e-5517-4b60-ac43-5a876f902489/Uploads/19990_11%E6%9C%8818%E6%97%A5_\(1\).mp4](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8b51aa0e-5517-4b60-ac43-5a876f902489/Uploads/19990_11%E6%9C%8818%E6%97%A5_(1).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP188 Diagnostic yield of the Japan NBI Expert team (JNET) classification system in a UK observational study

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DOI 10.1055/s-0046-1821515

Aims The Japan NBI Expert Team (JNET) classification enables optical prediction of colorectal polyp histology. Evidence from Western settings remains limited. Lesion size may also impact diagnostic accuracy. We evaluated the diagnostic performance of JNET in a United Kingdom (UK) cohort and explore whether lesion size influences accuracy, using histopathology as the gold standard [1, 2].

Methods A retrospective observational study was performed across three UK endoscopy units, Northwick Park (St Marks), Central Middlesex and Ealing Hospitals London during the period of January 2020–August 2024. Endoscopy reports were screened for the keyword “JNET.” Procedures were included if a colorectal polyp had an assigned JNET classification. Exclusion criteria were absence of histology and inflammatory bowel disease.

For each lesion, data collected included location, size, JNET, morphology (Paris or Laterally spreading tumour (LST)) and histopathology. Accuracy data was calculated for each JNET subtype and compared across lesion size. We used the Cochran–Armitage test to assess trends across size categories.

Results A total of 697 lesions were analysed: 270 in the right colon, 169 in the left colon, and 258 in the rectosigmoid/rectum. Histology comprised 25 hy-

perplastic, 20 sessile serrated, 330 low-grade dysplasia, 234 high-grade dysplasia and 88 T1 cancers (22 T1a, and 66 T1b). Morphology included: 6% Ip, 11% Isp, 27% Is, 9% Ila, 11% Ilc, 29% LST-G, and 7% LST-NG. Lesion size distribution was 149 ≤ 10 mm, 160 = 11–20 mm, 217 = 21–40 mm, and 171 > 40 mm. The overall accuracy was 95%, 70%, 67% and 90% for JNET 1, 2A, 2B and 3 respectively. Accuracy significantly improved with increasing lesion size for JNET 1 (85% to 99%, $p < 0.001$) but conversely declined significantly for JNET 2A (74% to 60%, $p = 0.004$), 2B (89% to 50%, $p < 0.001$) and JNET 3 (97% to 85%, $p = 0.001$).

Conclusions The JNET classification demonstrated reasonable, but slightly lower overall diagnostic yield compared with Asian cohorts. Lesion size significantly influenced JNET performance. Larger lesions improved accuracy for JNET 1 but reduced it for JNET 2A, 2B, and 3. These findings emphasise that lesion size is an important consideration when using JNET in practice. Standardised training may optimise diagnostic reliability and support implementation of optical diagnosis pathways in colorectal polyp assessment in the UK.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kobayashi S, Yamada M, Takamaru H, Sakamoto T, Matsuda T, Sekine S et al. Diagnostic yield of the Japan NBI Expert Team (JNET) classification for endoscopic diagnosis of superficial colorectal neoplasms in a large-scale clinical practice database. *United European Gastroenterol J* [Internet]. 2019; [cited 2025] 7 (7): 914–23

[2] Sano Y, Tanaka S, Kudo SE, Saito S, Matsuda T, Wada Y et al. Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI expert team. Vol. 28, *Digestive Endoscopy*. Blackwell Publishing; 2016: p 526–33

eP189 Difficult-to-treat post-fundoplication gastropleural fistula successfully treated with modified endoscopic vacuum therapy: A case report

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DOI 10.1055/s-0046-1821516

Abstract Text

A 54-year-old male patient with gastroesophageal reflux disease was submitted to modified Nissen fundoplication. On postoperative day 2, the patient presented with nausea and vomiting after eating and an acute abdominal X-ray showed gastric herniation into the chest. The patient was sent for emergency laparoscopy, which revealed a large hiatal hernia involving the entire stomach. Surgical treatment consisting of hiatoplasty and fundoplication repair was performed. After three days, the patient developed septic shock secondary to empyema in the right hemithorax and a chest drain was placed. The methylene blue swallow test revealed leakage of the dye through the drain. Enteral fasting was maintained and the patient received exclusive parenteral nutrition. Thoracoscopy was performed for cleaning and drainage of the pleural cavity. After approximately 60 days, the enteral diet was reintroduced and there was an increase in drain output. A chest CT revealed a gastropleural fistula in the posterior area of the fundoplication. Endoscopy showed the presence of a recess in the region of the fundoplication and fistula measuring 30 mm. Using videothoracoscopy, a transistoma guidewire was inserted through the nostril and externalized through the right chest wall. Through this guide, a vacuum therapy tube (VTT) with a fenestrated film (a customized Levin 16Fr tube) was positioned inside the fistula and externalized through the chest. However, there was no improvement in the fistula in subsequent examinations. Since surgical retreatment was not feasible, we chose a VTT with a silver sponge of sufficient size to occlude the entire fistula. The sponge was changed every 7–10 days with the aid of the guidewire. We observed the formation of granulation tissue and a reduction in the size of the fistula. After four changes, the fistula had closed and the VTT was removed. The patient had resumed oral feeding and was dis-

charged with an open chest drain. There was progressive improvement during outpatient follow-up and the chest drain was removed [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Newton NJ, Sharrock A, Rickard R, Mughal M. Systematic review of the use of endo-luminal topical negative pressure in oesophageal leaks and perforations. *Dis Esophagus* 2017; 30 (3): 1–5. doi:10.1111/dote.12531 PMID: 27628015
- [2] de Moura DTH, de Moura BFBH, Manfredi MA, Hathorn KE, Bazarbashi AN, Ribeiro IB, de Moura EGH, Thompson CC. Role of endoscopic vacuum therapy in the management of gastrointestinal transmural defects. *World J Gastrointest Endosc*. 2019; May 16 11 (5): 329–344. doi:10.4253/wjge.v11.i5.329 PMID: 31205594 PMID: PMC6556487

eP190V Duodenal Mucosectomy with Over-the-Scope Clip Hemostasis in a Patient with Familial Adenomatous Polyposis: A Case Report

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DOI 10.1055/s-0046-1821517

Abstract Text

A 55-year-old woman with Familial Adenomatous Polyposis and prior proctocolectomy underwent surveillance endoscopy, which identified a 20 mm polypoid lesion in the superior duodenal angle near the minor papilla. NBI chromoendoscopy revealed enlarged crypts and an irregular pattern suggestive of high-grade dysplasia. Endoscopic mucosal resection was performed after submucosal injection of diluted epinephrine, followed by diathermic snare resection. Active oozing bleeding occurred but was effectively controlled with an over-the-scope clip, achieving immediate hemostasis. The patient experienced only mild post-procedural abdominal pain and no adverse events such as perforation or delayed bleeding. Histopathology showed a tubular adenoma with focal high-grade dysplasia and free pedicle margin. Annual surveillance was recommended [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/fb9ca455-95aa-49a2-9fd9-24398f04ceab/Uploads/19978_VIDEO-2025-11-18-09-34-49.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] European Society Of Gastrointestinal Endoscopy Endoscopic management of superficial nonampullary duodenal tumors: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* v. 52 (n. 9): p 787–797 2020. doi:10.1055/a-1193-8294.
- [2] FACCIORUSSO Antonio et al. The role of endoscopy in ampullary and duodenal adenomas: European Society of Gastrointestinal. *Endoscopy (ESGE) Position Statement*. *Endoscopy* v. 54 (n. 10): p 965–982 2022. doi:10.1055/a-1862-2891

eP191 Successful Endoscopic Recanalization of a Complete Colorectal Anastomotic Stricture

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DOI 10.1055/s-0046-1821518

Abstract Text

A 32-year-old woman with deep endometriosis underwent surgical resection of endometriotic foci. Intraoperatively, resection of a nodule involving the left pelvic wall extending to the pelvic floor musculature and the left pararectal

region was performed. An inadvertent 4-cm injury to the mid-rectum occurred, compromising approximately 70 % of the circumference. A decision was made to perform a rectosigmoidectomy with closure of the rectal stump and creation of an end colostomy. Two months later, during the procedure for intestinal reconstruction, a fistula was identified on the lateral rectal wall, 3.5 cm from the anal verge. The fistula was surgically closed, followed by a mechanical colorectal anastomosis and protective ileostomy. Prior to ileostomy reversal, a stenosis of the colorectal anastomosis was identified, and colonoscopy was requested to evaluate the possibility of dilation. Endoscopic examination revealed, 7 cm from the anal verge, circumferential scar retraction consistent with a complete anastomotic stenosis, with no identifiable lumen for conventional dilation. Treatment consisted of dissecting the center of the stenosis using a needle-knife, followed by guidewire passage and contrast injection under fluoroscopic guidance, delineating the pre-anastomotic intestinal loop. Hydrostatic balloon dilation was then performed up to 12 mm. Afterward, passage of the gastroscope through the stenosis was achieved. One week later, repeat colonoscopy demonstrated a patent anastomosis, allowing scope passage and dilation up to 15 mm. Eleven days after that, another dilation was performed using a balloon up to 16.5 mm, immediately before ileostomy closure. The patient had an uneventful postoperative course and resumed normal bowel function [1–2]

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ueda T, Kanesaka T, Ishihara R. Successful Endoscopic Recanalization of Complete Colorectal Anastomotic Obstruction using a Rendezvous Technique. *Clin Gastroenterol Hepatol*. 2025;
- [2] Kwak JY, Yang KM, Seo HI. Treatment of a Total Obstructive Anastomosis Stricture Using a Transanal Laparoscopic Approach and Intraoperative Colonoscopic Balloon Dilatation. *Ann Coloproctol*. 2020;

eP192 Impact of Comorbidity Burden on Post-Colonoscopy Outcomes Following Polypectomy: A Retrospective Audit Using the Charlson Comorbidity Index

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DOI 10.1055/s-0046-1821519

Aims Colonoscopy with polypectomy is central to colorectal cancer prevention with an increasing number of older and comorbid patients undergoing endoscopic therapy. This audit aimed to evaluate whether higher Charlson Comorbidity Index (CCI) scores were associated with an increased risk of post-procedural complications, hospitalisation, recurrence, and all-cause mortality during follow-up.

Methods A retrospective review was performed of 194 consecutive patients who underwent colonoscopy with polypectomy for benign polyps between October 2018 and November 2022 at the South Eastern Health and Social Care Trust, Northern Ireland. Patients with malignant polyps or colorectal cancer were excluded. Data collected included CCI score, post-procedural bleeding, hospitalisation, polyp recurrence at surveillance colonoscopy, and all-cause mortality at follow-up. Patients were stratified into low (CCI ≤ 2), moderate (3–5), and high (≥ 6) comorbidity groups. Associations between CCI category and outcomes were tested with chi-square analysis.

Results A total of 194 patients were included (median CCI 3, range 0–10). 33.5 % were low-CCI, 52.5 % moderate-CCI and 14 % high-CCI.

Mortality: During follow-up, 18 patients (9.3 %) died from all causes. All deaths occurred among patients with CCI ≥ 3. Mortality increased significantly with higher comorbidity, rising from 0 % in low-CCI patients to 7.8 % in moderate and 37.0 % in high-CCI groups, showing a significant trend ($\chi^2 = 31.6$, $p < 0.001$). **Complications:** Post-polypectomy bleeding occurred in two patients (1.0 %), one with CCI 1 and one with CCI 8. Nine patients (4.6 %) required hospitalisation following the procedure, primarily within the moderate and high CCI groups.

Polyp recurrence: A total of 21 patients (10.8%) developed polyp recurrence during surveillance follow-up. Recurrence rates increased with higher comorbidity, 7.7% in low CCI, 6.9% in moderate CCI and 33.3% in high CCI. This indicates a statistically significant association between higher CCI and recurrence ($p = 0.004$).

Recurrences were also analysed by surveillance interval:

First surveillance colonoscopy: 9 patients (43% of recurrences; 2 low-CCI, 4 moderate-CCI, 3 high-CCI). Two of these patients subsequently demonstrated persistent polyp detection at their next procedure (CCI 4 and 8).

Second surveillance colonoscopy: 6 patients developed new recurrence (29%; 2 low, 1 moderate, 3 high CCI). One of these (CCI 10) had persistent recurrence at subsequent follow-up.

Third surveillance colonoscopy: 6 patients (29%; 1 low, 2 moderate, 3 high CCI)

Conclusions This audit demonstrates a clear and statistically significant association between comorbidity burden and both all-cause mortality and polyp recurrence following colonoscopic polypectomy for benign polyps. Although immediate procedural complications were uncommon across all comorbidity groups, long-term outcomes differed substantially, with both mortality and recurrence increasing sharply in patients with a CCI ≥ 6 .

Analysis of recurrence patterns revealed that patients with higher CCI scores not only had greater overall recurrence rates but were also more likely to experience persistent polyp detection across successive surveillance procedures.

These findings suggest a potential threshold of CCI ≥ 6 , beyond which the benefits of repeated endoscopic intervention for benign lesions may be outweighed by procedural burden and limited life expectancy. In such cases, an individualised approach including careful risk-benefit assessment should be considered. Routine integration of frailty and comorbidity assessment into colonoscopy pathways may improve patient selection, guide individualised management, and support more informed discussions regarding the long-term risks and benefits of benign polypectomy in comorbid populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP193 Gaseous dissection during ESD: how, why, where & what to do

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DOI 10.1055/s-0046-1821520

Background: Perforation of the digestive wall may occur during endoscopic submucosal dissection (ESD) and unless recognized and timely treated it can lead to severe adverse events. Microperforations may be harder to detect in extensive lesions and prolonged exposure to insufflation can lead to postprocedural emphysema. Recognition and limitation of this uncommon event and appropriate conservative management are essential.

Case presentation: A 71-year-old patient without significant comorbidities underwent screening colonoscopy which revealed an 8 cm, granular mixed-laterally spreading tumor (LST-GM) involving over 80% of the middle rectum. We performed "butterfly-tunneling" ESD under general anesthesia with endotracheal intubation with the patient in left lateral decubitus. The ESD lasted 4 hours and a small perforation was closed via through-the-scope clips halfway through the procedure. Pathology confirmed R0 resection of a traditionally serrated adenoma.

The immediate postoperative course was uneventful. Awaiting discharge at 24 hours the patient developed anterior cervical discomfort and mild dysphonia. Clinical examination identified a peculiar one-sided distribution of subcutaneous emphysema in the latero-cervical region, and palpable crepitus extending along the lateral aspect of the right lower limb. There were no signs of respiratory or haemodynamic compromise or abdominal guarding.

Contrast-enhanced CT confirmed extensive subcutaneous emphysema involving the cervical region, abdominal wall, and right lower limb, without pneumoperitoneum, contrast extravasation, abscess, or active bleeding. On review-

ing the procedure, it was apparent that prolonged carbon dioxide insufflation through the 2 mm perforation was likely to have occurred before closing and the left lateral position accounted for the peculiar unilateral distribution of the gas. Delayed resumption of orthostatism finally allowed migration of the free gas along the fascial planes and led to the presenting symptoms.

Careful clinical monitoring and conservative management including short-term fasting, intravenous fluids, and prophylactic antibiotics were initiated. The emphysema regressed spontaneously, and the patient was discharged after 48 hours. Follow-up colonoscopy showed an asymptomatic 12 mm stenosis that was dilated by CRE balloon.

Conclusion: This case illustrates a rare occurrence of post procedural emphysema following rectal ESD due to prolonged insufflation before closure. Conservative treatment led to complete resolution. In protracted procedures using insufflation, rapid closure of potential microperforations is advised as soon as compromise of resection is avoided.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP194 The edge of resection: endoscopic-laparoscopic cooperative techniques for large gastric tumors

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DOI 10.1055/s-0046-1821521

Abstract Text

Minimally invasive hybrid techniques combining endoscopy and laparoscopy have expanded therapeutic options for subepithelial gastric tumors and early neuroendocrine neoplasms. However, their implementation remains limited, and real-world data from European centers are still scarce. We present two-cases highlighting the organ-preserving and oncologic adequacy of laparoscopic-endoscopic cooperative techniques for challenging gastric lesions.

Case 1: Endoscopic evaluation in a 67-year-old woman revealed a 5-cm subepithelial lesion on the gastric lesser curvature, initially suggestive of leiomyoma. Given its size and location, we elected to perform laparoscopic-endoscopic cooperative surgery for local resection. The endoscopist delineated the lesion and performed semicircumferential submucosal injection and dissection with controlled full-thickness resection under laparoscopic assistance, after which the surgical team completed the procedure by retrieving the lesion and closing the gastric defect. Final pathology confirmed an R0 resection of a 5-cm low-mitotic index (Ki-67 1%) GIST, with no recurrence at 1-year follow-up [1].

Case 2: A 58-year-old patient with a type III gastric neuroendocrine tumor (NET) underwent non-exposed endoscopic wall-inversion surgery (NEWS), an endoscopy-driven full-thickness resection technique performed with laparoscopic assistance. Endoscopic inspection identified the lesion on the anterior gastric wall, in close proximity to the gastroesophageal junction, and allowed precise demarcation of its margins using coagulation marking. Under laparoscopic visualization, controlled seromuscular dissection was performed externally while preserving the integrity of the mucosal and submucosal layers. Endoluminal traction was established primarily through a snare, complemented by clip-line counter-traction to optimize lesion exposure and ensure stable tissue manipulation throughout the dissection. Following laparoscopic closure of the seromuscular defect, which resulted in inward inversion of the targeted gastric segment, the endoscopist completed an *en bloc* intraluminal resection using TT and IT knives. The specimen was retrieved in its entirety, without violation of the mucosal surface. Histopathologic examination confirmed a pT2, R0 gastric NET with a mitotic index of 13 mitoses per 2 mm² and no lymphovascular invasion. At the 6-month follow-up, both endoscopic ultrasound and contrast-enhanced computed tomography demonstrated no evidence of residual or recurrent disease.

Conclusion: These two cases illustrate the clinical value of advanced collaborative techniques such as LECS and NEWS for gastric tumors requiring precise,

full-thickness resection while minimizing morbidity and preserving gastric anatomy. Both procedures achieved complete oncologic resection with uneventful recovery, emphasizing the role of multidisciplinary endoscopic–surgical strategies in expanding curative, organ-preserving options for selected gastric neoplasms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ntourakis D, Mavrogenis G. Cooperative laparoscopic endoscopic and hybrid laparoscopic surgery for upper gastrointestinal tumors: current status. *World J Gastroenterol* 2015; 21 (43): 12482–12497. doi:10.3748/wjg.v21.i43.12482

eP195 Effectiveness and Safety of Upadacitinib in Patients with Crohn's Disease and Ulcerative Colitis: a Korea Multicenter Retrospective Cohort Study

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DOI 10.1055/s-0046-1821522

Aims Upadacitinib (UPA), a selective JAK1 inhibitor, has shown robust efficacy in clinical trials for Crohn's disease (CD) and ulcerative colitis (UC). However, real-world evidence in Asian populations remains limited. We aimed to evaluate the real-world effectiveness and safety of UPA in Korean patients with CD and UC across multiple centers.

Methods We conducted a retrospective study across three Korean academic centers including adults with UC or CD treated with UPA. A total of 79 patients were analyzed (UC 30; CD 49). Clinical, biochemical, and endoscopic outcomes were assessed at week 16 for UC and week 12 for CD, and adverse events (AEs) were evaluated throughout follow-up.

Results Among 79 patients, 88.6% (70/79) had prior exposure to at least one biologic therapy. In UC (n = 30), baseline disease activity was moderate to severe (median partial Mayo 8; endoscopic subscore 3). By week 16, substantial improvements were observed, with reductions in the partial Mayo score (to 2), endoscopic subscore (to 0), CRP, and fecal calprotectin (4034.8 → 185.5 µg/g). The UPA continuation rate was 96.7%, with discontinuation due to loss of response (n = 1) or an adverse event (n = 1). (Table 1) In CD (n = 49), baseline CDAI was high (mean 284.8), with a mean SES-CD of 10.4 and a median of two prior advanced therapies. By week 12, CDAI improved to 80.3, accompanied by reductions in CRP and fecal calprotectin (1408.6 → 458.4 µg/g). The UPA continuation rate was 83.6%, with discontinuation due to primary non-response (n = 1), loss of response (n = 5), or adverse events (n = 2). (Table 2) Across the entire cohort, the most frequent AEs were acne (49.4%), lymphopenia (11.4%), anemia (6.3%), herpes zoster (5.1%), and infections (6.3%); no thromboembolic events or malignancies occurred. (Table 3).

Conclusions Upadacitinib demonstrated substantial clinical, biochemical, and endoscopic improvements in both UC and CD in this real-world Korean multicenter cohort. High continuation rates, particularly in UC, support its effectiveness even in biologic-experienced patients. The safety profile was consistent with clinical trials, with no thromboembolic events or malignancies observed. These findings support UPA as an effective and well-tolerated therapeutic option for refractory IBD in routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP196V Three balloon enteroscopy: use of endorail system during double balloon enteroscopy

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DOI 10.1055/s-0046-1821523

Abstract Text

We report a case of a male patient with multiple gastro-duodenal-jejunal angiodysplasias, previously treated with argon plasma coagulation (APC) through double-balloon enteroscopy (DBE) advanced up to 200 cm. Due to recurrent bleeding, an antegrade DBE was performed using Endorail. Angiodysplasias distal to the first tattoo were treated with APC, exploring up to 330 cm of the small bowel. The Endorail system is recently approved for enteroscopy with CE marking. It uses a magnetic balloon that can be advanced beyond the enteroscope tip, filled with a ferromagnetic fluid, and magnetically anchored to the patient's abdomen, allowing it to be straightened and guided along the device. Once the challenging bowel segment is negotiated, the balloon guide can be retrieved. The Endorail system appears to enable deeper exploration of the small bowel in difficult cases [1, 2].

Video [http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/421acaa6-d51f-4e2d-ab13-069e1dca2ef3/Uploads/19978_Three_balloon%201%20\(1\).mp4](http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/421acaa6-d51f-4e2d-ab13-069e1dca2ef3/Uploads/19978_Three_balloon%201%20(1).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] ClinicalTrials.gov ID: NCT05626738

[2] https://www.accessdata.fda.gov/cdrh_docs/pdf23/K232327.pdf

eP197 Real-time Surgical Decision-making Enhanced by Intraoperative Endoscopic Ultrasound in Pancreatic Tumor Management

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DOI 10.1055/s-0046-1821524

Problem to solve Precise intraoperative localization of small, deep, or non-palpable pancreatic lesions remains challenging in minimally invasive pancreatic surgery. Laparoscopic ultrasound (LUS), although standard, may have limited accuracy due to restricted maneuverability, intervening air, or fibrosis, especially for lesions < 10 mm or located in complex anatomical regions. These limitations can hinder real-time surgical navigation, compromise margin assessment, and risk unnecessary pancreatic parenchymal resection. A reliable, high-resolution intraoperative imaging adjunct capable of providing immediate feedback and seamless integration into the surgical workflow is needed.

Innovation We developed a structured, preplanned integration of intraoperative endoscopic ultrasound (EUS) as an innovative adjunct during pancreatic tumor resection. This approach consists of: (1) incorporation of EUS as a predetermined intraoperative step; (2) same-operator continuity, with the endoscopist responsible for preoperative staging also performing the intraoperative examination; (3) sterile deployment of a linear-array echoendoscope without altering patient positioning or compromising the surgical field; and (4) continuous, real-time communication between endoscopist and surgeon to guide lesion localization, define resection planes, and verify post-resection status.

► **Table 1** Summary of Cases with Planned Intraoperative EUS Integration

Case	Age/ sex	Clinical presentation	Lesion Size (mm)	Lesion Location	Preoperative Diagnosis	Type of Surgery	Final Pathology
1	35 / M	Hypoglycemia	5	Pancreatic head	pNET (non-biopsied)	Pancreatoduodenectomy	Well-differentiated pNET
2	54 / F	Incidental cystic lesion	10	Neck / Body	Branch-duct IPMN with mural nodule	Laparoscopic distal pancreatectomy + splenectomy	IPMN with low-grade dysplasia
3	69 / M	Familial cancer screening	7	Head	pNET (Ga68 PET positive)	Whipple procedure	Grade 1 glucagonoma
4	77 / F	Abdominal pain, weight loss	8	Neck– body junction	pNET	Laparoscopic distal pancreatectomy + splenectomy	Glucagonoma, negative margins

Results Four adult patients with technically challenging pancreatic lesions ranging from 5–10 mm, including neuroendocrine tumors and a branch-duct IPMN with a mural nodule, underwent pancreatic surgery with planned intraoperative EUS. Feasibility was demonstrated in all cases: EUS was performed successfully under sterile conditions, without contamination events, technical failures, or interference with surgical workflow. In each case, intraoperative EUS provided improved real-time lesion localization compared with LUS, particularly for small or non-palpable lesions. It enabled precise delineation of resection margins, supported parenchyma-sparing strategies, and improved intraoperative orientation. Immediate post-resection EUS confirmed absence of residual disease and excluded vascular or biliary complications before closure. No EUS-related adverse events occurred, and all patients had favorable post-operative courses, with no imaging- or procedure-related complications. The operating room environment accommodated the endoscopy team without changes to patient positioning or surgical ergonomics. The four cases are summarized in ► **Table 1**.

Conclusions Intraoperative EUS was feasible, safe, and compatible with pancreatic surgery in this early experience. It may offer potential advantages in lesion localization, margin assessment, and real-time decision-making, particularly for small or difficult-to-localize lesions. These findings warrant further study to clarify its clinical impact and comparative performance as an intraoperative imaging adjunct.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP198 Diagnostic Accuracy of the Esophageal String Test for Eosinophilic Esophagitis: A Systematic Review and Meta-Analysis Feasibility Assessment

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DOI 10.1055/s-0046-1821525

Aims To systematically review and meta-analyze the diagnostic accuracy of EST compared to endoscopic biopsy for diagnosing active EoE.

Methods We conducted a systematic search of PubMed, Embase, and Web of Science (through November 2025) for studies evaluating EST against biopsy as the reference standard in EoE diagnosis. A total of 449 studies were found, deduplicated and of the 5 full-text articles assessed, 2 studies met inclusion criteria (Furuta et al. 2013; Ackerman et al. 2019), comprising 175 total participants [1, 2].

Results Both studies demonstrated high AUCs (0.82–0.97) and strong correlations between EST biomarkers and esophageal eosinophil counts. However, neither study reported diagnostic thresholds, binary classifications, sensitivity/specificity, or ROC coordinates. Because EST biomarkers were analyzed as continuous measures without predefined cutoffs, no 2 × 2 contingency tables could be constructed, and meta-analysis of pooled sensitivity and specificity was not feasible (► **Table 1**).

► **Table 1**

Author, Year	Population (N)	Age	Disease Activity Groups	AUROC / AUC	Key Biomarkers (Correlation r)	Biomarker Findings	Patient Preference
Furuta GT, 2023	41	7–20 yrs	Active 14 / Inactive 8 / Normal 19	0.97	MBP-1 (0.72), EDN (0.48), ECP (0.21), EPX (0.54), CLC/Gal-10 (0.73)	All eosinophil-derived proteins significantly elevated in active EoE	–
Ackerman, 2019	134	Active 24.9 ± 13.8; Inactive 29.3 ± 17.1; Normal 17.1 ± 9.7	Active 62 / Inactive 37 / Normal 35	0.82–0.87	Eot-3 (0.73), Eot-2 (0.60), EPX (0.49), MBP-1 (0.46), EDN (0.45), CLC (0.36)	All biomarkers significantly elevated in active EoE	87 % children; 95 % parents; 92 % adults preferred EST

Conclusions EST shows promise as a minimally invasive tool for monitoring EoE activity, with high AUC values and excellent patient acceptability. However, the absence of standardized diagnostic thresholds and insufficient statistical reporting precludes evidence synthesis of diagnostic accuracy. Future studies must establish and validate pre-specified EST cutoffs with complete 2 × 2 tables to determine clinical utility. Until then, EST cannot be recommended as a replacement for endoscopic biopsy in diagnostic pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ackerman SJ, Park JY, Dickten CL et al. One-hour esophageal string test: a nonendoscopic minimally invasive test that accurately detects disease activity in eosinophilic esophagitis. *Am J Gastroenterol* 2019; 114 (11): 1614–1625
- [2] Furuta GT, Kagalwalla AF, Lee JJ et al. The oesophageal string test: a novel, minimally invasive method measures mucosal inflammation in eosinophilic oesophagitis. *Gut*. 2013; 62 (10): 1395–1405

eP199 Risk Factors Analysis for Pathological Upgrade After Endoscopic Submucosal Dissection in Patients with Gastric Intraepithelial Neoplasia: A Single Center Retrospective Study

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DOI 10.1055/s-0046-1821526

Aims To analyze the risk factors for pathological upgrade in patients with gastric intraepithelial neoplasia (GIN) after endoscopic submucosal dissection ESD procedure.

Methods A retrospective analysis was conducted on 682 patients diagnosed with GIN by gastric endoscopic forceps biopsy (EFB) pathology at the Digestive Endoscopy Center of Wuxi People's Hospital from January 2018 to December 2024 (490 with low-grade intraepithelial neoplasia (LGIN) and 192 with high-grade intraepithelial neoplasia (HGIN)). Demographic characteristics (gender, age, BMI, chronic disease history, fecal occult blood), endoscopic features of lesions (location, morphology, size), and pathology data after ESD procedure were collected. Univariate, multivariate, and stepwise logistic regression analyses were performed to identify independent risk factors for pathological upgrade.

Results The total pathological upgrade rate after ESD was 59.4% (51.2% in the LGIN group and 80.2% in the HGIN group). Stepwise regression analysis revealed that a maximum lesion diameter ≥ 2 cm (OR = 2.49) was the most significant risk factor for pathological upgrade. Meanwhile, age ≥ 70 years, comorbid hypertension, Paris classification type IIc lesion, and a lesion location at the gastric angle or cardia were independent risk factors for pathological upgrade, whereas a type IIb lesion demonstrated a protective effect (OR = 0.61).

Conclusions Advanced age (≥ 70 years), hypertension, lesion size ≥ 2 cm, type IIc morphology, and lesions in the gastric angle/cardia significantly increase the risk of pathological upgrade after ESD. These findings provide a basis for pre-operative risk assessment and individualized treatment strategies for GIN patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP200 Post-ERCP Pancreatitis: Incidence, Risk Factors, and Outcomes from a Single-Centre Experience

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DOI 10.1055/s-0046-1821527

Aims This study aimed to determine the incidence, severity, and predictors of Post ERCP induced pancreatitis (PEP) in a tertiary care center in North India.

Methods This retrospective observational study included 300 consecutive ERCPs performed between January 2024 and August 2025 at the Department of Gastroenterology, Himalayan Institute of Medical Sciences, Dehradun. Data on demographics, indications, cannulation difficulty, prophylaxis, and outcomes were analyzed. PEP was defined as new or worsened abdominal pain with serum amylase/lipase more than 3 times upper limit of normal within 24 hours, requiring ≥ 2 days of hospitalization [1]. Severity was classified as per the Revised Atlanta Criteria.

Results Among 300 ERCPs done, mean patient age was 52 ± 10 years, with 60% female patients. Common indications included CBD stones (70%), cholangitis (15%), benign strictures (10%), and malignant obstruction (5%). Prophylaxis included rectal NSAIDs in 65% and pancreatic duct stenting in 12%. The overall incidence of PEP was 8% (n = 24): mild (n = 16), moderate (n = 5), and severe (n = 3). Difficult cannulation (> 5 attempts) and inadvertent PD injection were significant predictors (p < 0.05). No mortality occurred in the study.

Conclusions Post-endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis (PEP) remains the most frequent complication of ERCP, despite advances in prophylactic strategies [1]. The incidence of PEP in this cohort was comparable to global data as seen in Freeman et al study [2]. Difficult cannulation and Pancreatic duct injection were key risk factors for PEP in our study. Rectal NSAIDs demonstrated a protective effect in prevention of PEP. Similar results were seen in Dumonceau et al study [1]. Adherence to ESGE-recommended prophylactic measures can further minimize PEP rates. [3]

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dumonceau JM et al. Updated ESGE Guideline for PEP prophylaxis. *Endoscopy* 2014; 46: 799–815
- [2] Elmunzer BJ, Scheiman JM, Lehman GA et al. A randomized trial of rectal indomethacin to prevent post-ERCP pancreatitis. *N Engl J Med* 2012; 366 (15): 1414–1422
- [3] Elmunzer BJ, Scheiman JM, Lehman GA et al. A randomized trial of rectal indomethacin to prevent post-ERCP pancreatitis. *N Engl J Med* 2012; 366 (15): 1414–1422

eP201 Digital Microscopy in the Endoscopy Suite: A Reference Standard for Colorectal Polyp Size Measurement

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DOI 10.1055/s-0046-1821528

Aims Accurate determination of colorectal polyp size is critical for surveillance recommendations and for generating reliable ground truth in artificial intelligence (AI) development. Visual estimation is imprecise, and no validated reference standard exists. We aimed to assess the accuracy and reproducibility of real-time digital microscopic measurement of fresh polypectomy specimens [1–20].

Methods In this prospective study at the Centre hospitalier de l'Université de Montréal (CHUM), 70 polyps from 44 patients (mean age 65.4 years; 52.3% female) were measured on-site using a calibrated digital microscope. Three independent raters, blinded to each other, obtained long- and short-axis measurements. The primary outcome was inter-rater reliability for long-axis measurements. Secondary outcomes included short-axis reliability, overall agreement, and classification (≤ 5 mm vs. > 5 mm) (► Table 1).

► Table 1

	Overall(N = 70)
Segment, n (%)	
Caecum	6 (8.6%)
Ascending colon	14 (20.0%)
Transverse colon	13 (18.6%)
Descending colon	18 (25.7%)
Sigmoid	12 (17.1%)
Rectum	7 (10.0%)
Paris class, n (%)	
Is	58 (82.9%)
Isp	2 (2.9%)
Ila	7 (10.0%)
Ilc	3 (4.3%)
Pathology, n (%)	
Adenoma	46 (65.7%)
Hyperplastic	10 (14.3%)
Inflammatory polyp	7 (10.0%)
Normal/mucosal prolapse	1 (1.4%)
Other	2 (2.9%)
Missing	4 (5.7%)

Results Inter-rater reliability was excellent for both long-axis (ICC 0.941, 95% CI 0.914–0.961) and short-axis (ICC 0.943, 95% CI 0.917–0.962) measurements. Bland–Altman plots demonstrated mean differences near zero without systematic bias. Limits of agreement were within ± 1 mm. When dichotomized at the 5 mm threshold, agreement was perfect ($\kappa = 1.0$).

Conclusions On-site digital microscopy provides highly reproducible and verifiable size data with photographic documentation. This method should be considered a reference standard for accurate polyp sizing in clinical research and AI model development.

Conflicts of Interest Daniel von Renteln has received research funding from ERBE Elektromedizin GmbH, Ventage, Pendopharm, Satisfai, Fujifilm, and Pentax, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Medtronic, and Pendopharm. Roupin Djinbachian has received speaker fees from Fujifilm. The remaining authors declare that they have no conflict of interest.

References

- [1] Kwak MS, Cha JM, Jeon JW et al. Artificial intelligence-based measurement outperforms current methods for colorectal polyp size measurement. *Digestive Endoscopy* 2022; 34: 1188–1195. doi:10.1111/den.14318
- [2] Sudarevic B, Sodmann P, Kafetzis I et al. Artificial intelligence-based polyp size measurement in gastrointestinal endoscopy using the auxiliary waterjet as a reference. *Endoscopy* 2023; 55: 871–876. doi:10.1055/a-2077-7398
- [3] Yui CY, Toh DE, Chen TA et al. Use of artificial intelligence to measure colorectal polyp size without a reference object. *Endosc Int Open* 2025; 13:a25561836. doi:10.1055/a-2556-1836
- [4] Itoh H, Oda M, Jiang K et al. Binary polyp-size classification based on deep-learned spatial information. *International Journal of Computer Assisted Radiology and Surgery* 2021; 16: 1817–1828. doi:10.1007/s11548-021-02477-z
- [5] Djinbachian R, Taghiakbari M, Ali A et al. Virtual scale endoscope versus snares for accuracy of size measurement of smaller colorectal polyps: a randomized controlled trial. *Endoscopy* 2025; 57: 443–450. doi:10.1055/a-2475-0244
- [6] Taghiakbari M, Djinbachian R, Haumesser C et al. Measuring Size of Colorectal Polyps Using a Virtual Scale Endoscope or Visual Assessment: A

Randomized Controlled Trial. *Am J Gastroenterol* 2024; 119: 1309–1317. doi:10.14309/ajg.0000000000002623

[7] van Bokhorst QNE, Houwen B, Hazewinkel Y et al. Polyp size measurement during colonoscopy using a virtual scale: variability and systematic differences. *Endoscopy* 2025; 57: 137–145. doi:10.1055/a-2371-3693

[8] Song Y, Du S, Wang R et al. Polyp-Size: A Precise Endoscopic Dataset for AI-Driven Polyp Sizing. *Sci Data* 2025; 12: 918. doi:10.1038/s41597-025-05251-x

[9] Bonett DG. Sample size requirements for estimating intraclass correlations with desired precision. *Stat Med* 2002; 21: 1331–1335. doi:10.1002/sim.1108

[10] U.S. Food and Drug Administration Artificial Intelligence-Enabled Device Software Functions: Lifecycle Management and Marketing Submission Recommendations. In: Silver Spring, MD: U.S. Food and Drug Administration. 2025;

[11] von Renteln D, Djinbachian R, Zarandi-Nowroozi M et al. Measuring size of smaller colorectal polyps using a virtual scale function during endoscopies. *Gut* 2023; 72: 417. doi:10.1136/gutjnl-2022-328654

[12] Turner JK, Wright M, Morgan M et al. A prospective study of the accuracy and concordance between in-situ and postfixation measurements of colorectal polyp size and their potential impact upon surveillance. *Eur J Gastroenterol Hepatol* 2013; 25: 562–567. doi:10.1097/MEG.0b013e32835d1f2d

[13] Lam D, Kaneko Y, Scarlett A et al. The Effect of Formalin Fixation on Resection Margins in Colorectal Cancer. *Int J Surg Pathol* 2019; 27: 700–705. doi:10.1177/1066896919854159

[14] Djinbachian R, Khellaf A, Noyon B et al. Accuracy of measuring colorectal polyp size in pathology: a prospective study. *Gut* 2023; 72: 2015. doi:10.1136/gutjnl-2023-330241

[15] Rex DK, Rabinovitz R. Variable interpretation of polyp size by using open forceps by experienced colonoscopists. *Gastrointest Endosc* 2014; 79: 402–407. doi:10.1016/j.gie.2013.08.030

[16] Djinbachian R, Popescu Crainic I, Pioche M et al. Accuracy in Polyp Size Measurement Among Surgeons, Gastroenterologists, Trainees, and Experts: A Prospective Video-Based Study. *Official journal of the American College of Gastroenterology | ACG*. 2024; 119

[17] Sakata S, Klein K, Stevenson ARL et al. Measurement Bias of Polyp Size at Colonoscopy. *Diseases of the Colon & Rectum*. 2017; 60

[18] Gupta S, Lieberman D, Anderson JC et al. Recommendations for Follow-Up After Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology* 2020; 158: 1131–1153.e1135. doi:10.1053/j.gastro.2019.10.026

[19] Kaltenbach T, Anderson JC, Burke CA et al. Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer. *Gastroenterology* 2020; 158: 1095–1129. doi:10.1053/j.gastro.2019.12.018

[20] Kaltenbach T, Anderson JC, Burke CA et al. Endoscopic Removal of Colorectal Lesions—Recommendations by the US Multi-Society Task Force on Colorectal Cancer.

eP202 Endoscopic management of postoperative gastrointestinal bleeding in an Italian cancer-center

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DOI 10.1055/s-0046-1821529

Aims PostOperative GastroIntestinal Bleeding (POGIB) is a rare but relevant complication. Endoscopy represents a first-line treatment, but evidence about its safety and effectiveness remain limited. We aimed to report our experiences in the management of POGIB.

Methods A retrospective analysis with prospectively collected data was conducted on all patients that underwent endoscopic procedure for suspected POGIB at our center between January 2019 and July 2025. Univariate analyses

were performed to identify predictive factors for clinical success in anastomotic bleeding (► **Table 1**).

Results Eighty-two patients (median age 65 years, IQR 58–75; 61 % male) underwent endoscopy a median of 6 days after surgery (IQR 2–12) for suspected gastrointestinal bleeding (63 % hematochezia, 27 % melena, 5 % hematemesis, 5 % asymptomatic anemia). Active bleeding or stigmata were found in 83 % of cases: 70 % anastomotic, 13 % non-anastomotic (mainly ulcerative gastroduodenitis). Hemostatic intervention was performed in 72 % of patients, mainly mechanical (38 %) or combined mechanical (27 %). Technical success was achieved in 88 %, overall clinical success in 82 % (in 62 cases after one, in 5 after two endoscopic procedures). Ten patients underwent reoperation (five for persistent bleeding) and four died (one for massive gastrointestinal bleeding). Considering POGIB with anastomotic bleeding, no predictive factors for clinical success were identified among demographic or clinical data. Among treatments, mechanical hemostasis was significantly associated with higher success rates ($p=0.0005$). No adverse events occurred during endoscopy (► **Table 2**).

► **Tab. 1** General characteristics of study population and main findings (n = 82)

Previous gastrointestinal surgery n (%)	23 (28)
Department of admission n (%)	Colorectal surgery 49 (60); Sarcoma/Mesenchyma surgery 15 (18); Hepatobiliary surgery 14 (17); Other 4 (5)
Multivisceral surgery n (%)	39 (48)
Endoscopic procedures n (%)	Colonoscopy 59 (72); EGDS 22 (27); Enteroscopy DAE 1 (1)
Endoscopic treatments n (%)	Mechanical 31 (38); Mechanical + topical 16 (20); Topical 6 (7); Mechanical + injection 4 (5); Mechanical + thermal 2 (2); No treatment 23 (28)

EGDS: EsophagoGastroDuodenoScopy; DAE: Device Assisted Enteroscopy.

► **Tab. 2** Univariate analysis of results of endoscopic treatments in anastomotic bleeding (n = 57)

Variable	Success / Failure	P value
Age	–	0.535
Sex	Male 28/4, Female 24/1	0.513
Surgery and Timing	Past GI surgery: No 42/5, Yes 10/0; Multivisceral: No 28/2, Yes 24/3; Anastomosis site: Upper 6/0, Lower 46/5; Endoscopy: ≤ 7 days 36/3, > 7 days 16/2	0.642–1
Endoscopic treatments	None 0/2, Mechanical 30/1, Mechanical + other 19/2, Topical 3/0	0.0057

Conclusions Results suggest that endoscopic management of POGIB is safe and effective. Further prospective studies are needed to establish the best endoscopic strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP203 Endoscopic Diagnosis and Rescue Therapy of an Esophagopericardial Fistula Secondary to Metastatic Renal Cell Carcinoma: A First Reported Case

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DOI 10.1055/s-0046-1821530

Abstract Text

Esophagopericardial fistula (EPF) is an exceptionally rare and life-threatening condition historically associated with esophageal carcinoma, postoperative complications, peptic ulcer disease, or radiotherapy. Fewer than 70 cases have been reported since 1931, and no previous case has been attributed to metastatic renal cell carcinoma (RCC). The mortality remains extremely high due to purulent pericarditis, cardiac tamponade, and sepsis. We present the first reported case of EPF originating from a paraesophageal RCC metastasis, successfully diagnosed and managed through advanced endoscopy.

Our patient is a 65-year-old male with metastatic RCC with mediastinal lymph node progression infiltrating the esophagus (Figure 1), for which cabozantinib is initiated. One month later, he presented with shock, severe metabolic acidosis, acute kidney injury and elevated lactate. Imaging revealed bilateral pleural effusions and a progressive pericardial effusion. Purulent pericardiocentesis yielded *Enterococcus faecium* and *Candida albicans*. CT showed pneumopericardium and air tracking between the mid-thoracic esophagus and pericardium (Figure 2), raising suspicion of fistulization, particularly in the context of a previously treated mediastinal paraesophageal metastatic mass [1–3].

Beside gastroscopy in ICU revealed, in the middle third of the esophagus, fibrin, purulent exudate and a 4 cm long orifice confirming EPF (Figure 3). Given the patient's critical instability, endoscopic therapy was selected as the safest option. A fully covered 18 cm × 28 mm esophageal stent was deployed under endoscopic guidance and secured with an over-the-scope clip. Initial sealing and expansion were satisfactory. Two days later, he developed persistent sepsis and hypotension. Chest X-ray demonstrated that the prior stent had migrated caudally (Figure 4). The displaced stent was removed endoscopically. A longer fully covered 24 cm × 28 mm bariatric-type stent was deployed and fixed with an over-the-scope clip, achieving complete coverage. A new pericardiocentesis was performed, obtaining purulent exudate.

Subsequent CT imaging confirmed marked reduction of pericardial collections and resolution of contrast leakage. The patient improved hemodynamically and was successfully extubated. Multidisciplinary management continued with pericardiectomy and targeted antimicrobial therapy.

EPF is usually related to primary esophageal malignancy; most of literature cases describe esophageal carcinoma as the malignant etiology. This is the first documented EPF arising from RCC metastasis. Early endoscopic diagnosis was crucial, and therapeutic stenting—despite migration—provided effective fistula sealing and stabilization in a critically ill patient. This case underscores the pivotal role of advanced endoscopy in the diagnosis, treatment and rescue management of malignant EPF.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Takayama T, Okura Y, Funakoshi K, Sato T, Ohi H, Kato T. Esophageal cancer with an esophagopericardial fistula and purulent pericarditis. Intern Med 2013; 52 (2): 243–7
- [2] Abdullah HMA, Khan UI, Wasekar C, Omar M. Cardiac tamponade and purulent pericarditis secondary to an oesophageal pericardial fistula as an initial presentation of squamous cell carcinoma of the oesophagus. BMJ Case Rep 2019; 12 (7):e229634

[3] Wills NK, Arnab P, Oompie F, Papavarnavas NS. Candida pericarditis and tamponade from a malignant pericardio-oesophageal fistula. *S Afr J Infect Dis* 2025; 40 (1): 741

eP204 Outcome of PEG-J Extension Using Transnasal Endoscopy (TNE) Through Stoma Opening – A Single-Center Descriptive Study

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DOI 10.1055/s-0046-1821531

Aims This descriptive study investigates the outcomes of PEG-J extension using Transnasal Endoscopy (TNE) through an existing stoma opening at a single tertiary center.

Methods This is a retrospective descriptive study conducted at James Cook University Hospital. Data were collected from patient records including demographics, medical history, indications for PEG-J, tube size, number of PEG-J replacements, time intervals between replacements, method of placement, and causes of PEG-J exchange. Descriptive statistics were used to analyze the collected data [1–4].

The old PEG or PEG/J tube was usually removed and TNE was used through the gastrostomy stoma into the stomach and then was advanced as deep as possible into the duodenum. A guidewire was then introduced deep in the duodenum and TNE was withdrawn leaving the guidewire in place. The new PEG/J tube was then lubricated with oil before being fed over the wire in exchange one-to-one process. The balloon was then inflated and the tube fixed in place.

Results A total of 11 patients (6 female, 5 male) were included in the study, with a mean age of 43.9 ± 18.5 years (range 18–76 years). The mean number of PEG-J replacements was 7.0 ± 2.6 (range 3–10). The most common indications for PEG-J placement were: gastroparesis ($n = 5$), followed by dysphagia ($n = 2$). Other indications included oesophageal aperistalsis, feeding difficulties, recurrent chest infections with tracheostomy, and brain stem stroke ($n = 1$ each). The predominant tube size used was 16f ($n = 7$), with 18f used in 4 patients. The primary causes for PEG-J exchange were coiled tube back to stomach ($n = 6$), blocked tube ($n = 3$), and burst balloon ($n = 2$).

Conclusions This study provides insights into the outcomes of PEG-J extension using TNE through stoma opening in a single-center cohort. The findings highlight the common indications and causes for tube exchange, which can inform clinical practice and guide future research. Further larger-scale studies are warranted to validate these findings and explore long-term outcomes and technical success rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wei M. An overview of percutaneous endoscopic gastrostomy tube *World Journal of Gastrointestinal Endoscopy*. 2021; <https://pmc.ncbi.nlm.nih.gov/articles/PMC8411178/>
- [2] Krafft MR, Maan S, Scott A et al. Percutaneous endoscopic gastrostomy with jejunal extension versus direct percutaneous endoscopic jejunostomy for post-pyloric feeding: a dual-center retrospective.... *Digestive Diseases and Sciences*. 2025 <https://link.springer.com/article/.doi:10.1007/s10620-025-09198-2>
- [3] Gkolfakis P, Arvanitakis M, Despott EJ et al. Endoscopic management of enteral tubes in adult patients–Part 2: Peri-and post-procedural management. *European Society of Gastrointestinal Endoscopy (ESGE).... Endoscopy International Open*. 2021 <https://www.thieme-connect.com/products/ejournals/html/.doi:10.1055/a-1331-8080>
- [4] AGA Clinical Practice Update on Endoscopic Enteral Access. *Gastroenterology* 2025; [https://www.gastrojournal.org/article/S0016-5085\(24\)05597-5/abstract](https://www.gastrojournal.org/article/S0016-5085(24)05597-5/abstract)

eP205 EUS-Guided Portal Pressure Gradient and Liver Biopsy in Pre-Transplant Assessment: A Case Series and Review of the Literature

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DOI 10.1055/s-0046-1821532

Aims Accurate assessment of hepatic fibrosis and portal hypertension (PH) is essential in patients with end-stage renal disease (ESRD) who are suspected to have advanced hepatic fibrosis, as this may influence the choice between isolated renal transplantation and combined liver–kidney (hepato-renal) transplantation. Endoscopic ultrasound (EUS)-guided portal pressure gradient (PPG) measurement (EUS-PPG) provides a minimally invasive alternative to the hepatic venous pressure gradient (HVPG) for evaluating PH, and can be combined with multimodality endoscopic assessment in a single session. However, the procedure can be technically challenging in patients with ESRD due to increased bleeding risk and altered anatomy, such as in those with polycystic liver disease. The aim of our study was to evaluate the safety, feasibility, and impact of EUS-PPG on clinical decision-making in this patient group [1–8].

Methods A prospective therapeutic EUS registry was reviewed retrospectively, focusing on patients with ESRD who were suspended from the renal transplant list due to suspected underlying liver disease. Patients with ESRD undergoing EUS-PPG measurement with or without concurrent endoscopic variceal screening, elastography, and liver biopsy between August 2023 and August 2025 were included. Patient demographic data, clinical characteristics, Endoscopic findings, PPG values, histopathology findings, and procedure-related complications were recorded and analysed. Clinically significant portal hypertension (CSPH) was defined as a PPG ≥ 10 mmHg. The primary outcome was the impact of EUS-PPG on transplant decision-making, while secondary outcomes included the safety and feasibility of the procedure.

Results A total of 7 patients with ESRD who had been suspended from the renal transplant list were included (4 female, 3 male; mean age 52 years). All EUS-PPG procedures were technically successful, with PPG values ranging from 3–6 mmHg. 5 patients underwent EUS-guided liver biopsy, and all specimens were adequate for histological analysis. Each biopsy met key performance indicators i.e. total specimen length ≥ 20 mm, and presence of ≥ 11 complete portal tracts. One patient experienced minor post-biopsy bleeding requiring a short hospital stay but no intervention. None of the patients demonstrated clinically significant portal hypertension. Based on these findings, all patients were recommended for reinstatement on the isolated renal transplant list. No adverse events were observed during follow-up.

Conclusions EUS-PPG measurement, with or without concurrent liver biopsy, is a feasible, safe, and clinically valuable tool for assessing hepatic fibrosis and portal hypertension in renal transplant candidates. It provides critical hemodynamic and histologic information in a single session, thereby informing transplant eligibility decisions and potentially avoiding unnecessary combined liver–kidney transplantation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanderschueren E, Laleman W, Bonne L, Maleux G, Wagner DR, Yeh C, Calvo A, Sendino O, Gines A, Baiges A, Bruno MJ. Endoscopic Ultrasound-Guided Portosystemic Pressure Gradient Measurement vs. Transjugular Balloon Occlusion Measurement in Patients with Cirrhosis (ENCOUNTER): A Bicentric EU Study. *JHEP Reports*. 2025; 101466
- [2] Huang JY et al. EUS-guided portal pressure gradient measurement with a simple novel device: a human pilot study. *Gastrointest Endosc*. 2017;
- [3] Dhindsa B et al. Endoscopic ultrasound-guided portal pressure gradient measurement: a systematic review and meta-analysis. *Ann Gastroenterol*. 2024;

- [4] Kim S et al. Endohepatology in clinical practice: EUS-guided portal pressure measurement combined with EUS-guided liver biopsy. *Endosc Ultrasound*. 2023;
- [5] Rubin R et al. EUS-guided portal-systemic pressure gradient measurement to determine transplant candidacy. *Transpl Int*. 2024;
- [6] Malik A et al. Safety and efficacy of EUS-guided PPG measurement with concomitant liver biopsy: systematic review. *Front Gastroenterol*. 2023;
- [7] Luo R et al. EUS-guided portal pressure gradient measurement for evaluating portal hypertension: a retrospective analysis. *Endosc Ultrasound*. 2025;
- [8] Edelson J et al. EUS-guided portal pressure gradient identifies clinically significant portal hypertension. *Portal Hypertens & Cirrhosis*. 2024;

eP206 Under a Different Light: Early Gastric Neoplasia Revealed by Advanced Imaging in a MAPS III High-Risk Patient

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DOI 10.1055/s-0046-1821533

Abstract Text

A 48-year-old man with a first-degree family history of gastric cancer underwent esophagogastroduodenoscopy for persistent dyspepsia. Standard white-light imaging (WLI) showed a well-distensible stomach with preserved folds and only mild mucosal edema, with no identifiable focal lesions. When the examination was repeated using high-definition virtual chromoendoscopy with blue-light imaging (BLI) and optical magnification, the stomach appeared truly "under a different light." Multiple pale, map-like areas were visible in both body and antrum, consistent with gastric intestinal metaplasia (GIM). Endoscopic risk assessment using the Endoscopic Grading of Gastric Intestinal Metaplasia (EGGIM) yielded a score of 9, indicating extensive metaplastic involvement and aligning with the high-risk category defined by MAPS III criteria. Careful inspection of the lesser curvature of the gastric body revealed an 8–10 mm depressed lesion (Paris 0-IIc), completely invisible under WLI. In BLI with magnification, the lesion displayed features typical of early gastric neoplasia: loss of the normal microsurface pattern (MS), irregular microvascular architecture (MV), and a sharply defined demarcation line separating normal from abnormal mucosa. These findings fulfilled the diagnostic criteria of the Magnifying Endoscopy Simple Diagnostic Algorithm for Gastric Cancer (MESDA-G), based on the validated vessel-plus-surface (VS) classification system. Targeted biopsies confirmed intraepithelial neoplasia (low-grade dysplasia, intestinal phenotype type I). Random biopsies from antrum, angulus and body documented chronic inflammation, extensive intestinal metaplasia (OLGIM IV) and severe glandular atrophy (OLGA IV), delineating a diffusely high-risk mucosal background. Lesion marking, circumferential incision and controlled submucosal dissection were all performed using a Hybrid Knife, achieving complete en-bloc resection without immediate adverse events. Post-procedural assessment confirmed an intact muscularis propria and radical excision. This case highlights the diagnostic superiority of advanced endoscopic imaging over standard WLI. The integration of BLI, optical magnification and structured classification systems (EGGIM and MESDA-G) enabled identification of an early neoplastic focus entirely missed by conventional imaging. MAPS III emphasizes the importance of high-quality endoscopy, supported by advanced imaging techniques for the systematic evaluation of atrophy and metaplasia; in this patient, these principles facilitated timely diagnosis and curative treatment. Advanced imaging does not merely change what the mucosa looks like: it changes what can be diagnosed. For this reason, adequate training is essential for endoscopists to fully master and exploit the potential of these technologies [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yao K, Uedo N, Kamada T et al. Guidelines for endoscopic diagnosis of early gastric cancer. *Dig Endosc* 2020; 32 (5): 663–698. doi:10.1111/den.13684
- [2] Dinis-Ribeiro M, Libânio D, Uchima H et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy* 2025; 57 (5): 504–554. doi:10.1055/a-2529-5025
- [3] Esposito G, Pimentel-Nunes P, Angeletti S et al. Endoscopic grading of gastric intestinal metaplasia (EGGIM): a multicenter validation study. *Endoscopy* 2019; 51 (6): 515–521. doi:10.1055/a-0808-3186

eP207 Endoscopic resection for duodenal carcinoid tumors

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DOI 10.1055/s-0046-1821534

Aims Few studies have assessed the safety and efficacy of endoscopic resection for duodenal carcinoid tumors. This study aimed to evaluate the utility of endoscopic resection in this setting.

Methods Between February 2015 and February 2024, 35 patients with sporadic duodenal carcinoids managed by endoscopic resection were enrolled. Endoscopic treatment was performed in patients without nodal or distant metastasis. Rates of endoscopic complete resection, histologic complete resection, procedure-related complications, and tumor recurrence were retrospectively analyzed.

Results Twenty-five nonampullary duodenal carcinoids were treated with endoscopic mucosal resection, four with endoscopic submucosal dissection (ESD), and six ampullary carcinoids with snare papillectomy. The mean patient age was 61.9 years (range, 44–83). Mean tumor size was 8.8 ± 2.4 mm (range, 3–12) for nonampullary carcinoids and 13.7 ± 5.4 mm (range, 5–20) for ampullary carcinoids.

The endoscopic complete resection rate was 97.1%. Incomplete resection occurred in one patient undergoing ESD due to tumor invasion into the muscularis propria. Histologic complete resection was achieved in 31 of 35 patients (88.6%) on the initial attempt; one additional patient required a second session to achieve complete resection.

Procedure-related perforation occurred in three patients with nonampullary carcinoids (8.6%); two were managed endoscopically, and one required local surgical excision. After a median follow-up of 39 months (range, 10–96), local recurrence was observed in one patient (2.8%) with a nonampullary tumor larger than 10 mm. Among patients with ampullary carcinoids, no local recurrence or distant metastasis was detected during a median follow-up of 40 months (range, 18–100).

Conclusions Endoscopic resection appears to be a safe and effective treatment option for small (≤ 10 mm) nonampullary duodenal carcinoids without evidence of muscularis propria invasion. For ampullary carcinoids < 20 mm confined to the submucosa, minimally invasive endoscopic papillectomy may be considered, particularly in older patients or those with significant comorbidities who are at higher risk for postoperative complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP208 Efficacy and Limitations of Steroid Prophylaxis for Stricture Prevention After Extensive Esophageal ESD

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DOI 10.1055/s-0046-1821535

Aims Esophageal stricture is one of the most challenging complications following endoscopic submucosal dissection (ESD) for superficial esophageal

cancer. Mucosal defects ≥ 5 cm in length or involving the entire circumference are considered high risk for post-ESD stricture, with chemoradiotherapy or surgery often recommended for these conditions, even when dealing with superficial lesions. Although combined local and systemic steroid therapies are widely used for stricture prevention, their efficacy, optimal dosage, and clinical indications remain insufficiently established. This study evaluated the effectiveness and limitations of steroid-based prophylaxis in preventing esophageal stricture after extensive ESD.

Methods We retrospectively reviewed 72 patients who underwent esophageal ESD at our institution between 2007 and 2024, in whom the mucosal defect involved $\geq 3/4$ of the circumference. In analysis 1, patients were classified into a sub-circumferential group (SC group; $n = 61$, $\geq 3/4$ but less than full circumference) and a circumferential group (C group; $n = 11$, full circumference). Lesion characteristics, preventive strategies, and post-ESD stricture outcomes were compared between the groups. In analysis 2, patients were divided into groups with and without stricture according to the need for endoscopic balloon dilation when a standard endoscope could not pass through the post-ESD site for identifying postoperative esophageal stricture risk factors. Subgroup comparisons were further conducted in the 61 patients who received steroid-based prophylaxis.

Results In analysis 1, mean longitudinal mucosal defect length was significantly greater in the C group than in the SC group (81 mm vs. 47 mm, $p < 0.01$). Local steroid injection was performed in 45 (74%) SC and 11 (100%) C patients, respectively ($p = 0.10$), with significantly higher total doses in the C group (150 mg vs. 100 mg, $p < 0.01$). Oral steroids were administered for 11 (18%) SC and 10 (91%) C cases ($p = 0.01$). Stricture occurred in 15 (25%) SC and 4 (40%) C patients ($p = 0.66$), with a median of 4 (1–21) and 8 (3–11) dilation sessions, respectively ($p = 0.34$). In analysis 2, esophageal stricture was recorded in 19 of 72 (26%) patients. Median resection length was similar between patients with and without stricture (50 mm vs. 49 mm). Median total triamcinolone dose was 100 mg (18 mg/cm of lesion length) and not associated with stricture formation. Lesions located in the upper esophagus (Ce + Ut) tended to exhibit a higher stricture rate (55%) compared with lower lesions (21%), although this difference did not reach statistical significance ($p = 0.056$). Among the 61 patients receiving steroid prophylaxis, 13 (21%) experienced strictures. However, triamcinolone dose, dose/cm of lesion length, lesion length, circumferential extent, muscularis injury, and lesion location showed no significant associations with stricture development. All 11 circumferential lesions measured ≥ 5 cm. Three (27%) cases developed stricture despite both local and systemic steroid prophylaxis, requiring a mean of 6 endoscopic balloon dilations.

Conclusions Combined steroid prophylaxis lowered overall stricture rates. Under steroid administration, conventional risk factors were no longer associated with stricture development. Upper esophageal locations tended to exhibit higher risk, but no clear independent predictors were identified. All full-circumferential lesions were ≥ 5 cm, with 3 displaying stricture despite combined steroid prophylaxis. Although the sample size limits comparative analysis across lesion lengths, these results show that stricture is not inevitable, even in extensive full-circumferential disease. Therefore, ESD remains a feasible option for selected ≥ 5 cm circumferential lesions under adequate steroid prophylaxis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP209 Role of Endoscopic Retrograde Cholangiopancreatography (ERCP) in the Diagnosis and Treatment of Residual Cystic Duct Stones after Cholecystectomy: A Cases series

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DOI 10.1055/s-0046-1821536

Aims A residual cystic duct stone may occur in up to 40% of patients within a period ranging from 2 days to 25 years after cholecystectomy. Traditionally,

management has relied mainly on surgical intervention. This study aimed to evaluate the role of endoscopic retrograde cholangiopancreatography (ERCP) in the diagnosis and treatment of residual cystic duct stones in cholecystectomized patients.

Methods This was a retrospective descriptive study including all cholecystectomized patients presenting with residual cystic duct stones. Data were collected over a 4-year period, from 2021 to 2025.

Results Among 83 patients who underwent cholecystectomy and presented with post-cholecystectomy syndrome, 31.3% ($n = 26$) were found to have a residual cystic duct stone. The male-to-female ratio was 0.3, with a clear female predominance (76.9%, $n = 20$) compared to males (23.1%, $n = 6$).

The main reasons for hospitalization were isolated hepatic colic in 34.6% ($n = 9$) of cases and acute cholangitis in 65.4% ($n = 17$).

Imaging studies (abdominal ultrasound and Magnetic Resonance Cholangiopancreatography MRCP) revealed one or more stones in the cystic duct in 42.3% ($n = 11$) of patients, associated with residual stones in the common bile duct (CBD) in 69.2% ($n = 18$). Additionally, 15.4% ($n = 4$) of patients presented with isolated CBD dilatation without an identifiable obstruction.

ERCP identified residual cystic duct stones in 100% ($n = 26$) of cases and CBD stones in 73.1% ($n = 19$), among which 19.2% ($n = 5$) were associated with Mirizzi syndrome.

The median size of cystic duct stones was 15 mm [6–20], while that of CBD stones was 16.3 mm [8–25].

Endoscopic extraction of cystic duct stones via ERCP was successfully achieved in 73.1% of cases ($n = 19$). The main causes of failure included stone shape ($n = 2$), normal CBD caliber ($n = 3$), stone size ($n = 1$), and multiple stones ($n = 1$). In cases where extraction failed (26.9%, $n = 7$), a plastic biliary stent was placed to ensure effective drainage before referring patients for surgery.

Conclusions This study highlights the crucial role of ERCP in the management of residual cystic duct stones in cholecystectomized patients, with a therapeutic success rate of approximately 73%. ERCP represents an effective and minimally invasive alternative to surgery, particularly for patients with high operative risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP210V When the Lesion Enters the Terminal Ileum: Traction Makes ESD Possible

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DOI 10.1055/s-0046-1821537

Abstract Text

We present a traction-assisted endoscopic submucosal dissection (ESD) of a 35-mm granular heterogeneous LST involving the ileocecal valve and extending into the terminal ileum. The procedure was initiated from the ileal side using a transparent cap to separate the villi and obtain a stable view for the first mucosal incision and submucosal entry. Dissection then progressed toward the colonic portion of the lesion. Clip-band traction provided optimal exposure across the valve, enabling a safe and controlled resection. The lesion was removed en bloc without complications. Histology confirmed a tubulovillous adenoma with low-grade dysplasia and R0 margins [1–5].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/1bdb6030-dd6a-4d6d-aad5-dddbce57bf16/Uploads/19978_DSE_ileon%20terminal%203%20minutos%20calidad%20media.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Muramoto T, Negishi R, Takita M, Minato Y, Ohata K Successful endoscopic submucosal dissection for a huge lipoma in the terminal ileum.
- [2] Gurram KC, Ly E, Zhang X, Modayil R, Das K, Ramai D, Nithyanand S, Bhumi S, Neppala S, Boinpally H, Stavropoulos S. A novel technique of endoscopic submucosal dissection for circumferential ileocecal valve adenomas with terminal ileum involvement: the "doughnut resection" (with videos). *Surg Endosc*. 2020; 34 (3): 1417–1424. doi:10.1007/s00464-019-07202-1 Epub 2019 Nov 14 PMID: 31728752
- [3] Tanaka H, Oka S, Kunihiro M, Nagata S, Kitamura S, Kuwai T, Hiraga Y, Furudoi A, Tanaka S. Endoscopic submucosal dissection for tumors involving the ileocecal valve with extension into the terminal ileum: a multicenter study from the Hiroshima GI Endoscopy Research Group. *Surg Endosc*. 2023; 37 (2): 958–966. doi:10.1007/s00464-022-09542-x Epub 2022 Sep 7 PMID: 36070146
- [4] Hotta K, Osera S, Shinoki K, Imai K, Ito S, Yamaguchi Y, Kishida Y, Takada K, Ono H. Feasibility of endoscopic submucosal dissection for cecal tumors involving the ileocecal valve or appendiceal orifice. *J Gastroenterol Hepatol*. 2022; 37 (8): 1517–1524. doi:10.1111/jgh.15872 Epub 2022 May 5 PMID: 35481681
- [5] Wang L, Liu ZQ, Zhang JY, Li QL, Chen SY, Zhong YS, Zhang YQ, Chen WF, Qin WZ, Hu JW, Cai MY, Yao LQ, Ma LL, Zhou PH. Feasibility and safety of endoscopic resection for the jejunoileal lesions. *J Gastroenterol Hepatol*. 2024; 39 (3): 527–534. doi:10.1111/jgh.16413 Epub 2023 Nov 16 PMID: 37974384

eP211 Assessment of Faecal Immunochemical Testing (FIT) Triage and Recording Practices in Colonoscopies for Symptomatic Patients

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DOI 10.1055/s-0046-1821538

Aims UK guidance advises Faecal Immunochemical Testing (FIT) should be used to triage all referrals for colonoscopy in patients presenting with lower gastrointestinal symptoms. We aimed to calculate the completeness and accuracy of FIT recording within endoscopy reports, and to evaluate whether endoscopist quality indicators were associated with FIT documentation.

Methods All colonoscopies performed within an NHS Foundation Trust between 1 April and 31 May 2025 were reviewed. Procedures for lower gastrointestinal symptoms were identified, and FIT results recorded in endoscopy reports were compared with those in the local pathology system.

The completeness and accuracy of FIT recording were calculated. Endoscopists were grouped by annual procedure volume (< 100 vs ≥ 100) and caecal intubation rate (< 90% vs ≥ 90%), with associations analysed using chi-squared testing.

Results A total of 1,138 colonoscopies were performed over the 2-month period, of which 566 (49.7%) investigated lower gastrointestinal symptoms, performed by 37 endoscopists. Among these, 442 (78.1%) had a FIT result recorded on the endoscopy report, while a further 45 (10.2%) had a FIT performed but not recorded. Of the 442 reports with a recorded FIT, 425 (96.2%) were accurate; among the 17 (3.8%) inaccuracies, over half (n = 9, 52.9%) involved minor numerical discrepancies (e.g. 40 recorded instead of 45).

Of the 37 endoscopists, 14 (37.8%) performed fewer than 100 colonoscopies annually, accounting for 88 procedures (15.5%), and 9 (24.3%) had a CIR < 90%, performing 167 procedures (29.5%). There was no association between endoscopist annual

procedure volume and the completeness or accuracy of FIT recording (p = 0.79), nor between CIR and FIT recording (p = 0.07).

Conclusions Most (88%) colonoscopies performed for lower gastrointestinal symptoms had a FIT completed prior to endoscopy; however, in 10% of cases, results were not included in the endoscopy report despite being available. FIT values recorded were accurate, and no association was found between FIT completion and endoscopist procedure volumes or CIR.

These findings highlight the need to improve processes surrounding FIT recording in symptomatic colonoscopy; ensuring all are triaged by FIT and that endoscopists can readily access and document results. This would support equitable and efficient utilisation of colonoscopy resources across the UK.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP212V EndoFLIP-guided repeat peroral endoscopic myotomy for refractory type III achalasia: tailoring therapy in a challenging case

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DOI 10.1055/s-0046-1821539

Abstract Text

Peroral endoscopic myotomy (POEM) is the preferred treatment for type III achalasia, as it allows the myotomy of both the lower esophageal sphincter (LES) and the spastic esophageal segment [1]. However, the optimal myotomy length varies among patients [2]. The Endoluminal Functional Lumen Imaging Probe (EndoFLIP) provides assessment of LES distensibility and is increasingly used to tailor myotomy length, especially during re-interventions [3]. We report the case of a 29-year-old man with type III achalasia initially treated with posterior POEM. After early improvement, he developed recurrent dysphagia. During an anterior re-POEM, EndoFLIP identified two areas of reduced distensibility, guiding targeted extension of the myotomy. Final measurements confirmed normalization of distensibility. The patient was discharged two days later and remained asymptomatic at six-month follow-up.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/a94a48db-9f32-4654-8899-5372539a88b0/Uploads/19978_esge_days%20endoflip%20re-poem.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Knight W et al. Early outcomes following EndoFLIP-tailored peroral endoscopic myotomy (POEM): the establishment of POEM services in two UK centers. *Dis Esophagus* 2023; 36 (8):doac110. doi:10.1093/dote/doac110
- [2] Ponds FA et al. Diagnostic methods to measure spastic segment and guide tailored myotomy length in type III achalasia. *Neurogastroenterol Motil* 2020; 32: e13766
- [3] Schoenberg MB et al. Endoscopic management of gastrointestinal motility disorders – Part 1: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2020; 52: 109–123

eP213 Evaluation of axial and lateral resolution and slice thickness in endoscopic ultrasound

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DOI 10.1055/s-0046-1821540

Aims Higher spatial resolution and thinner slice thickness are essential in ultrasound imaging because they reduce out-of-plane contamination and improve micro-lesion detection. These principles also apply to endoscopic ultrasound (EUS), where image quality directly affects diagnostic accuracy and the safety of EUS-guided procedures. However, spatial resolution and slice thickness have rarely been evaluated systematically or quantitatively across EUS devices. This study aimed to quantitatively assess axial and lateral spatial resolution and slice thickness across multiple EUS platforms, depending on imaging frequency and measurement depth.

Methods We used the following endoscope–processor pairings: GF-UCT260 with EU-ME2/EU-ME3 (Olympus, Japan) and Aplio i800 (Canon, Japan); and EG-580UT/EG-740UT with SU-1 (Fujifilm, Japan). Spatial resolution and cyst

model delineation were evaluated using the phantom (Kyoto Kagaku N-365 multipurpose phantom, Japan), and slice thickness was evaluated using a custom 45° inclined phantom (film: OHM laminate film 100 µm [LAM-FA41003]). [Spatial resolution] axial/lateral resolution were evaluated using wires (diameter 0.05 mm, spacing 0.5, 1, 2, 3, and 4 mm) at measurement depths of 15, 30, and 50 mm.

[Cyst delineation] Cyst models (1, 2, 3, and 4 mm) were evaluated at measurement depths of 10, 30, and 50 mm.

[Slice thickness] Ultrasound beams were vertically incident, and the longitudinal width (X) of the hyperechoic band generated in the inclined direction on the image was measured. Because the inclination was 45°, X was defined as the slice thickness (Y mm). Measurements were performed for each frequency and measurement depth (10–60 mm).

Results [Spatial resolution] Axial resolution at measurement depths of 15 and 30 mm was 0.5 mm, while lateral resolution at the same depths was 1–2 mm. At a depth of 50 mm, axial resolution was 1 mm, and lateral resolution was 4 mm or unmeasurable. In all devices and under all conditions, axial resolution was superior to lateral resolution. The performance was nearly equivalent across all endoscopes and processor.

[Cyst delineation] Cyst models with diameters of 1, 2, 3, and 4 mm were detectable at a measurement depth of 10 mm, and those with diameters of 2, 3, and 4 mm were detectable at 30 mm. At a depth of 50 mm, all cysts were non-detectable. The performance was nearly equivalent across all endoscopes and processor.

[Slice thickness]

Slice thickness reached its minimum at a scope-specific focal depth. For the Olympus GF-UCT260 scope, the focal depth was 30 mm, with minimum values of 1.55 mm (12 MHz, EU-ME2), 1.52 mm (THE-R, EU-ME3), and 1.66 mm (d11, Aplio i800). In contrast, for the Fujifilm SU-1 processor, the focal depth was 20 mm, with minimum slice thicknesses of 1.63 mm (THE-8.0, EG-580UT) and 1.87 mm (12 MHz, EG-740UT). These findings indicate that the depth at which slice thickness is minimized differs among devices. Across all systems, slice thickness increased at both shallower and deeper depths relative to the focal depth. At 10 mm, slice thickness ranged from 4.33–4.86 mm (EU-ME2), 4.97–5.23 mm (EU-ME3), and 3.65–4.25 mm (Aplio i800) for GF-UCT260, and 1.98–3.74 mm (EG-580UT), 2.22–3.34 mm (EG-740UT) on the SU-1 processor. At 60 mm, values ranged from 3.90–4.60 mm (EU-ME2), 3.05–4.55 mm (EU-ME3), and 3.70–3.95 mm (Aplio i800) for GF-UCT260, and 3.72–5.22 mm (EG-580UT), 6.47–6.99 mm (EG-740UT) on the SU-1 processor [1–6].

Conclusions In EUS, spatial resolution is maintained at depths ≤ 30 mm but declines at 50 mm. Slice thickness is lowest at a scope-specific focal depth and increases at shallower and deeper levels. Thus, targets away from the focal depth may become partially embedded within the slice, raising the risk of off-target sampling and bleeding. Aligning the lesion with the focal depth and adjusting frequency, scope choice, and approach angle to device-specific characteristics may improve procedural safety, tissue acquisition, and diagnostic accuracy. These findings also enhance endoscopy service quality by providing objective metrics to optimize EUS imaging settings and standardize EUS-guided procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] An Assessment of the Imaging Performance of Hand-Held Ultrasound Scanners Using the Edinburgh Pipe Phantom
- [2] Estimation of Ultrasound Beam Width in the Elevation (Section Thickness) Plane
- [3] A precise, reproducible method for measuring ultrasound probe slice thickness using a Gammex 403 phantom
- [4] Differences in ultrasound elevational beam width (slice thickness) between popular handheld devices
- [5] Establishing Cutoff Values for a Quality Assurance Test Using an Ultrasound Phantom in Screening Ultrasound Examinations for Hepatocellular Carcinoma
- [6] Effects of Ultrasound Section-Thickness on Brachytherapy Needle Tip Localization Error

eP214 Modified endoscopic vacuum therapy for the treatment of gastrointestinal fistulas and perforations: update of a Brazilian center experience

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DOI 10.1055/s-0046-1821541

Aims The aim of this study is to describe the clinical, laboratory and endoscopic characteristics of patients submitted to endoscopic vacuum therapy (EVT) for treatment of fistulas and perforations in the gastrointestinal (GI) tract at a Brazilian tertiary care center, as well as indications, success rate and treatment-related complications (► **Table 1**).

► **Table 1** Results (n = 42)

VARIABLES	n (%) or mean (min-max)
Age	58 (18-86)
Gender	
Male	29 (59.5%)
Site of Perforation	
Proximal Esophagus	16 (37.2%)
Distal Esophagus	16 (37.2%)
Others	11 (25.6%)
Diameter of Orifice (cm)	1.8 (0.5-7)
Cavity Extension (cm)	5.9 (0-18)
Exchanges of the Tube (week)	3.1 (0-16)
Duration of Treatment (days)	24.8 (5-184)
Success Rate of Treatment	36 (83.7%)
Follow-up Time (months)	9.1 (0-30)

Methods This retrospective study included patients referred between November 2019 and April 2025 to the State University of Campinas, Brazil, with perforation or fistula in the GI tract. All patients were admitted and treated with EVT using a low-cost customized nasogastric tube (16 Fr) coated with fenestrated film. This system was connected to the wall suction system and a 20F intravenous catheter was connected to the tube to maintain a negative pressure between -75 and -150 mmHg. Endoscopic control examinations after the end of treatment were performed on outpatient basis. Demographic, diagnosis-related and treatment data were obtained during the follow-up of the patients [1–3].

Results Forty-two patients were submitted to EVT during the study period. One patient was submitted to two EVT at the same time resulting in 43 fistulas treated. Twenty-nine (59.5%) patients were men. The mean age was 58 years (18–86 years). The indication for EVT was divided into three groups: postoperative, spontaneous and iatrogenic, which corresponded to 87%, 9% and 4%, respectively. Regarding the site, most defects occurred in the cervical and distal esophagus (both 37.2%). EVT was the primary therapy in 71.4%. The remaining fistulas had undergone surgical treatment (19%) or placement of a stent (9.52%) previously. In the postoperative cases, fistula was diagnosed within an average of 17.8 days (1–90 days) after surgery. On endoscopic assessment, the diameter of the orifice ranged from 0.5 to 7 cm (mean 1.8 cm) and the cavity extension ranged from 0 (without cavity) to 18 cm (mean 5.9 cm). The tube was changed once a week, with a mean of 3.1 changes (0–16 changes). The mean duration of treatment was 24.8 days (5–184 days) and the total length of hospital stay ranged from 5 to 212 days. During EVT, the patients were evaluated clinically and by laboratory tests. Pre- and post-treatment laboratory analysis revealed a significant decrease in white blood cell counts (WBC)

(7,305 vs 13,380/mm³, $p < 0.001$) and C-reactive protein (CRP) levels (126 vs 40 mg/L, $p < 0.001$). The success rate of treatment was 81.8%, 9.1% failed and 9.1% discontinued treatment. There were no complications or deaths related to the treatment. The mean follow-up time was 9.1 months.

Conclusions Despite the limited number of patients, modified EVT was found to be a safe, low-cost and effective method for the treatment of defects in the GI tract, especially postoperative fistulas. WBC and CRP can be used as parameters indicating improvement during the treatment of these patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cost-effective modified endoscopic vacuum therapy for the treatment of gastrointestinal transmural defects: step-by-step process of manufacturing and its advantages. *VideoGIE*. 2021; Vol 6 (No 12):
- [2] *BJs Open* 2019; 3 (2): 153
- [3] *VideoGIE* 2021; Vol 6 (No): 12

eP215 A UK single centre pilot experience using a novel robotic colonoscopy system

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DOI 10.1055/s-0046-1821542

Problem to solve How to complete colonoscopy for those who fail standard colonoscopy

Innovation Colonoscopy is the gold standard investigation in the lower gastrointestinal tract. However, 75% of patients can experience pain or discomfort with moderate sedation. The application of robotic technology promises to advance and overcome difficulties faced including better utilisation of rooms for advanced procedures and to achieve a complete colonoscopy in patients where pain and technical challenges inhibit progression.

This pilot study, the first at a UK NHS Hospital between January 2023 to April 2025 with an expert endoscopist performing the robotic colonoscopy with the Endotics system. This is a disposable soft robot which employs expand and contract movement to self-propel along the bowel. Patients with failed previous standard colonoscopy along with index diagnostic procedures deemed potentially difficult were recruited. Procedures were performed outside the endoscopy unit similar to an outpatient clinical room.

Results 126 patients were recruited (57M:69F), mean-age 55.5 years over 30 months. The commonest indications for robotic colonoscopy were rectal bleeding (35.7%), failed standard colonoscopy (22.6%) and change in bowel habit (19.1%). 23 patients had failed previous standard colonoscopy with 16 patients achieving completion with subsequent robotic colonoscopy (70% improvement). Average caecal intubation time 36.63 minutes with average total procedure time 48.74 minutes.

Conclusions Robotic colonoscopy provides a safe and effective method in improving comfort and completion-rates, including previously failed colonoscopy. Direct visualisation, biopsy and polypectomy is still possible with robotic colonoscopy. This study has demonstrated a viable alternative to conventional colonoscopy. With no sedation it allows procedures to be conducted outside the traditional endoscopy unit such as outpatients. The study highlights a learning curve to reduce caecal intubation time.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP216 Ablation of gastric inlet patches using a novel cap for precise APC application

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DOI 10.1055/s-0046-1821543

Aims In patients with refractory reflux disease and gastric inlet patches ablation with Argon plasma coagulation (APC) is an established therapeutic tool. The goal is to destroy selectively ectopic mucosa to reduce acid production and improve thereby symptoms and quality of life. But precise application of APC is challenging in the upper esophagus. Aim of the study was to evaluate the feasibility of a novel cap for APC (ArgoCap).

Methods 21 patients (m,f) were treated for gastric inlet patches using a novel transparent cap attached to the tip of the gastroscope which allows for angled positioning of the APC probe (ArgoCap). APC mode was 20W, precise mode. Feasibility, Clinical success and satisfaction with the examination was assessed. Additionally clinical data on reflux symptoms before and after treatment in short time surveillance, complications and adverse events were assessed.

Results APC therapy using the ArgoCap was feasible and technically successful in 100% of all cases. No complications or adverse events were reported. The investigators rated the cap's use as easy to perform.

Conclusions Precise APC therapy using the ArgoCap in the esophagus is feasible and easy to perform for treatment of gastric inlet patches. Further studies are mandatory to analyse the impact on clinical long-term success of the therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP217 Cross-Country Perspectives on Helicobacter Pylori: Less GERD, Less B12 Too

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DOI 10.1055/s-0046-1821544

Aims We evaluated the relationship between *Helicobacter pylori* (HP) gastritis, Gastroesophageal reflux disease (GERD), and serum vitamin B12 levels in patients undergoing upper gastrointestinal endoscopy for dyspeptic symptoms, since the available literature is conflicting. We also looked at the cross-country variations in this regard between Türkiye and India.

Methods This multicenter, retrospective study included patients who underwent endoscopy between December 2024 – November 2025 for dyspeptic symptoms. Demographic, laboratory, and endoscopic findings were collected. HP infection was diagnosed by gastric biopsy or rapid urease test. Data from tertiary centers, one from Türkiye and one from India were used. Categorical variables were compared using the Chi-square or Fisher's exact test, and continuous variables using the independent t-test or Mann-Whitney U test.

Results 1. Baseline Characteristics: Among 500 patients, 275 (55%) were male, with a mean age of 47.5 ± 14 years. Gender distribution was similar between countries ($p = 0.141$).

2. Prevalence of HP Gastritis and Gastric Involvement: HP gastritis was detected in 336 (67.2%) patients, slightly higher than previously reported [1]. HP prevalence was significantly greater in India (76% vs. 62.1%; $p = 0.001$). Intestinal metaplasia was present in 16.7% of the 300 biopsied patients. Pattern of gastric involvement; antral in 404 (80.8%), antral-predominant in 34 (6.8%), corpus involvement was in 62 (12.4%) patients. HP gastritis was more frequent in men ($p = 0.004$) and in individuals < 60 years ($p = 0.011$).

3. Endoscopic Findings: Endoscopic hyperemia, erosions, atrophy, ulcers, nodularity, and duodenitis were all significantly associated with HP infection (all $p < 0.05$). Hiatal Hernia (HH) was seen in 37 (7.4%) patients. HH was more frequent in Indian patients ($p < 0.001$).

► Table 1

Parameter	HP (+)	HP (-)	p-value	Türkiye	India	p-value
HP prevalence, %	67.2	32.8		62.1	76	0.001
GERD, n (%)	99(29.5)	67(40.9)	0.011	104(39.8)	23(11.5)	<0.001
Corpus, n (%)	47(14)	15(9.1)	0.123	36(13.8)	21(10.5)	0.287
Antral predominant, n (%)	30(8.9)	4(2.4)	0.007	4(1.5)	29(14.5)	<0.001
Antrum, n (%)	259(77.1)	145(88.4)	0.003	221(84.7)	150(75)	0.009
Ulcers, n (%)	38(11.3)	9(5.5)	0.036	24(9.2)	22(11)	0.522
B12 deficiency, n (%) (404/372)	84(30.4)	12(9.4)	<0.001	9(5.2)	83(41.5)	<0.001

4. GERD: GERD was diagnosed in 166 (33.2%), and was less common in HP-positive individuals (29.5 % vs. 40.9%; OR 0.605, 95 % CI 0.401–0.893; $p = 0.011$) similar to a recent study [2]. GERD was more frequent in patients with corpus involvement ($p = 0.007$). GERD was more common in Türkiye (39.8 % vs. 11.5%; $p < 0.001$).

5. Vitamin B12 Levels and Deficiency: Mean vitamin B12 levels were significantly lower in HP-positive patients (334 ± 193 vs. 418 ± 198 ng/L; $p < 0.001$). Vitamin B12 deficiency was more frequent in HP-positive patients (30.4 % vs. 9.4%; $p < 0.001$), consistent with prior reports [3–5]. Serum B12 deficiency was markedly higher in India (41.5 % vs. 5.2%; $p < 0.001$). Hemoglobin levels were similar across all groups. Serum B12 levels were lower in HP-positive Turkish patients, but the deficiency was lesser than in Indian patients.

Factors associated with B12 deficiency: More common with corpus involvement ($p = 0.023$)

The key findings of the study have been summarised in the ► Table 1.

Conclusions In this cross-country study, *Helicobacter pylori* infection was highly prevalent in dyspeptic patients and consistently associated with endoscopic abnormalities. Although GERD was common overall, it was less frequent in HP-positive patients, suggesting a protective effect in both groups studied. HP-positive patients have lower vitamin B12 levels, particularly with corpus-predominant gastritis. These findings highlight the need to consider both nutritional impact and reflux patterns when managing HP gastritis across different populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaptan K, Beyan C, Ural AU, Cetin T, Avcu F, Gülşen M, Finci R, Yalçın A. *Helicobacter pylori*—is it a novel causative agent in Vitamin B12 deficiency? Arch Intern Med 2000; 160 (9): 1349–53. doi:10.1001/archinte.160.9.1349
- [2] Ali H., Shariq T., Naseeb F. et al. Prevalence of Vitamin B12 Deficiency Among H. Pylori-positive Patients Presenting with Functional Dyspepsia at a Tertiary Care Hospital in Karachi. SN Compr. Clin. Med. 7: 366 2025. doi:10.1007/s42399-025-02175-w
- [3] Tükel N, Aliustaoğlu M. The Frequency of Vitamin B12 Deficiency in Patients with *Helicobacter Pylori* Infection and the Relationship Between *Helicobacter Pylori* and Vitamin B12 Deficiency. EJMA 2024; 4 (2): 85–89. doi:10.14744/ejma.2024.40085
- [4] Scida S, Russo M, Miraglia C, Leandro G, Franzoni L, Meschi T, De' Angelis GL, Di Mario F. Relationship between *Helicobacter pylori* infection and GERD. Acta Biomed 2018; 89 (8-S): 40–43. doi:10.23750/abm.v89i8-S.7918
- [5] Dutta AK, Reddy VD, Iyer VH, Unnikrishnan LS, Chacko A. Exploring current status of *Helicobacter pylori* infection in different age groups of patients with dyspepsia. Indian J Gastroenterol 2017; 36 (6): 509–513. doi:10.1007/s12664-017-0810-0

eP218 Lumen-apposing metal stent for benign prepyloric stenosis: a case report

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DOI 10.1055/s-0046-1821545

Aims/Purpose: Guidelines recommend treating benign gastric outlet obstruction with serial balloon dilations. However, dilation has usually a transient effect. Self-expanding metal stent (SEMS) placement is a valid alternative, but the rate of migration is high, especially when the stenosis is short. We present a case of a prepyloric stenosis from caustic ingestion treated by balloon dilation followed by lumen-apposing metal stent (LAMS) placement during the same session.

Methods: Three months after caustic ingestion, a 66 year old patient developed a gastric outlet obstruction syndrome. EGD showed a stomach filled by solid/liquid contents and a tight, prepyloric stenosis. After prolonged starving and drainage by naso-gastric tube, EGD was repeated, and confirmed the prepyloric stricture, which allowed only the passage of a guidewire-assisted catheter. Contrast injection and fluoroscopy showed that the length of the stenosis was about 10 mm. A wire and balloon were advanced and pneumatic dilation up to 15 mm was performed with good effect. Subsequently, we decided to deploy a 15x10 mm LAMS through the dilated stricture and was anchored to the surrounding gastric mucosa by application of two metallic clips. The scope was then able to be passed easily into the duodenum.

Results: We observed almost immediate symptom resolution and the patient was able to tolerate a liquid diet from day 1 and a solid diet from day 3. No further episodes of vomiting occurred. On follow-up contrast radiography after 48 hours, smooth gastric contrast emptying into the duodenum through the prepyloric stent was observed. Follow up EGD was performed after one week and the LAMS was correctly in place and easily passable with the endoscope.

Conclusion: LAMS placement is being performed for an increasing number of clinical benign and malignant conditions. Our clinical case describing an off-label use of LAMS suggests that this type of stent may be a valuable option for a benign short stricture due to its short length and wide flanges, which could reduce the risk of migration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP219V Bridging the Gap for High-Risk Patients: EUS-Guided Radiofrequency Ablation of a pNET in Cirrhosis

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DOI 10.1055/s-0046-1821546

Abstract Text

The authors present a case of a 61-year-old male with alcohol-related cirrhosis, Child A, and large esophageal varices. Laboratory tests revealed thrombocytopenia (28,000/ μ L), prolonged prothrombin time (19.1 seconds), and fibrinogen of 99 mg/dL. Surveillance contrast-enhanced CT identified a 17 mm lesion in the pancreatic tail showing arterial contrast uptake. EUS-guided biopsy revealed a grade 1 pancreatic neuroendocrine tumor (pNET). Given the high surgical risk, a multidisciplinary team proposed EUS-guided radiofrequency ablation (RFA). During the procedure, after precise positioning of a 19G needle within the target lesion, 3 overlapping ablation applications were performed. Immediate intra-procedural imaging showed complete loss of contrast enhancement [1, 2].

EUS-RFA is an effective minimally invasive option for pNETs, mainly in high-risk patients.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/d393d7a3-34a7-4b91-9654-f307f6f39ca1/Uploads/19978_TA_EUS.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khoury T et al. "Safety and efficacy of endoscopic ultrasound-guided radiofrequency ablation for pancreatic neuroendocrine neoplasms: Systematic review and meta-analysis." *Digestive Endoscopy* 36 (4): 2024; 395–405
- [2] Rizzatti G et al. "Endoscopic ultrasound-guided radiofrequency ablation for treatment of pancreatic neuroendocrine tumors: Multicenter prospective study." *Endoscopy International Open* 13. continuous publication. 2025;

eP220 Feasibility and Efficacy of Spray Coagulation for Radiation Proctopathy: A Retrospective Study in a Tertiary Center

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DOI 10.1055/s-0046-1821547

Aims 1) Evaluate the effectiveness of snare tip Coagulation Spray in the treatment of radiation proctopathy.

2) Evaluate adverse events (AEs) related to the procedure, including pain, bleeding, and strictures, and the number of sessions required to achieve clinical effectiveness.

Methods This retrospective study was conducted at Instituto do Câncer do Estado de São Paulo between January and December 2024.

Inclusion criteria were patients over 18 years old with a confirmed diagnosis of chronic radiation proctopathy and rectal bleeding.

Exclusion criteria included severe coagulopathies, inadequate bowel preparation, or incomplete data.

Data were obtained from electronic medical records. Technical success was defined as achieving complete hemostasis without the need for additional techniques. Clinical efficacy was determined by the absence of bleeding within 30 days after the procedure. Adverse events were categorized as early ($\leq$ 48 hours) or late ($>$ 48 hours).

Results Eighteen patients were included. The total number of sessions was 32. Two patients died due to oncological comorbidities. Of the 16 patients analyzed, 7 patients (43.8%) underwent two sessions, 6 patients (37.5%) one session, 2 patients (12.5%) three sessions, and 1 patient (6.2%) received four sessions to achieve complete hemostasis.

Technical success was 100%, and clinical success was 87.5%. Non-adverse events were recorded.

Conclusions Non-contact monopolar coagulation spray using a snare tip, is a safe and effective treatment for chronic radiation proctopathy. With a high technical and clinical success rate and an absence of associated adverse events.

Coagulation Spray represents a viable and economical alternative to argon plasma coagulation, especially in resource-limited settings [1–5].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lenz L, Rohr R, Nakao F, Libera E, Ferrari A. Chronic radiation proctopathy: A practical review of endoscopic treatment. *World J Gastrointest Surg.* 2016; 8 (2): 151–60. doi:10.4240/wjgs.v8.i2.151 PMID: 26981189 PMID: PMC4770169
- [2] Grodsky MB, Sidani SM. Radiation proctopathy. *Clin Colon Rectal Surg.* 2015; 28 (2): 103–11. doi:10.1055/s-0035-1547337 PMID: 26034407 PMID: PMC4442718
- [3] Lee JK, Agrawal D, Thosani N, Al-Haddad M, Buxbaum JL, Calderwood AH, Fishman DS, Fujii-Lau LL, Jamil LH, Jue TL, Khashab MA, Law JK, Naveed M, Qumseya BJ, Sawhney MS, Storm AC, Yang J, Wani SB. ASGE guideline on the role of endoscopy for bleeding from chronic radiation proctopathy. *Gastrointest Endosc.* 2019; 90 (2): 171–182.e1. doi:10.1016/j.gie.2019.04.234 Epub 2019 Jun 22 PMID: 31235260
- [4] Abu-Sbeih H, Tang T, Ali FS, Ma W, Shatila M, Luo W, Tan D, Tang C, Richards DM, Ge PS, Thomas AS, Wang Y. Clinical Features and Management of Acute and Chronic Radiation-Induced Colitis and Proctopathy. *Cancers (Basel).* 2023; 12 15 (12): 3160. doi:10.3390/cancers15123160 PMID: 37370770 PMID: PMC10296205
- [5] Cadena-Aguirre D, Lenz L, Lima MS, Pombo AAM, Balbinot RS, Safatle-Ribeiro AV, Maluf-Filho F. A novel treatment for radiation proctopathy using monopolar spray coagulation with a polypectomy snare tip. *Endoscopy.* 2025; 57 (S 01): E519–E520. doi:10.1055/a-2598-4404 Epub 2025 May 28 PMID: 40436410 PMID: PMC12119197

eP221V G-POEM in the Treatment of Severe Gastroparesis Associated With Systemic Sclerosis: A Case Report

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DOI 10.1055/s-0046-1821548

Abstract Text

Between 50–80% of patients with Systemic Sclerosis (SSc) develop gastric involvement, with gastroparesis being a common manifestation. We report a 36-year-old woman with SSc presenting with early satiety, postprandial vomiting, and significant weight loss. Endoscopy was normal, but contrast studies and gastric scintigraphy confirmed severe delayed gastric emptying. Dietary measures and optimized prokinetic therapy provided no relief. Due to refractory symptoms, G-POEM was performed under deep sedation. The procedure included a 15-mm mucosotomy, creation of a submucosal tunnel, pyloromyotomy, and closure with TTS clips, without complications. The patient was discharged after 48 hours and demonstrated sustained symptom resolution at 12 months. This case highlights G-POEM as a feasible therapeutic option for SSc-related gastroparesis [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/d6aa5df7-ab75-4e03-aa26-42948cce1d99/Uploads/19978_G_POEM%20.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khashab MA, Wang AY, Cai Q. AGA Clinical Practice Update on Gastric Peroral Endoscopic Myotomy for Gastroparesis: Commentary. *Gastroenterology* Volume 164 (Issue 7): 2023; Pages 1329–1335
- [2] Khashab MA, Wang AY, Cai Q. AGA Clinical Practice Update on Gastric Peroral Endoscopic Myotomy for Gastroparesis: Commentary. *Gastroenterology* Volume 164 (Issue 7): 2023; 1329–1335.e1516
- [3] Martinek J, Hustak R, Mares J et al. Endoscopic pyloromyotomy for the treatment of severe and refractory gastroparesis: a pilot, randomised, sham-controlled trial *Gut* 2022; 71: 2170–2178

eP222 Primary Gastric Melanoma Presenting as a Subepithelial Tumor: A Rare Case Report

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DOI 10.1055/s-0046-1821549

Background: Primary gastric melanoma (PGM) is extremely rare and often presents with non-specific gastrointestinal symptoms or incidental findings. Because there are no standardized diagnostic guidelines, confirmation by histopathology and exclusion of an extra-gastric primary site are essential.

Case presentation: A 33-year-old woman was referred for evaluation of a 4-cm mucosal elevation at the gastric antrum, initially suspected to be a subepithelial lesion. Endoscopy revealed an oval bulge with positive tenting and rolling signs and a negative cushion sign. Contrast-enhanced abdominal CT revealed a 3.7-cm, well-circumscribed, heterogeneously enhancing mass with preserved mucosa. Endoscopic ultrasonography revealed a 3.38 × 2.14-cm hypoechoic, heterogeneous lesion with irregular margins arising from the muscularis propria. Under a presumptive diagnosis of gastrointestinal stromal tumor, a laparoscopic antrectomy with Billroth-II reconstruction was performed. Histological examination revealed rhabdoid, epithelioid, and spindle cell components with scattered melanin pigments. Immunohistochemistry demonstrated positivity for HMB-45, Melan-A, PRAME, and cathepsin and negativity for S-100 and SOX-10, confirming malignant melanoma. Next-generation sequencing revealed the absence of driver mutations. Dermatological evaluation, including biopsy of a benign nevus, and whole-body 18F-FDG PET/CT excluded cutaneous or other primary origins and demonstrated no metastasis. A diagnosis of primary gastric melanoma was established. The patient recovered uneventfully and was followed up without adjuvant therapy.

Conclusion: PGM can mimic gastric subepithelial lesions on endoscopy and EUS, potentially leading to misdiagnosis as gastrointestinal stromal tumors. Awareness of this rare entity, along with careful use of histopathology and immunohistochemistry, is crucial for accurate diagnosis and appropriate surgical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP223 Learning Curve for Endoscopic Retrograde Appendicitis Therapy: a multicenter retrospective study with different levels of trainees

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DOI 10.1055/s-0046-1821550

Aims Endoscopic retrograde appendicitis therapy (ERAT) is a minimally invasive treatment for appendicitis, widely practiced in China. Clarifying the learning curve, especially among endoscopists with varying endoscopic experience, including endoscopic retrograde cholangiopancreatography (ERCP) skills, is essential for its broader adoption. This study aimed to determine the number of cases required to achieve procedural proficiency across different experience levels, as well as to examine the disparities in technical success rates and clinical outcomes.

Methods In this multicenter retrospective study, 655 consecutive patients who had undergone ERAT from October 2021 to March 2024 were analyzed. All ERAT procedures were performed by nine trainees from three hospitals, categorized into novice, non-ERCP experience, and ERCP experience groups. Outcomes included technical/clinical success, procedure time, pain, recurrence, length of stay, and adverse events. Learning curves were evaluated with CUSUM based on procedure time.

Results Technical and clinical outcomes improved with increasing experience in all groups. Proficiency occurred at the 31st case in the ERCP group, the 55th in the non-ERCP group, and the 59th in novices. The ERCP group had the highest technical (99.1%) and clinical (94.4%) success ($P = 0.023$; 0.093), the shortest mean procedure time (20.9 min; $P < 0.001$), and the lowest recurrence

($P < 0.001$). Complication rates, including intraoperative and postoperative adverse events, were low and similar across groups (0.8%–2.6%, $P > 0.05$). Postoperative pain and hospital stay decreased with experience ($P < 0.001$).

Conclusions Endoscopists with extensive prior endoscopic experience, particularly in ERCP, achieve proficiency in ERAT more rapidly. Structured training programs tailored to different experience levels are essential to support the safe and effective global implementation of ERAT.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP224 Anastomotic Actinomycosis Mimicking Recurrent Gastric Cancer: A Rare Diagnostic Pitfall

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DOI 10.1055/s-0046-1821551

Background: Gastrointestinal actinomycosis is rare, difficult to recognize, and often mimics malignancy. Gastric involvement is exceptional and is described in only a small number of reports [1–4]. Postoperative sites, such as gastric anastomoses, are particularly susceptible to *Actinomyces* infection due to altered mucosal integrity [5].

Case Presentation: A 76-year-old man with a history of gastric cancer treated surgically and with chemotherapy more than five years earlier, considered cured, underwent routine endoscopic surveillance. Endoscopy revealed a normal esophagus and loops, but the laterolateral gastric anastomosis showed irregular, ulcerated, infiltrative lesions with yellowish exudates, raising strong suspicion of tumor recurrence. Multiple biopsies were taken.

Histopathology demonstrated foveolar hyperplasia, ulceration, intestinal metaplasia, granulation tissue, mixed inflammatory infiltrate, and *Helicobacter pylori*. Critically, *Actinomyces* colonies were identified on one fragment, with no dysplasia or malignancy. Findings were diagnostic of anastomotic actinomycosis.

Management and Outcome: The patient received standard therapy consisting of high-dose intravenous penicillin, followed by prolonged oral amoxicillin, as recommended for gastrointestinal actinomycosis [1]. Endoscopic follow-up showed complete healing of anastomotic lesions. Persistent *H. pylori* infection was treated subsequently with eradication therapy.

Discussion: Actinomycosis can masquerade as malignancy due to its infiltrative pattern, fibrosis, ulceration, and the presence of sulfur granules. Several gastric cases initially suspected as cancer were later reclassified as actinomycosis on biopsy [2–4]. Anastomotic involvement is documented in postoperative infections and requires prolonged penicillin-based therapy [5]. Early recognition avoids unnecessary oncologic interventions.

Conclusion: Anastomotic actinomycosis is an important differential diagnosis for suspicious anastomotic lesions in patients with prior gastric cancer. Histopathology is essential for accurate diagnosis, and penicillin-based therapy ensures excellent outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] McDonald NM, Luz LP, Amin K, Amateau SK. Recalcitrant Gastric Actinomycosis Treated With Over-the-Scope Clip. *ACG Case Rep J* 2022; 9: e00798. doi:10.14309/crj.0000000000000798
- [2] Patel N, Woodcock H, Patel K et al. Gastric actinomycosis: a rare endoscopic diagnosis. *Endoscopy* 2010; 42: E218–E219. doi:10.1055/s-0030-1255721
- [3] Lee SH, Kim HJ, Kim HJ et al. Primary gastric actinomycosis diagnosed by endoscopic biopsy. *Gastrointest Endosc* 2004; 59 (4): 586–589. doi:10.1016/S0016-5107(04)00009-4
- [4] Ziogou A, Giannakodimos I, Giannakodimos A et al. Primary Actinomycosis of the Stomach: A Review of the Literature for a Rare Entity. *J Pers Med* 2025; 15 (3): 116. doi:10.3390/jpm15030116
- [5] Valour F, Sénéchal A, Dupieux C et al. Actinomycosis: etiology, clinical features, diagnosis, treatment, and management. *Infect Drug Resist* 2014; 7: 183–197. doi:10.2147/IDR.S39601

eP225 Title:Endoscopic Radial Incision and Cutting for Intra-gallbladder Stenosis: The First Clinical Practice

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DOI 10.1055/s-0046-1821552

Abstract Text

Endoscopic Radial Incision and Cutting (ERIC) has been widely used in the management of benign gastrointestinal and anastomotic stricture [1, 2]. However, there is no report of ERIC treating intra-gallbladder stenosis yet. Gallbladder stenosis may be encountered, in pace with the application of various methods for gallbladder-preserving managements. Herein, the stenosis was completely resolved via ERIC, thereby facilitating gallbladder stones removal afterwards. A 28-year-old female presented with a several-year history of intermittent upper abdominal pain. The patient was diagnosed with gallstones, that cholangioresonance imaging revealed a gourd-shaped gallbladder containing multiple stones in both chambers (Figure 1a). Although cholecystectomy was recommended at the local hospital, she declined and was subsequently transferred to our department for gallbladder-preserving cholelithotomy via natural orifice transluminal endoscopic surgery (Video 1).

The procedure was initiated via a transrectal approach to access the abdominal cavity. A gourd-shaped gallbladder was identified (Figure 1b). Intraluminal examination revealed significant stenosis with cicatricial mucosal changes (Figure 1c). ERIC was then performed using an IT knife to incise the stricture, allowing adequate passage of the endoscope (Figure 1d). This was followed by complete removal of all distal stones. Following thorough irrigation of the gallbladder cavity, which confirmed the absence of residual calculi (Figure 1e), both the gallbladder and intestinal access sites were securely closed with endoclips. No intraoperative and postoperative adverse event was observed. On three-month follow-up, an abdominal computed tomography (CT) demonstrated significantly improvement in gallbladder morphology (Figure 1f). In this case, we demonstrate the feasibility and efficacy of ERIC for treating intra-gallbladder stenosis. Moreover, ERIC resolved intra-gallbladder stenosis, consequently reducing the recurrence of gallstones. This study highlights the potential for further exploration and application in similar cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Muto M, Ezoe Y, Yano T, Aoyama I, Yoda Y, Minashi K et al. Usefulness of endoscopic radial incision and cutting method for refractory esophagogastric anastomotic stricture (with video). *Gastrointestinal Endoscopy* 2012; 75 (5): 965–72
- [2] Mitani Y, Hirohashi K, Tamaoki M, Yokoyama A, Katada C, Ueda A et al. Efficacy and safety of radial incision and cutting for nonsurgical refractory benign esophageal stricture. *Endoscopy International Open* 2024; 12 (9): E1035–E42

eP226 Micro hole balloon improves prevention of stricture after esophageal endoscopic submucosal dissection

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DOI 10.1055/s-0046-1821553

Problem to solve stricture after esophageal endoscopic submucosal dissection

Innovation A new device (micro hole balloon) enabling safer, more efficient local triamcinolone(TA) injection in less time.

Results [Method] This study included 85 patients who underwent endoscopic submucosal dissection (ESD) for esophageal cancer with local TA injection at a single high-volume center between January 2021 and August 2025. Exclusion criteria were as follows: history of esophageal surgery (5 cases), additional surgical resection after endoscopic treatment (4 cases), residual recurrence after photodynamic therapy, ESD, and chemoradiotherapy (6 cases), and incomplete follow-up(3 cases). A comparative analysis was performed between 45 cases treated with a local injection needle from January 2021 to February 2024 and 22 cases treated with a micro-hole balloon from March 2024 to August 2025. [Result] Lesion localization was in the cervical or upper thoracic esophagus in 17 cases (25.6%). Circumference of the post-resection ulcer was greater than or equal to 3/4 in 57 cases (85.1%), and circumferential resection were performed in 8 cases (11.9%). The median tumor size was 52 mm. Muscle layer injury was observed in 21 cases (31.3%) during ESD. Oral steroid administration was combined in 39 cases (58.2%), and stenosis was observed in 14 cases (20.9%). No significant differences were observed between the needle injection and balloon injection groups in patient characteristics such as tumor location (localized/circumferential), tumor length, malignancy grade, or muscle layer injury. Oral steroid administration tended to be less frequent in the balloon group, but this difference was not statistically significant (64.4% vs. 45.5%; $P=0.189$). Procedure time was significantly shorter in the balloon group (310 sec vs. 69 sec; $P<0.01$). Both the stenosis rate (28.9% vs. 4.5%; $P=0.025$) and the number of balloon dilation required to achieve stenosis (9 vs. 4; $P=0.012$) were significantly lower in the balloon group. No complication was observed in TA injection in the balloon group.

Conclusions The micro hole balloon is considered a highly useful device, enabling safe, efficient, and rapid administration of TA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP227 Utilizing a dedicated nurse specialist improves quality of ERCP service delivery

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DOI 10.1055/s-0046-1821554

Aims To analyse impact of nurse specialist utilization in quality improvement of ERCP service

Methods 1640 ERCPs were reviewed from our prospective database between 2022 and 2025. Standard KPIs were calculated and complications were noted from the database collected by ERCP nurse specialist. The results then were compared with KPIs published by ESGE, BSG and JAG guide to quality and safety standards [1, 2].

Results Our nurse specialist followed and maintained database of 98% (2024/25), 95% (2023/24) and 75% (2022/23) of ERCP procedures done in last 3 years. Out of total 1640 ERCPs, 60% of procedures (n=981) were performed for patients out of our hospital and 6% of procedures were done under GA in endoscopy department.

Our CBD cannulation (88.5%, 89.9% and 90.5% in serial studied years) and stone clearance (74 to 84.4% in serial studied years) rates achieved the standard recommended KPIs. Also post ERCP pancreatitis (5.5%), bleeding (0.63%), cholangitis (3.5%), perforation (0.27%), mortality (0.48%) (1) and overall complication in 5.6% of patients fulfilled the recommended KPIs.

Conclusions More than half of ERCPs performed in our hospital were external referrals. Presence of a dedicated nurse specialist in our department ensured timely triage, pre-assessments and meticulous post-procedural follow-ups, especially for out of hospital patients. Continuous monitoring of KPIs from the database, maintained by nurse specialist in accordance with international

guidelines, helped in quality improvement and better service delivery to the patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bishay K et al. "Adverse Events Associated with Endoscopic Retrograde Cholangiopancreatography: Systematic Review and Meta-Analysis." *Gastroenterology* 2024. doi:10.1053/j.gastro.2024.10.033 Accessed 30 Dec. 2024
- [2] Shi D., Guo S., Bao Y. et al. Diagnosis and management of type II endoscopic retrograde cholangiopancreatography-related perforations: a multi-center retrospective study. *BMC Gastroenterol* 24: 241 2024. doi:10.1186/s12876-024-03335-3

eP228 Endoscopic Retrograde Cholangiopancreatography (ERCP) is Associated with Higher Overall Mortality Risk and Longer Hospitalization in the Elderly: A systematic review and Meta-analysis

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DOI 10.1055/s-0046-1821555

Aims ERCP is increasingly being performed in older adults but there is limited data on its technical success and procedure-related adverse events across different age strata. In this systematic review and meta-analysis, we aimed to synthesize the available evidence on ERCP outcomes stratified by age groups (<65, 65–79, 80–89, ≥90 years).

Methods A comprehensive literature search was performed using OVID MEDLINE, EMBASE, and the Cochrane Library from database inception to October 2025. Studies were included if they enrolled patients aged ≥65 years who underwent diagnostic or therapeutic ERCP. Outcomes included technical success, major procedural adverse events (e.g. post-ERCP pancreatitis (PEP), bleeding, perforation, cholangitis, cardiopulmonary complications), length of stay, and mortality. Study-level proportions were pooled using a random-effects meta-analysis with Freeman–Tukey double arcsine transformation and inverse-variance weighting. Heterogeneity was assessed using the I^2 statistic, and subgroup differences across four predefined age strata were evaluated using the Chi-square test.

Results Fifty-two studies ($n = 26,926$) were included in this review. The pooled estimate for technical success was 92 % (95 % CI 91–94 %; $I^2 = 95$ %). By age subgroups, technical success was 95 % (95 % CI 93–97 %) for <65, 91 % (88–94 %) for 65–79, 91 % (88–94 %) for 80–89, and 87 % (79–94 %) for ≥90, with significant subgroup differences ($p = 0.01$). Across included studies, the pooled proportion of any adverse event after ERCP was 9.0 % (95 % CI 7.0–10.0 %; $I^2 = 89$ %) with no statistically significant subgroup differences ($p = 0.36$). The pooled estimate for PEP 3.0 % (95 % CI 3.0–4.0 %; $I^2 = 81$ %) and for cardiopulmonary complications was 1.0 % (1.0–2.0 %, $I^2 = 81$ %). There were statistically significant differences between subgroups, with elderly patients having lower rates of PEP ($p = 0.01$) and higher rates of cardiopulmonary complications ($p = 0.002$). Other pooled estimates were: 2.0 % (1.0–2.0 %; $I^2 = 61$ %) for bleeding, 0.0 % (0.0–0.1 %; $I^2 = 21$ %) for perforation, and 1.0 % (1.0–1.0 %; $I^2 = 66$ %) for cholangitis, with no statistically significant subgroup differences. The pooled length of hospital stay was 10.53 days (95 % CI 8.38–12.67; $I^2 = 100$ %). Subgroup pooled means were: <65 years = 7.53 days (95 % CI 5.84–9.23), 65–79 years = 13.19 days (9.05–17.33), 80–89 years = 7.63 days (3.58–11.69), and ≥90 years = 21.96 days (11.91–32.01). Subgroup differences were statistically significant ($p = 0.004$). Overall mortality after ERCP was low at 1.0 % (95 % CI 0.0–1.0 %; $I^2 = 84.3$ %). By age subgroups, mortality was 0.0 % (0.0–0.1 %) for <65 years, 1.0 % (0.0–1 %) for 65–79 years, 1.0 % (0.0–0.1 %) for 80–89 years, and 4 %

(1–8 %) for ≥90 years. The test for subgroup differences was significant ($p = 0.0008$).

Conclusions Older age is associated with lower technical success, although the overall rate of technical success remains relatively high. Age is also associated with increased risk of cardiopulmonary complications, longer hospital stay, and higher mortality, especially among patients ≥90 years. Conversely, the risk of PEP is consistently lower among older patients. These findings highlight the importance of careful patient selection, individualized risk assessment, and meticulous preoperative optimization to enhance the safety and efficacy of ERCP in the elderly population. Future studies should specifically focus on patient-oriented outcomes in the elderly population undergoing ERCP.

Conflicts of Interest Dr. Jeffrey Mosko received research support from Boston Scientific and ERBE, and speaker honouraria and consulting fees from Boston Scientific, ERBE, Fuji, Medtronic, Pendopharm, and Steris.

eP229 Endoscopic Retrograde Cholangiopancreatography (ERCP) Outcomes in Nonagenarians compared to Older Adults (65–89): A Systematic Review with Meta-analysis

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DOI 10.1055/s-0046-1821556

Aims ERCP is being increasingly performed in elderly patients. Clinical decision-making for ERCP in very old patients (≥90 years) requires comparative analysis of the procedural success and procedural adverse events compared to younger old adults (65–89 years). In this study, we compared procedural success, periprocedural adverse events, mortality, and length of hospitalization between patients aged ≥90 years and those aged 65–89 years as a reference group.

Methods A comprehensive literature search was performed using OVID MEDLINE, EMBASE, and the Cochrane Library from database inception to October 2025. Studies were included if they enrolled patients aged ≥65 years who underwent diagnostic or therapeutic ERCP. Outcomes of interest included technical success, major procedural adverse events (post-ERCP pancreatitis (PEP), bleeding, perforation, cholangitis, cardiopulmonary complications), length of stay, and mortality. We pooled head-to-head data from studies reporting outcomes separately for ≥90 and 65–89-year cohorts. Random-effects meta-analysis (inverse-variance) was used to calculate pooled relative risk (RR) ratios for dichotomous outcomes and mean difference for continuous outcomes.

Results Nine studies compared outcomes between patients aged ≥90 years ($n = 642$) and those aged 65–89 years ($n = 3,878$). There was no statistically significant difference in technical success between the ≥90-year and 65–89-year groups (RR 0.95, 95 % CI 0.90–1.01; $I^2 = 81$ %; $p = 0.08$). Similarly, no significant differences were observed in peri- or post-procedural adverse events, including bleeding (RR 1.43, 95 % CI 0.75–2.75; $I^2 = 0$ %; $p = 0.28$), PEP (RR 0.70, 95 % CI 0.39–1.24; $I^2 = 0$ %; $p = 0.23$), perforation (RR 2.88, 95 % CI 0.92–9.07; $I^2 = 0$ %; $p = 0.07$), or cardiopulmonary complications (RR 2.60, 95 % CI 0.95–7.12; $I^2 = 42$ %; $p = 0.06$). However, the mean length of hospital stay was significantly longer among nonagenarians compared to those aged 65–89 years (mean difference = 7.44 days, 95 % CI 5.21–9.66; $I^2 = 0$ %; $p < 0.001$). Mortality was also significantly higher in the ≥90-year group (RR 3.39, 95 % CI 2.16–5.30; $I^2 = 5$ %; $p < 0.001$).

Conclusions ERCP demonstrates comparable technical success and rates of periprocedural adverse events in patients aged ≥90 years and those aged 65–89 years. However, nonagenarians experience significantly longer hospital stays and higher post-ERCP mortality. These findings highlight the importance

of thorough pre-procedural evaluation, individualized risk stratification, and enhanced post-procedural monitoring and discharge planning to optimize safety and outcomes in very elderly patients undergoing ERCP. Research focusing on patient-outcomes in the elderly undergoing advanced procedures is warranted.

Conflicts of Interest Dr. Jeffrey Mosko received research support from Boston Scientific and ERBE, and speaker honoraria and consulting fees from Boston Scientific, ERBE, Fuji, Medtronic, Pendopharm, and Steris.

eP230 Biodegradable Stents in ERCP: Improving Safety, Cost-Efficiency, and Environmental Impact – A Single-Center Study

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DOI 10.1055/s-0046-1821557

Aims Biodegradable stent (BDS) represents a promising alternative to conventional plastic stents in Endoscopic Retrograde Cholangiopancreatography (ERCP) that may reduce repeat procedure, cost, and environmental impact. This study evaluated technical success, clinical outcomes, cost, and carbon footprint associated with BDS use across biliary and pancreatic indications in a real world, single center setting.

Methods We conducted a 5-year retrospective review of ERCPs with BDS from October 2020 to October 2025, evaluating indications, procedural success, and clinical outcomes along with cost and estimated carbon footprint (5 kg-CO₂e/procedure).

Results In 152 patients (biliary 78, pancreatic 74) biodegradable stent placement achieved 100% (152/152) technical success with full fluoroscopic visibility. For biliary cases, the primary indication was post-cholecystectomy bile leak (57/78, 73%) with 96.5% (55/57) resolution. Minor indications included bridge to cholecystectomy (10/78), CBD strictures (4/78), edematous ampulla (1/78), gallbladder perforation (1/78), and unexplained biliary dilatation (1/78), all achieving 100% clinical success, with cholangitis prevention in 75% (3/4) of cases.

Pancreatic intervention was mainly for post ERCP pancreatitis prophylaxis (71/74; 96%) with (55/71; 77.5%) success rate, and 2.8% (2/71) mortality due to severe pancreatitis. Rare cases of duct dysfunction (2/2) and stricture (1/1) achieved 100% success.

Total cost savings were estimated at £101,021 by avoiding 74 abdominal X-rays, some of which may have required an OGD, and 78 ERCPs for stent removal, resulting in an estimated carbon footprint reduction of 649 kg CO₂e.

Conclusions Biodegradable biliary and pancreatic stents deliver a safe and effective ERCP with excellent outcomes, lower healthcare cost and offers a truly patient centred and environmentally sustainable approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP231 Retrospective analysis of body composition in patients with walled-off pancreatic necrosis at the tertiary center of The Institute of Pancreatic Diseases: a single-centre experience

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DOI 10.1055/s-0046-1821558

Aims Background: According to the Revised Atlanta classification [1], walled-off pancreatic necrosis (WOPN) is a mature, encapsulated necrotic collection that develops ≥ 4 weeks after necrotizing acute pancreatitis (AP), occurring in 1%–9% of cases overall and up to 15% of cases of severe AP.

Aim: To analyze the body composition of these patients with different tools available at our Institute.

Methods We collected demographic and anthropometric data—including weight, height, body mass index (BMI), Bioelectrical Impedance Analysis (BIA), hand-grip strength (dynamometry), and the Malnutrition Universal Screening Tool (MUST)—from 64 patients treated for WOPN at our Institute between May 2022 and November 2025, retrospectively. These measures were used to evaluate body composition and malnutrition risk. Two groups were formed based on treatment type: endoscopic ultrasound (EUS)-guided lumen-apposing metal stent (LAMS) insertion (n = 42) versus conservative (n = 22).

Results Among the 64 patients, 41 (64.06%) were male (28 (66.67%) and 13 (59.09%) in the intervention and the conservative group, respectively). The median age was 54.5 years (56.5 and 50.5 years, respectively). BIA was performed in 21 LAMS (50%) and 12 conservatively treated patients (54%). The mean extracellular water (ECW) ratio was 0.396 in the LAMS group and 0.388 in the conservative group, respectively (67% of LAMS patients and 50% of conservative patients had a high ECW ratio). These elevated ECW ratios, due to fluid collections, substantially distorted BIA-derived muscle parameters (FFMI, SMI, and skeletal muscle mass), indicating that BIA is not a reliable method for assessing body composition in WOPN patients. Hand-grip strength was assessed in 11 LAMS patients: 82% (n = 9) showed weak grip strength, and 18% normal values. In contrast, among 16 conservatively treated patients, only 31% (n = 5) showed weak grip strength, while 44% (n = 7) had normal and 25% (n = 4) strong measurements. MUST scores indicated higher malnutrition risk in the LAMS group (n = 32): 41% low, 13% moderate, and 47% high risk. In the conservative group (n = 21), the majority had low risk (76%), while only 10% and 14% were classified as moderate and high risk, respectively. Overall, LAMS patients demonstrated poorer general condition, weaker muscle strength, and higher malnutrition risk, likely related to longer hospitalization and greater weight loss from impaired oral intake.

Conclusions Nutritional monitoring in WOPN—especially in interventional (LAMS) patients—is crucial due to their high risk of malnutrition and sarcopenia. As BIA results are confounded by fluid collections, CT-based body composition assessment is more reliable. Optimal care requires a multidisciplinary team comprising physiotherapists, dietitians, and psychologists; future randomized studies are needed to refine management strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Banks PA, Bollen TL, Dervenis C et al. Classification of acute pancreatitis—2012: revision of the Atlanta classification and definitions by international consensus. . Gut 2013; 62: 102–111

eP232 Endoscopic drainage of walled-off pancreatic necrosis (WOPN): experience from a single center

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DOI 10.1055/s-0046-1821559

Aims Walled-off pancreatic necrosis (WOPN) is a complication of acute pancreatitis that often requires endoscopic intervention for drainage and necrosectomy. The choice of stent type for endoscopic drainage remains debated, with double-pigtail plastic stents and lumen-apposing metal stents (LAMS) being the most commonly used options.

The aim of our study was to evaluate the efficacy and safety of endoscopic drainage in the management of walled-off pancreatic necrosis (WOPN) in our center

Methods We conducted a single-center retrospective descriptive study in our gastroenterology, and interventional endoscopy department, including patients admitted for endoscopic drainage of symptomatic WOPN between 2019 and 2025. Epidemiological, clinical, endoscopic, and outcome data were analyzed

Results Among the 63 patients followed for acute necrotizing pancreatitis, eleven developed a symptomatic WOPN, an incidence of 17.4%. The mean age was 59 years (range :38-73). The sex ratio was 2,7 (M/F = 8/3). WOPN was a complication of biliary acute necrotizing pancreatitis of in 81.8% of cases (N=9), alcoholic in 9.1% of cases (N=1) and metabolic in 9.1% of cases (N=1). All patients were symptomatic. Abdominal pain was the most common symptom in all patients (N=11), followed by vomiting (N=7). Two patients reported significant weight loss. Eight patients had a complicated form: compression of a neighboring organ (N=5), or infected WOPN (N=3). The compression was either vascular (N=4) causing segmental portal hypertension, or biliary (N=1) with overt jaundice. The WOPN was single in 72.7% of cases (N=8). The location was in the pancreatic body, allowing access through the posterior gastric wall. The average size was 9.4 cm (range:4,7-20cm). During esophagogastroduodenoscopy or duodenoscopy, gastric stasis was noted in 2 patients, gastric mucosal bulging in 4 patients, and congestive gastric or bulbar mucosa in all patients. One patient had bulbar stenosis. Under endoscopic ultrasound (EUS), the WOPN had heterogeneous content with at least 30% necrotic material in 45.5% of cases (N=5), and more than 60% in 18% of cases (N=2).

All patients underwent drainage under endoscopic ultrasound guidance. The route was transgastric in all cases. A cystotome was used to create the gastro-cystic fistula in all patients, followed by hydrostatic dilation in 4 patients. Two double-pigtail plastic stents (7 Fr) were placed in seven patients, abiflanged metal stent in three patients, and a HOT AXIOS covered metal stent kit in one patient. Drainage was successful in all patients, with purulent fluid discharge in 5 patients and partial collapse of the WOPN under endoscopic ultrasound control. Regarding outcomes, one patient had persistent pain requiring two subsequent endoscopic necrosectomy sessions, three patients had disconnected pancreatic duct syndrome, requiring prolonged placement of plastic stents. The remaining patients had favorable outcomes with stent removal.

Conclusions Endoscopic drainage of walled-off pancreatic necrosis (WOPN) is a safe and effective option, with a success rate of 100% in our series. The use of endoscopy ultrasound improves procedural safety and patient selection. careful monitoring for complications remains essential to optimize outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP233 Performance and Safety of Precut Sphincterotomy in Difficult ERCP

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DOI 10.1055/s-0046-1821560

Aims Precut sphincterotomy is an essential access technique for selective biliary cannulation in difficult endoscopic retrograde cholangiopancreatography (ERCP). It requires advanced endoscopic expertise and is usually reserved for experienced centers. Although its effectiveness is established, its use varies according to practice patterns and operator experience. The aim of this study was to evaluate the technical approach, success rate, and safety of precut sphincterotomy in our center.

Methods We conducted a retrospective single-center study including all patients who underwent precut sphincterotomy between January 2019 and December 2025. Difficult cannulation was defined according to ESGE criteria (≥ 5 minutes, ≥ 5 attempts, or repeated pancreatic cannulation). Demographic, clinical, anatomical, and procedural data were analyzed. Cannulation time was not systematically recorded.

Results Among 825 ERCPs performed during the study period, 48 required precut sphincterotomy (5.8%). The mean age was 68.1 years, and 58.3% were female. Indications included malignant obstruction in 52% (25/48) and cholelithiasis in 43.7% (21/48). The papilla was normal in 91.7% and diverticular in ~8%.

Techniques used included papillotomy (68.8%), infundibulotomy (29.2%), and transpancreatic precut (2.1%). Additional sphincterotomy to extend the precut was required in 43.8%.

Selective biliary cannulation was achieved using guidewire-assisted technique in 89.6% and double-wire technique in 6.3%. Two patients (4.1%) had cannulation failure, resulting in an overall success rate of 93.8%. Precut success was similar for lithiasis and malignant indications (100% vs 92%, $p = 0.49$), suggesting that the indication did not influence procedural success.

Post-ERCP pancreatitis occurred in 8.3%. Three mild intraprocedural bleeding events (6.25%) were controlled endoscopically, and one severe hemorrhage (2.1%) corresponded to a post-ERCP episode of moderate hematemesis. The patient developed aspiration-induced respiratory distress during endoscopy, requiring ICU admission. One Stapfer type II perforation (2.1%) was managed conservatively with antibiotics, monitoring, and CT evaluation. No patient required surgical intervention.

Conclusions In our experience, precut sphincterotomy was required in 5.8% of ERCPs and achieved a high success rate of 93.8%, with an acceptable safety profile consistent with published data. This study supports the feasibility and effectiveness of precut sphincterotomy in difficult biliary access cases in an intermediate-volume center, highlighting the importance of technical expertise and close post-procedural monitoring.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP234 Endoscopic Polyp Size Measurement Using a Laser-Based Sizing Probe: A Pilot Study

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DOI 10.1055/s-0046-1821561

Aims Accurate size measurement of colorectal polyps is important for planning polyp resection and post-polypectomy surveillance. This study evaluated a through-the-scope laser-based probe for polyp size measurement during colonoscopies.

Methods A prospective pilot study was conducted at CHUM in which polyps in enrolled patients were attempted to be measured with a laser-based probe. The primary outcome was the accuracy of laser-based polyp measurements, assessed as mean bias using microscopic sizing as the reference. Secondary outcomes included agreement with the reference, technical success rate, reasons for failed measurement, and per-polyp measurement time [1–5].

Results Among 323 patients, laser-based measurement was attempted for 237 polyps; 149 had a microscopic size measurement. The technical success rate of the laser-based probe was 40.9% (97/237; 95% CI, 34.6%–47.5%), with mean time per measurement of 1:35. Accounting for specimens that could not be resected en bloc for microscopic measurements, a total of 41/149 (27.5%; 95% CI, 20.7%–35.5%) had paired laser-based and microscopy measurements for the primary analysis. Laser-based measurement demonstrated accurate sizing with minimal bias (-0.10 mm, 95% CI -0.30 to 0.10 ; $P = 0.328$) and met the 0.4 mm non-inferiority margin. Agreement with the reference was high (ICC = 0.91 ; 95% CI, 0.83 – 0.95), with near-perfect categorical concordance ($\kappa = 0.85$) and 95.1% accuracy (39/41; 95% CI, 82.2–99.2). Bland–Altman limits of agreement ranged from -1.34 mm to 1.14 mm.

Conclusions Laser-based measurement provided accurate polyp sizing when obtained. However, the technical success rate was limited by longer measurement times and device issues.

Conflicts of Interest Daniel von Renteln has received research funding or support from ERBE Elektromedizin GmbH, Boston Scientific, Dova Health, Ventage, and Fujifilm, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Medtronic, and Dova Health. Roupin Djinbachian has received speaker fees from Fujifilm. Robert Battat has received

speaker, consulting, and moderator fees from Bristol Myers Squibb, Johnson and Johnson Innovative Medicine, AbbVie, Takeda, Ferring, Celltrion, Pfizer, Merck, and Eli Lilly. He has served on advisory boards for Celltrion, AbbVie, Pfizer, Janssen, Bristol Myers Squibb, Takeda, Merck, and Eli Lilly. Additionally, he has received educational grants and sponsorships from AbbVie, Johnson and Johnson Innovative Medicine, Pfizer, Eli Lilly, Amgen, Pendopharm, Kye Pharma, Merck, Celltrion, Organon, and Takeda. Robert Battat has also received travel support from Pfizer, Celltrion, Johnson and Johnson Innovative Medicine, and AbbVie. Christina Dane Daoud has received consultant and speaker fees from Takeda, and consultant fees from Pendopharm. The remaining authors declare that they have no conflict of interest.

References

- [1] Shimoda R, Akutagawa T, Tomonaga M, Murano T, Shinmura K, Yoshioka M et al. Estimating colorectal polyp size with a virtual scale endoscope and visual estimation during colonoscopy: Prospective, preliminary comparison of accuracy. *Digestive Endoscopy* [Internet] 2022; 34 (7): 1471–7. Available from. doi:10.1111/den.14351
- [2] Utsumi T, Horimatsu T, Nishikawa Y, Teramoto A, Hirata D, Iwatate M et al. Factors associated with inaccurate size estimation of colorectal polyps: A multicenter cross-sectional study. *Journal of Gastroenterology and Hepatology* [Internet] 2021; 36 (8): 2224–9. Available from. doi:10.1111/jgh.15464
- [3] Kerbage A, Souaid T, Singh K, Burke CA. Taking the guess work out of endoscopic polyp measurement. *Journal of Clinical Gastroenterology* [Internet] 2025 Available from. doi:10.1097/mcg.0000000000002161
- [4] Kerbage A, Souaid T, Singh K, Burke CA. Taking the guess work out of endoscopic polyp measurement. *Journal of Clinical Gastroenterology* [Internet] 2025 Available from. doi:10.1097/mcg.0000000000002161
- [5] Chaptini L, Chaaya A, Depalma F, Hunter K, Peikin S, Laine L. Variation in polyp size estimation among endoscopists and impact on surveillance intervals. *Gastrointestinal Endoscopy* [Internet] 2014; 80 (4): 652–9. Available from. doi:10.1016/j.gie.2014.01.053

eP235 A Retrospective Study on the Current Status, Efficacy, and Safety of Sedatives (Midazolam, Remimazolam, Propofol) Used During Lower Gastrointestinal Endoscopy in a Local Private Clinic

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DOI 10.1055/s-0046-1821562

Aims In recent years, there has been a growing demand for reducing discomfort during gastrointestinal endoscopy. In Japan, remimazolam, a new ultra-short-acting benzodiazepine sedative, has been approved for insurance coverage, and its usefulness in promoting earlier awakening compared to conventional midazolam has been reported. The purpose of this study was to retrospectively compare the sedative effects, awakening and recovery times, and safety of midazolam (M group), remimazolam (R group), and propofol (P group) during lower gastrointestinal endoscopy at a single local private clinic. Additionally, we aimed to investigate whether early awakening facilitated by these sedatives contributed to a reduction in staff overtime hours.

Methods This was a single-center, retrospective study. A total of 121 cases of lower gastrointestinal endoscopy performed at our clinic between September 19, 2025, and November 7, 2025, were included. Patients were categorized into three groups based on the sedative used: M group, R group, and P group. We compared the sedative effect, the time from the end of the endoscopy to discharge from the recovery room, and the incidence of complications. Furthermore, we compared staff overtime hours during the two-month periods of September–October 2022 (when midazolam was primarily used) and September–October 2025 (when remimazolam was increasingly utilized).

Results A total of 121 cases were included, with examinations performed by three endoscopists. The M group consisted of 76 cases (mean age 65.0 years, 44.7% male), the R group 27 cases (mean age 56.4 years, 44.7% male), and the

P group 18 cases (mean age 49.7 years, 33.3% male). The mean examination times were 12.5 minutes for the M group, 11.9 minutes for the R group, and 13.7 minutes for the P group, with no significant difference observed among the three groups.

Regarding sedative effect, the proportion of patients who reported "no memory at all" was 100% in the M group, 66.7% in the R group, and 72.2% in the P group. Those who reported "some memory" were 0%, 33.3%, and 27.8%, respectively. The M group showed a significantly stronger sedative effect compared to both the R group and the P group ($p < 0.05$). No significant difference was found between the R group and the P group.

The mean time to discharge from the recovery room was 143.1 minutes for the M group, 18.0 minutes for the R group, and 12.7 minutes for the P group. The M group had a significantly longer recovery time compared to both the R group and the P group ($p < 0.05$). Furthermore, the R group also had a significantly longer recovery time compared to the P group ($p < 0.05$).

Regarding complications, one case of hypotension and vomiting was observed in the M group, and one case of hypotension in the P group. No complications were observed in the R group.

The average overtime hours for six staff members at our clinic were 541.5 minutes in September–October 2022 and 438.5 minutes in September–October 2025. Although there was a trend towards decreased overtime hours, no statistically significant difference was observed ($p = 0.18$).

Conclusions The propofol group exhibited the shortest time to discharge from the recovery room. The remimazolam group demonstrated a significantly shorter recovery time than the midazolam group and could be used without complications. In terms of sedative effect, the midazolam group was superior. In the initial cases of remimazolam use in this study, some cases showed insufficient sedative effect, possibly due to initial unfamiliarity or dosage setting. However, its usefulness in promoting earlier awakening was suggested. Future challenges include increasing the number of cases, extending the period of use, and establishing optimal dosing for remimazolam. Although staff overtime hours showed a decreasing trend, a statistically significant difference was not observed, potentially due to factors such as an annual increase in the number of examinations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP236 Melanoma Of Unknown Primary In The Pancreas: A Case Report

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DOI 10.1055/s-0046-1821563

Introduction: Pancreatic melanoma is an extremely rare condition, especially those of unknown primary (MUP), accounting for about 2% of visceral involvement in melanomas.

Case Report: A 43-year-old man with a history of hypertension sought medical attention due to severe epigastric pain radiating to the back, nausea, postprandial fullness, and urinary changes. Laboratory tests revealed elevated ferritin, erythrocyte sedimentation rate, blood glucose, C-reactive protein, and mild leukocytosis. Imaging studies identified a cystic lesion in the head of the pancreas, which had significantly increased in size from 11 mm in 2013 to 51x59x37 mm at the current presentation. Endoscopic ultrasound (EUS) revealed a well-defined, hypochoic, and homogeneous solid lesion, located in head to pancreas body transition, and a fine-needle biopsy guided by EUS (EUS-FNB) was performed. Histopathological and immunohistochemical analysis confirmed the diagnosis of small cells melanoma with neuroendocrine differentiation. Dermatological evaluation and PET-CT did not identify any skin lesions, with uptake limited to the pancreas. Laparoscopy revealed hepatic and peritoneal metastases, confirming metastatic melanoma.

Discussion: This case highlights the diagnostic challenges of pancreatic melanoma, particularly in the absence of skin lesions, and emphasizes the importance of histopathological and immunohistochemical analysis via EUS for an accurate diagnosis. The rarity of primary pancreatic melanoma and the lack of definitive diagnostic criteria necessitate further research to better understand its pathogenesis and optimal management [1–13].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jin Y et al. Melanoma of unknown primary in the pancreas: should it be considered primary? *BMC Surg* 2020; 20 (1): 76
- [2] Liu X et al. Laparoscopic pancreaticoduodenectomy for metastatic pancreatic melanoma: A case report. *Medicine (Baltimore)* 2018; 97 (44): e12940
- [3] Cham J et al. Malignant Melanoma With Neuroendocrine Differentiation: A Case Report and Literature Review. *Front Oncol* 2021; 11: 763992
- [4] Pisani D et al. Neuroendocrine Transdifferentiation in Cutaneous Melanoma: A Case Report and Review of the Literature. *Am J Dermatopathol* 2023; 45 (4): 264–268
- [5] Satturwar S et al. Cytologic features of small cell melanoma. *Diagn Cytopathol* 2022; 50 (2): E63–E70
- [6] Yuan Z et al. Contrast-enhanced ultrasound of pancreatic melanoma: A case report and literature review. *Front Oncol* 2022; 12: 989638
- [7] Nakamura Y et al. Isolated pancreatic metastasis from malignant melanoma: a case report and literature review. *Clin J Gastroenterol* 2019; 12 (6): 626–636
- [8] Guerra F et al. The role of resection for melanoma metastases to the pancreas. *HPB (Oxford)* 2022; 24 (12): 2045–2052
- [9] Egberts F et al. Metastatic melanoma of unknown primary resembles the genotype of cutaneous melanomas. *Annals of Oncology Volume* 25 (Issue 1): 246–250
- [10] Kamposioras K et al. Malignant melanoma of unknown primary site. To make the long story short. A systematic review of the literature. *Crit Rev Oncol Hematol* 2011; 78 (2): 112–26
- [11] Boussios S et al. Melanoma of unknown primary: New perspectives for an old story. *Crit Rev Oncol Hematol* 2021; 158: 103208
- [12] Long G et al. Cutaneous melanoma. *Lancet*. 2023; 402 (10400): 485–502
- [13] Schadendorf D et al. Melanoma. *Nature Reviews. Disease Primers* 2015; 1: 15003

eP237 Single-balloon enteroscopy–assisted closure of a late entero-cutaneous fistula in Roux-en-Y anatomy using argon plasma coagulation, submucosal fibrin glue injection and through-the-scope clips

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DOI 10.1055/s-0046-1821564

Abstract Text

We report the case of a 50-year-old woman with long-standing, steroid-dependent ulcerative colitis who received neoadjuvant chemotherapy followed by subtotal gastrectomy with Roux-en-Y reconstruction for gastric adenocarcinoma. After 4 weeks, she presented to the emergency department with abdominal pain and clinical sepsis; computed tomography (CT) demonstrated free intraperitoneal air with a large perianastomotic fluid collection. She underwent re-operation for suspected anastomotic dehiscence, but no anastomotic or mural defect was identified intraoperatively. The postoperative course was complicated by laparotomy wound dehiscence with bile-stained secretions, managed with negative pressure wound therapy (NPWT). A subsequent CT scan with water-soluble oral contrast showed no extraluminal contrast leakage. Because symptoms and wound output persisted one month after the second surgery despite conservative management, endoscopic evaluation of the anastomoses and duodenal stump was undertaken under general anesthesia using single-balloon enteroscopy (SBE) with CO₂ insufflation and continuous fluoroscopic guidance, permitting retrograde access to the duodenal stump via the

afferent limb. On endoscopic inspection, two discrete defects, each approximately 8 mm, were identified at opposite edges of the stump suture line; endoluminal fluoroscopic contrast injection opacified both tracts, confirming an enterocutaneous fistulous communication. Margin preparation was performed with argon plasma coagulation (APC) in pulsed mode at 30 W. Fibrin glue was then delivered via a 23-gauge needle as submucosal injections in a multi-quadrant fashion around each orifice (2 mL per quadrant) and intratract, for a total of 20 mL. To maintain apposition and support re-epithelialization, six 11-mm through-the-scope (TTS) clips were placed across the defects. The procedure was uneventful. Drain output declined rapidly and reached zero within 72 hours; CT scan at day 7 showed no residual leakage. Oral intake was resumed on day 8, NPWT was discontinued, and the patient was discharged without additional intervention. At 180-day follow-up, she remained asymptomatic with no recurrence. In the setting of Roux-en-Y anatomy and late duodenal stump fistula—where device delivery and effectiveness may limit conventional endoscopic suturing systems, this combined SBE-guided approach (APC margin freshening, targeted submucosal and intratract fibrin sealant, and adjunctive TTS clipping) proved feasible, safe, and promptly effective. Patient selection is key: controlled sepsis and small-to-moderate defects favored success, allowing a minimally invasive rescue that may obviate re-operation while preserving the surgical reconstruction [1–4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Shehab HM, Elasmr HM. Combined endoscopic techniques for closure of a chronic post-surgical gastrocutaneous fistula: case report and review of the literature (with video). *Surg Endosc* 2013; 27 (8): 2967–2970. doi:10.1007/s00464-013-2839-1
- [2] Ito S, Ohgaki K, Kawazoe T et al. Successful Treatment of Refractory Enterocutaneous Fistula After Esophagectomy Using Soft Coagulation by an Endoscopic and Percutaneous Approach: A Case Report. *Anticancer Res* 2023; 43 (6): 2873–2877. doi:10.21873/anticancer.16457
- [3] Moreels TG, Hubens GJ, Ysebaert DK, Op de Beeck B, Pelckmans PA. Diagnostic and therapeutic double-balloon enteroscopy after small bowel Roux-en-Y reconstructive surgery. *Digestion* 2009; 80 (3): 141–147. doi:10.1159/000212074
- [4] Cereatti F, Grassia R, Drago A, Conti CB, Donatelli G. Endoscopic management of gastrointestinal leaks and fistulae: What option do we have? *World J Gastroenterol* 2020; 26 (29): 4198–4217. doi:10.3748/wjg.v26.i29.4198

eP240 Safety of Cryoballoon Ablation for Palliation of Esophageal and Gastroesophageal Junction Cancer

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DOI 10.1055/s-0046-1821567

Aims Endoscopic palliation of malignant dysphagia related to cancer of the esophagus or gastroesophageal junction (GEJ) usually has been accomplished with esophageal stent placement. There is an emerging use of cryotherapy for palliation, although this is center and expertise dependent. We report a novel endoscopic palliation method using nitrous oxide cryoballoon ablation (CbA) for malignant dysphagia.

Background Esophageal cancer commonly causes malignant dysphagia requiring palliative endoscopic therapy. Liquid nitrogen spray cryoablation has been reported as a safe and effective modality for tumor debulking in advanced esophageal cancer, with low rates of serious adverse events. There is currently no data on the use of CbA palliation for malignant dysphagia. CbA can be used in situations where liquid nitrogen cannot be used such as when venting tube placement is not technically possible. We aimed to report on the dosing, efficacy, and safety of CbA for esophageal cancer palliation in a multicenter cohort

Methods We performed a multicenter retrospective review of patients with inoperable esophageal or GEJ cancer who underwent endoscopic CbA for dysphagia palliation at five centers. All procedures utilized the C2 CryoBalloon Ablation System (Merit Medical Systems, South Jordan, UT). Data on key technical parameters were collected. 30-day adverse events were reported and classified by severity. Symptomatic efficacy was assessed by improvement in dysphagia after treatment.

Results Twenty-two patients with mean age 67 [range 44 to 90], 85 % male) with inoperable cancer of the esophagus or gastroesophageal junction (46 adenocarcinoma, 7 squamous cell carcinoma) underwent a total of 50 CbA sessions. Some of the patients were previously treated with esophageal stents. The C2 180° balloon was used in 31 cases, the focal balloon was used in the remainder. The dosing of the cryogen with the 180° balloon ranged from 0.7 to 0.8 mm/sec. The dosing for the focal balloon was 10 sec x 2, 12 sec x 1, 14 sec x 1, and 14 x 3.

There were 2 procedure-related adverse events reported (4 %). There was 1 incident of bleeding requiring endoscopic hemostasis, and 1 stricture requiring dilation. There was 1 death from pulmonary embolism and one transient ischemia attack, both deemed not related to the procedure. There were no perforations. There were two incidents of device malfunction (4 %). Follow-up data on dysphagia was available in 34 of the 50 procedures with improvement noted in 31, no change in 2 patients and worsening in one patient. Some patients had dramatic improvement in dysphagia and luminal disease.

Conclusions Cryoballoon ablation is a safe and well-tolerated palliative therapy for malignant obstruction of the esophagus and gastroesophageal junction. Procedure-related adverse events are uncommon. The results of this retrospective multicenter study will be useful for planning a prospective study to better define patient selection and longer-term response rates.

Conflicts of Interest Pentax consultant Merrit consultant

eP241 Non-inferiority of Tegoprazan to PPIs in H. pylori Eradication: Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1821568

Aims Helicobacter pylori infection contributes to peptic ulcer disease and gastric cancer, making eradication crucial. However, standard therapy with a proton pump inhibitor (PPI) plus antibiotics has shown declining success rates. Tegoprazan is a novel potassium-competitive acid blocker (P-CAB) that producing rapid, meal-independent and CYP2C19-genotype-independent acid suppression.

We performed a meta-analysis to compare the efficacy and safety of tegoprazan-based regimens versus PPI-based regimens for H. pylori eradication.

Methods We systematically searched PubMed, Scopus, Cochrane Library and Web of Science. Eligible randomized and comparative studies evaluated tegoprazan-based versus PPI-based regimens. The primary endpoint was intention-to-treat (ITT) eradication; secondary endpoint was overall adverse events (AEs). Random-effects meta-analysis pooled risk ratios (RR) with 95 % confidence intervals (CI); heterogeneity was assessed with I². Prespecified subgroup analyses were by treatment regimen (triple, dual, other).

Results Eleven studies met inclusion criteria. Eradication efficacy was equivalent between groups (RR 1.01, 95 % CI 0.96–1.05, p = 0.77; I² = 0 %). Subgroups showed no effect modification: triple RR 1.00 (0.92–1.08; I² = 0 %), dual RR 1.02 (0.93–1.12; I² = 0 %), other RR 1.01 (0.93–1.09; I² = 0 %). AEs were similar overall (RR 0.92, 0.82–1.03; p = 0.15; I² = 29.7 %, τ^2 = 0.01). By regimen, dual therapy favored tegoprazan with fewer AEs (RR 0.68, 0.53–0.89; I² = 0 %; p = 0.005), whereas triple (RR 0.93, 0.78–1.12; I² = 23.4 %) and other regimens (RR 1.02, 0.87–1.19) showed no difference.

Conclusions Tegoprazan-based regimens are non-inferior to PPI-based regimens for ITT eradication, with highly consistent results across regimen types. Overall tolerability is at least comparable, and dual-therapy regimens demonstrate significantly fewer AEs with tegoprazan. Tegoprazan is an effective, well-tolerated first-line alternative to PPIs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP242 Phenotypic Restructuring of Ineffective Esophageal Motility: The Transition from Chicago v3 to v4 Declassifies a Cohort Defined by Isolated Weak Swallows and Absence of Peristaltic Failure

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DOI 10.1055/s-0046-1821569

Aims The Chicago Classification version 4 (CCv4) introduced stricter criteria for diagnosing Ineffective Esophageal Motility (IEM), raising the threshold to > 70 % ineffective swallows or $\geq$ 50 % failed peristalsis. This study aimed to evaluate the demographic, clinical, endoscopic, and manometric differences between patients who retained the diagnosis of IEM under CCv4 criteria and those who were declassified from the previous CCv3 definition.

Methods We conducted a retrospective study of patients undergoing High-Resolution Manometry (HRM) at a tertiary care center in Western India between September 2020 and April 2024. Patients meeting CCv3 criteria for IEM were included and re-evaluated using CCv4 criteria. The cohort was divided into two groups: Group 1 (Retained IEM as per CCv4) and Group 2 (Declassified). We compared demographics, clinical symptoms, upper GI endoscopy findings, and HRM metrics—specifically analyzing failed versus weak swallows and peristaltic reserve—between the two groups [1, 2].

Results Out of 101 patients meeting CCv3 IEM criteria, 80 (79 %) retained the diagnosis under CCv4 (Group 1), while 21 (21 %) were declassified (Group 2). There were no statistically significant differences between the groups regarding age, gender, comorbidities, clinical symptoms (dysphagia, regurgitation, chest pain), or endoscopic findings (hiatal hernia, erosive esophagitis). However, manometric profiles differed significantly. Group 1 had a significantly lower mean Distal Contractile Integral (DCI) compared to Group 2 (234.6 vs. 422.7 mmHg · s · cm; p < 0.001). Notably, 64 % of Group 1 patients exhibited failed swallows, whereas Group 2 had zero failed swallows, presenting exclusively with weak swallows (p < 0.0001). Esophageal contraction reserve on multiple rapid swallows (MRS) was not significantly different between the groups (p = 0.114).

Conclusions Application of CCv4 criteria declassified 21 % of patients previously diagnosed with IEM. While the new criteria did not correlate with distinct clinical or endoscopic presentations, they successfully identified a manometrically severe subgroup characterized by lower DCI and the presence of failed contractions. Since failed swallows are associated with poorer bolus clearance, CCv4 appears to select for patients with more profound peristaltic dysfunction who may require distinct management strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Boland K, Abdul-Hussein M, Tutuan R, Castell DO. Characteristics of Consecutive Esophageal Motility Diagnoses After a Decade of Change. J Clin Gastroenterol 2016; 50 (4): 301–306. doi:10.1097/MCG.0000000000000402
- [2] Pakoz ZB, Sari SO, Vatansever S et al. Ineffective esophageal motility assessment in patients with and without pathological esophageal acid reflux. Medicine (Baltimore) 2021; 100 (20): e26054. doi:10.1097/MD.00000000000026054

eP243 Five-Minute vs Six-Minute Withdrawal Time in BBPS ≥ 8 Colonoscopy by Experienced Endoscopists: A Multicentre Randomized Tandem Trial

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DOI 10.1055/s-0046-1821570

Aims Current colonoscopy quality indicators recommend a minimum withdrawal time (WT) of 6 minutes. However, prolonged WT can reduce throughput and may not account for endoscopist experience or bowel preparation quality. Whether a 6-minute WT remains necessary when examinations are performed by experienced endoscopists with excellent preparation is uncertain. We conducted a study among experienced endoscopists and patients with high-quality preparation (Boston Bowel Preparation Scale [BBPS] ≥ 8) to compare a 5-minute WT with a 6-minute WT for adenoma detection rate (ADR) and adenoma miss rate (AMR).

Methods In this multicenter, randomized controlled trial, 423 patients were enrolled from June 2023 to March 2025 across five centers (Wuxi People's Hospital; Jiangsu Province People's Hospital; Xuzhou First People's Hospital; the Second Affiliated Hospital of Soochow University; Taizhou People's Hospital). Each colonoscopy involved two withdrawals performed by the same endoscopist. Participants were randomized to a 5-minute WT group (first withdrawal 5 minutes, second withdrawal 6 minutes; $n = 214$) or a 6-minute WT group (first withdrawal 6 minutes, second withdrawal 6 minutes; $n = 209$). A timer standardized withdrawal speed. Primary outcomes were ADR and AMR.

Results Baseline demographic and clinical characteristics were similar between groups (Table 1). Procedural metrics—including bowel preparation quality, cecal intubation rate, cecal intubation time, cecal intubation distance, use of abdominal compression, and patient repositioning—were comparable (Table 2). Overall ADR did not differ between the 5-minute and 6-minute groups (39.7% vs 43.5%; $P = 0.606$). ADR during the first withdrawal (36.0% vs 36.8%; $P = 0.934$) and the second withdrawal (10.7% vs 13.4%; $P = 0.492$) was likewise similar. AADR showed no significant differences overall (4.7% vs 5.3%; $P = 0.954$), during the first withdrawal (4.7% vs 5.3%; $P = 0.956$), or during the second withdrawal (0.5% vs 0.5%; $P = 0.999$). Similarly, polyp detection rate (PDR) and sessile serrated lesion detection rate (SSLDR) did not differ between groups. The patient-level AMR was numerically lower in the 5-minute group than in the 6-minute group (27.1% vs 30.8%; $P = 0.567$), indicating fewer missed adenomas with the 5-minute WT, although this difference was not statistically significant. A similar trend was observed for lesion-level AMR, which was also lower in the 5-minute group than in the 6-minute group (20.2% vs 23.7%; $P = 0.188$). There were no significant differences in advanced adenoma miss rate (AAMR), polyp miss rate (PMR), or sessile serrated lesion miss rate (SSLMR) (all $P > 0.05$) (► Table 1).

Conclusions Among experienced endoscopists performing colonoscopy with excellent bowel preparation (BBPS ≥ 8), shortening WT from 6 to 5 minutes did not reduce ADR and was associated with a comparable AMR. A 5-minute WT appears acceptable under these conditions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP244 Polypectomy in Patients with Limited Life Expectancy in an Irish Tertiary Referral Centre, Current Practice Assessed Against New BSG Guidance

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DOI 10.1055/s-0046-1821571

Aims The benefit of polypectomy during colonoscopy in an elderly, comorbid population remains unclear. Clinicians regularly struggle with balancing the often-uncertain natural history of polyp progression to symptomatic malignancy against the elevated risks of complications relating to diagnostic colonoscopy and polypectomy, and associated patient outcomes. The British Society of Gastroenterology (BSG) recently issued guidance to facilitate informed decision-making regarding polypectomy in those with limited life expectancy. We aimed to audit our baseline practice at the Mater Misericordiae University Hospital (MMUH) in the > 80 -year-old population and assess whether application of the BSG guidance would affect our polypectomy rate in this cohort [1].

Methods In this audit we retrospectively studied electronic health records at MMUH for all patients aged > 80 years of age who were referred for (and subsequently underwent) colonoscopy and polypectomy from January 2024 to January 2025.

Data examined included procedure indication, comorbidities (analysed using the Charlson Comorbidity Index), the size/characteristics of polyps removed, complications (e.g., bleeding, perforation), and re-admissions/emergency visits within 90 days.

Compliance with new BSG recommendations was assessed.

Results Following pre-assessment, 58 (28M/30F, median age 81) patients proceeded to lower GI endoscopy (45 full colonoscopy, 13 left sided colonoscopy).

The Charlson Co-Morbidity Index was median 6 (range 4-9).

25/58 patients (43.1%) proceeded to polypectomy – 11 patients (1-5mm polyp removed), 3 patients (6-9mm), 7 patients (10-19mm), 4 patients (> 20 mm). 12/58 (20.6%) patients had repeat scope recommended for ongoing polyp surveillance.

► Table 1 Detection and miss rate in the two groups

		5-minute (n = 214)	6-minute (n = 209)	P- value
ADR, n (%)	Overall ADR	85(39.7%)	91(43.5%)	0.606
	The first withdrawal	77(36.0%)	77(36.8%)	0.934
	The second withdrawal	23(10.7%)	28(13.4%)	0.492
AADR, n (%)	Overall AADR	10(4.7%)	11(5.3%)	0.954
	The first withdrawal	10(4.7%)	11(5.3%)	0.956
	The second withdrawal	1(0.5%)	1(0.5%)	0.999
AMR, n (%)	Patient-AMR	23/85(27.1%)	28/91(30.8%)	0.567
	Lesion-AMR	35/173(20.2%)	40/169(23.7%)	0.188
AAMR, n (%)	Patient-AAMR	1/10(10.0%)	1/11(9.1%)	0.944
	Lesion-AAMR	1/14(7.1%)	1/15(6.7%)	0.998

Application of the new BSG guidance would have *averted polypectomy* in 14/25 (56%) of patients.

Of the non-guideline adherent cases, anti-coagulation was withheld in 6/14 (43%) to facilitate polyp resection

Conclusions Application of the recent BSG guidance on polypectomy in patients > 80 years old with limited life expectancy would significantly reduce the polypectomy rate in our patient cohort.

This would have important implications not only for patient safety but also resource use in endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] BSG/ACPGBI guidance on the management of colorectal polyps in patients with limited life expectancy

eP245 Long-term Outcomes After Endoscopic Eradication Therapy for Barrett's Neoplasia: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1821572

Aims Endoscopic eradication therapy (EET), combining endoscopic mucosal resection (EMR) and radiofrequency ablation (RFA), is the standard treatment for Barrett's oesophagus (BO) with dysplasia and early oesophageal adenocarcinoma. Nevertheless, the long-term durability of complete remission and the risk of recurrence remain only partially defined. This systematic review and meta-analysis evaluated the long-term outcomes of EET for BO-related neoplasia.

Methods We systematically searched MEDLINE (n = 1364), Embase (n = 443), and the SCOPUS (n = 2805) from inception to 20 July 2025 for studies reporting long-term outcomes following EET for BO neoplasia. Primary endpoint was recurrence rates of IM and dysplasia/cancer during surveillance. Proportions were pooled using a random-effects model (DerSimonian-Laird) with logit transformation.

Results Eight studies including 3,367 patients and ~7,500 person-years of follow-up met inclusion criteria; 75% were high-quality studies. Median follow-up was 39.5 months. Pooled CR-IM was 86.4% (95% CI: 81.2–90.5%; 8 studies, N = 3,245) and CR-D was 94.0% (95% CI: 91.2–96.1%; 8 studies, N = 3,245). Among patients achieving CR-IM, intestinal metaplasia recurred in 14.0% (95% CI: 8.0–23.5%; 7 studies, N = 1,997) and dysplasia/cancer in 5.6% (95% CI: 3.5–8.9%; 8 studies, N = 3,028). Any recurrence occurred in 18.5% (95% CI: 12.3–26.8%; 8 studies, N = 3,028), corresponding to an annual dysplasia recurrence rate of ~1.5 per 100 person-years. Heterogeneity was considerable across outcomes ($I^2 = 76$ –94%). In pooled treatment comparisons, dysplasia/cancer recurrence was lower after EMR + RFA than RFA alone (4.2% [95% CI: 2.8–6.3%] vs 8.9% [95% CI: 5.1–15.1%]; relative risk [RR] 2.1, 95% CI: 1.3–3.4; $p = 0.022$). Baseline low-grade dysplasia was associated with lower dysplasia/cancer recurrence than HGD/T1a (3.1% [95% CI: 1.8–5.2%] vs 6.8% [95% CI: 4.1–11.0%]; RR 2.2, 95% CI: 1.1–4.4; $p = 0.043$). Progression to advanced disease (T1a) occurred in 6–12% of recurrences, mostly managed endoscopically. Leave-one-out analyses showed pooled dysplasia/cancer recurrence remained within 4.8–6.2%, and omitting the most influential study (Cotton 2017) changed estimates by only 0.8%, indicating no single study drove the results. Temporal analyses suggested a learning-curve effect, with CR-IM improving from ~75% to 90–95% and dysplasia recurrence falling from ~12%

to 3–5% between 2009 and 2025. Baujat plots identified Cotton 2017 as contributing 42.5% of total heterogeneity, while large recent cohorts (Wolfson 2022, van Munster 2022) strongly influenced but also stabilised pooled estimates. Meta-regression bubble plot for relationship between BO length and dysplasia recurrence rate showed weak positive but non-significant association ($R^2 = 0.18$, $p = 0.23$).

Conclusions EET has shown long-term durability following successful eradication of BO with neoplasia. Although recurrence is not uncommon, it is usually detected early and amenable to further endoscopic treatment. Our findings do not support frequent surveillance within the first year and suggest a personalised surveillance strategy based on the patient's risk of recurrence, in order to minimise the burden of surveillance gastroscopy [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Desai M, Rösch T, Sundaram S, Chandrasekar VT, Kohli D, Spadaccini M, Hassan C, Repici A, Sharma P. Systematic review with meta-analysis: the long-term efficacy of Barrett's endoscopic therapy-stringent selection criteria and a proposal for definitions. *Aliment Pharmacol Ther.* 2021; 54 (3): 222–233. doi:10.1111/apt.16473 Epub 2021 Jun 24. Erratum in: *Aliment Pharmacol Ther.* 2021 Nov;54(9):1223. 10.1111/apt.16635 PMID: 34165205

eP246 Endoscopic treatment for primary neoplasia of the gastroesophageal junction: a multi-center retrospective study

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DOI 10.1055/s-0046-1821573

Aims The incidence of gastro-oesophageal junction (GEJ) adenocarcinoma continues to rise worldwide, underscoring the need for evidence-based management of early neoplasia in this anatomically complex region. The GEJ represents the interface between two adjacent organs with distinct treatment recommendations. The presence of Barrett's epithelium may introduce additional variability in biological behaviour and treatment response. This study aimed to determine predictors of curative resection in Siewert type II GEJ lesions and to compare the outcomes of EMR and ESD performed in this area.

Methods This retrospective two-centre cohort study included consecutive patients who underwent endoscopic resection for early Siewert type II GEJ neoplasia between 2011 and 2025 at Cambridge University Hospital and the Maria Skłodowska-Curie National Research Institute of Oncology in Warsaw. Lesions with macroscopically visible Barrett's oesophagus were classified as Barrett's-related. The primary endpoint was curative resection rate, defined as R0 resection (negative deep margin for EMR; deep and lateral margins for ESD), histological grade $\leq$ G2 and absence of lymphovascular invasion. Secondary endpoints included local recurrence of high-grade dysplasia or adenocarcinoma and surgery within 12 months from endoscopic resection. A multivariable logistic regression model adjusted for age, sex, and Barrett's status. Comparisons between EMR and ESD, and between Barrett's- and non-Barrett's-related lesions, were performed using χ^2 tests and. A p value < 0.05 was considered statistically significant [1–5].

Results A total of 158 patients were included (mean age 69, $\pm$ 10.7 years, 76.6% male). Final histology revealed 137 adenocarcinomas and 21 high-grade dysplasia; 96 EMR and 62 ESD procedures were performed. Curative resection was achieved more frequently in Barrett's-related neoplastic lesions than in those without Barrett's (71.7% vs 53.8%; $p = 0.026$). In the multivariable logistic model, the presence of Barrett's epithelium was an independent predictor of curative resection (OR 2.54; 95% CI 1.16–5.63; $p = 0.020$), whereas age, sex, and resection technique were not significant. Lesions without Barrett's mucosa demonstrated a more aggressive profile, with higher rates of poor differentiation (G3: 21% vs 13%), a greater prevalence of lymphovascular invasion (26%

vs 8 %) and a higher rate of submucosal invasion (47.6 % vs 19.1 %), compared with Barrett-related lesions. Among Barrett's-related Siewert type II lesions (n = 106), curative resection rates were comparable between EMR and ESD (71.2 % vs 73.1 %; p = 0.86), with similar rates of local recurrence (23.1 % vs 23.8 %) and additional surgery (5.1 % vs 4.2 %). There was a trend towards higher curative resection in non-Barrett's lesions with ESD compared to EMR (61.1 % vs 37.5 %, p = 0.12) and lower recurrence rate (7.1 % vs 25.0 %; p = 0.297), although these differences did not reach statistical significance due to limited sample size.

Conclusions Primary GEJ neoplasia without visible Barrett's exhibited lower rate of curative endoscopic resection likely in keeping with deeper histological invasion and more frequent lymphovascular invasion compared with Barrett-related lesions. Our data suggest that ESD should be the preferred resection modality for GEJ associated lesion in the absence of Barrett's epithelium.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Weusten BLAM, Bisschops R, Dinis-Ribeiro M, di Pietro M, Pech O, Spaander MCW et al. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. Endoscopy [Internet]. 2023; cited 2023 Dec 26 55 (12): Available from <https://pubmed.ncbi.nlm.nih.gov/37813356/>
- [2] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022 [Internet]. Endoscopy. Endoscopy 2022; Vol. 54 : cited 2024 Jan 7 p 591–622. Available from: <https://pubmed.ncbi.nlm.nih.gov/35523224/>
- [3] Sugano K, Spechler SJ, El-Omar EM, McColl KEL, Takubo K, Gotoda T et al. Kyoto international consensus report on anatomy, pathophysiology and clinical significance of the gastro-oesophageal junction [Internet]. Gut. Gut 2022; Vol. 71: cited 2023 Apr 11 p 1488–514. Available from <https://pubmed.ncbi.nlm.nih.gov/35725291/>
- [4] Danpanichkul P, Suparan K, Totharungraj P, Dejvajara D, Rakwong K, Pang Y et al. Epidemiology of gastrointestinal cancers: a systematic analysis from the Global Burden of Disease Study 2021. Gut [Internet]. 2024; cited 2024 Dec 1; gutjnl-2024-333227. Available from: <https://pubmed.ncbi.nlm.nih.gov/39242191/>
- [5] Arnold M, Ferlay J, Van Berge Henegouwen MI, Soerjomataram I. Global burden of oesophageal and gastric cancer by histology and subsite in 2018. Gut [Internet]. 2020; cited 2023 Apr 11 69 (9): 1564–71. Available from: <https://pubmed.ncbi.nlm.nih.gov/32606208/>

eP247V Endoscopic intermuscular dissection and partial exposed full thickness resection with suturing of the muscle layer defect in a rectal adenocarcinoma

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DOI 10.1055/s-0046-1821574

Abstract Text

Early rectal cancers that are difficult to resect with standard EMR/ESD, particularly those with fibrosis or MRS +, may require resection in deeper planes with methods such as endoscopic intermuscular dissection (EID) or exposed full-thickness resection (EFTR), which can leave deep bowel wall defects. We report a hybrid EID-EFTR approach combined with selective muscular-layer suturing. A 27-mm lsp JNET 2B lesion 4 cm from the anal verge, with prior biopsies suggesting at least intramucosal neoplasia and MRI cT1–N0 staging, was removed en bloc, creating a varying thickness defect. Two sutures reapproximated the muscularis propria, leaving the mucosa open. Recovery was uneventful. Pathology showed a moderately differentiated pT1b adenocarcinoma (2083 µm invasion, no LVI, Bd1). This hybrid technique may enhance organ-sparing management of selected early rectal cancers.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/a4039822-7eba-406f-9d0b-f0e5a28a0fc6/Uploads/19978_EID_and%20partial%20EFTR%20combined%20with%20muscle%20layer%20suturing.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP248 EUS-Guided Phosphorus-32 injection as a Local Ablative Boost in Pancreatic Cancer Therapy

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DOI 10.1055/s-0046-1821575

Aims of our study was to evaluate the feasibility and safety of the endoscopic ultrasound (EUS)-guided intratumoural injection of phosphorus-32 (³²P), an emerging local ablative technique that may enhance local disease control and surgical conversion when used alongside systemic therapy, in patients with pancreatic cancer.

Methods This single-centre observational study assessed the feasibility and outcomes of EUS-guided fine-needle ³²P injection in patients with LAPC receiving gemcitabine–nab-paclitaxel at the University Hospital of Santiago de Compostela between September 2024 and September 2025.

Results Eleven patients were included (mean age 66.5 years; range 48–84). Tumour locations were the pancreatic head (n = 6), neck (n = 2), and body (n = 3), all demonstrating vascular involvement. Mean tumour diameter was 30.6 mm (22–45) on CT and 34.6 mm (25–45) on EUS, with a mean volume of 9.17 cc (1.8–36.2). Mean ³²P dose was 48.6 MBq (1.5–223). No immediate complications were observed; 18 % experienced mild adverse events, and one patient developed moderate acute pancreatitis. Chemotherapy was resumed in 91 % after 9.8 days (mean interval). One patient (9 %) underwent successful R0 resection. Local progression occurred in 9 % and distant progression in 36 %. Median CA 19-9 levels decreased from 695.8 U/mL (2.3–2458.7) at baseline to 185.6 U/mL (2.1–852.4) post-treatment. Median overall survival and progression-free survival were 291.5 and 273 days, respectively.

Conclusions EUS-guided ³²P injection appears to be a feasible and safe local ablative approach for patients with LAPC. It can be seamlessly integrated into treatment protocols without compromising subsequent surgical resection

Conflicts of Interest International advisor for FujiFilm: Julio Iglesias-García, José Lariño-Noia, Yessica Domínguez-Novoa, J. Enrique Domínguez-Muñoz

eP249 Refractory haemorrhage from a major papillary angioectasia: overcoming therapeutic failure with bevacizumab

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DOI 10.1055/s-0046-1821576

Abstract Text

Angioectasias are the most common acquired vascular malformations of the gastrointestinal tract and a frequent cause of recurrent obscure or overt bleeding in older adults. In aortic stenosis, the associated von Willebrand defect defines Heyde syndrome, and although TAVI usually improves bleeding, persistence can occur. Argon plasma coagulation (APC) is the first-line endoscopic therapy, although certain locations pose substantial technical challenges. Pharmacological options in refractory cases remain limited; recent data suggest

that bevacizumab, an anti-VEGF monoclonal antibody, may be promising, although real-world experience is still scarce. We report a 76-year-old male with severe aortic stenosis treated with TAVI, coronary artery disease, and chronic anaemia secondary to recurrent bleeding from intestinal angioectasias. Despite TAVI, he continued to experience recurrent melena, symptomatic anaemia and repeated hospital admissions. Von Willebrand factor levels and post-TAVI gradients were normal. Initial endoscopic assessments demonstrated multiple small-bowel angioectasias identified by capsule endoscopy and treated endoscopically with APC. Medical therapy with long-acting octreotide was also initiated at 10 mg/month and escalated to 60 mg/month, provided only transient symptomatic improvement; the patient remained transfusion-dependent and required frequent intravenous iron supplementation. During subsequent bleeding episodes, fresh blood was consistently observed in the second portion of the duodenum. Side-viewing duodenoscopy was therefore performed, allowing optimal visualisation of the papilla and revealing a major papillary angioectasia with persistent active oozing, while previously treated lesions showed no evidence of haemorrhage. The papillary angioectasia required multiple sessions of combined haemostasis—adrenaline injection, APC and clip placement—performed with a duodenoscope. Although haemostasis was achieved each time, recurrent bleeding from the same site persisted. Endoscopic papillectomy was considered but not pursued due to age, comorbidities and procedural risk. Given refractoriness to endoscopic therapy and maximal-dose octreotide, bevacizumab was initiated (5 mg/kg every two weeks). Treatment was complicated by uncontrolled hypertension and a pre-acute pulmonary oedema episode, both managed medically. A sustained response became evident only after completing the six-dose induction regimen, with stabilised haemoglobin, resolution of melena and cessation of transfusion and iron requirements. Papillary angioectasias represent a rare but challenging entity due to anatomical constraints, high bleeding potential and the risk of pancreatitis after intervention. This case illustrates successful bleeding control with combined endoscopic therapy and bevacizumab rescue after failure of intensive octreotide treatment. It highlights the potential role of VEGF blockade in highly refractory lesions and reinforces the need for individualised decision-making in complex angioectasias [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Compare D, Sgamato C, Rocco A, Minieri S, Cinque S, Giordano F et al. Long-term bevacizumab is safe and effective in managing small bowel angioectasias bleeding refractory to conventional treatments: a case report. *EClinicalMedicine*. 2024; PMID: PMC11227363 PMID: 38974879
- [2] Becq A, Sidhu R, Goltstein LCMJ, Dray X. Recent advances in the treatment of refractory gastrointestinal angiodysplasia. *United European Gastroenterol J* 2024; 12 (8): 1128–1135
- [3] Ecq A, Sidhu R, Goltstein LCMJ, Dray X. Recent advances in the treatment of refractory gastrointestinal angiodysplasia. *United European Gastroenterol J* 2024; 12 (8): 1128–1135

eP250 Generation of Pancreatic Cancer Organoids from low cellularity EUS-guided sampling biopsy specimens

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DOI 10.1055/s-0046-1821577

Aims of our study was to evaluate the feasibility of generating patient-derived organoids (PDOs) from EUS-TA samples

Methods Prospective study of patients referred to the Endoscopy Unit of the University Hospital of Santiago de Compostela, Spain, for EUS-TA of pancreatic tumour. EUS was performed using linear echoendoscopes and Hitachi-Fujifilm systems. Tissue sampling was performed using core needles. Tissue samples were minced and dissociated into small pieces from which cell cultures were established using growth medium supplemented with factors such as gastrin, respondin-1, noggin and WNT-3A proteins, which play a key role in the self-renewal and maintenance of human pancreatic PDOs. Data are presented as mean ± standard deviation, or median and range for quantitative variables and as percentages for categorical variables. Factors associated with the success in obtaining PDOs were evaluated using multivariate logistic regression, with location, staging, lesion size, needle size and number of passes considered as independent variables.

Results The study included 28 patients diagnosed with PDCA (mean age 73.3 ± 10.1 years, 14 males). Mean tumour size was 41.8 ± 15.1 mm; 13 lesions were located in the head, 9 in the body, 5 in the tail and 1 in the uncinate process. One PDAC (3.6%) was considered resectable, 5 (17.9%) borderline, 6 (21.4%) locally advanced and 16 (57.1%) metastatic at the time of diagnosis. For EUS-TA, 19-gauge and 25-gauge needles were used in 1 case (3.6%) each, and a 22-gauge needle was used in the remaining cases (26 cases, 92.9%). A median of two passes (range 1–4) were performed. In an initial training set, PDOs were obtained in 1 of 12 (8.3%) samples. After protocol refinement, the success rate of PDO establishment increased to 56.3% (9 of 16 patients). On multivariate analysis, neither lesion location, stage, lesion size, needle size, nor number of passes were associated with PDO success.

Conclusions This study highlights the feasibility of obtaining PDOs from EUS-TA of PDAC patients. The protocols developed in this study allowed the establishment of pancreatic PDOs from a minimal tissue source, providing a valuable tool for further functional modelling of human pancreatic tumours.

Conflicts of Interest International Advisor for FujiFilm: Julio Iglesias-García, José Lariño-Noia, Yessica Domínguez-Novoa, J. Enrique Domínguez-Muñoz

eP251 Endoscopic intermuscular dissection of a primary tumor remnant after good response to FOLFOXIRI/Bevacizumab in metastatic rectal cancer – A Case Report

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Background Multimodal individualized treatment concepts are becoming increasingly important in the treatment of metastatic rectal cancer. Rectum-sparing resections of the primary tumor after a good response to systemic therapy in patients with metastatic rectal cancer have so far only been described in isolated cases as part of liver-first strategies [1]. Data on endoscopic resection procedures in metastatic rectal cancer are currently lacking. The aim of this article is to demonstrate the potential of endoscopic intermuscular dissection (EID) as an effective organ-preserving treatment option within the framework of a multimodal therapy concept following successful systemic therapy.

Case report A 20-year-old patient with microsatellite-stable hepatically metastasized rectal carcinoma (KRAS G13D mutation, BRAF wild type) was treated with a total of seven cycles of FOLFOXIRI, the first five of which were combined with Bevacizumab. With an excellent response to therapy, including a reduction in the size of the local lesion from 30 to 15 mm and regression of the liver metastases. With no involved regional lymph nodes on MRI our interdisciplinary tumor conference decided on an individualized approach involving endoscopic resection of the primary tumor followed by evaluation of a possible liver transplant, analogous to the TransMet study [2].

To increase the likelihood of R0 resection, EID of the residual lesion was performed at 12 cm from the anal verge, with endoscopic dissection between the circular and longitudinal muscles. Compared to EMR or ESD, this allows even deeper infiltrating carcinomas to be removed from healthy tissue. The EID was performed without technical or post-procedural complications. The resulting defect was completely closed using an endoscopic suture system (SutuArt, Olympus, Japan). Histopathological examination showed complete resection of the carcinoma in healthy tissue (vital tumor cell content 10 %, regression grade 3 according to Dworak, ypT1, sm2 with an infiltration depth of 800 μ m, L0, V0). The plan now is to continue systemic therapy and refer the patient to a liver transplant center.

Conclusion The described case illustrates that in metastatic rectal carcinomas that respond well to systemic therapy EID enables a safe resection of the local tumor with organ preservation. EID thus represents a possible addition to a multimodal therapy concept in suitable patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Adam R., Piedvache C., Chiche L., Adam J.P., Salamé E., Bucur P., Cherqui D., Scatton O., Granger V., Ducreux M. et al. 2024; Liver transplantation plus chemotherapy versus chemotherapy alone in patients with permanently unresectable colorectal liver metastases (TransMet): results from a multicentre, open-label, prospective, randomised controlled trial. *Lancet* 404: 1107–1118
- [2] Meillat H., Garnier J., Palen A., Ewald J., de Chaisemartin C., Tyrant M., Mitry E., Lelong B. 2023; Organ sparing to cure stage IV rectal cancer: A case report and review of literature. *World J Gastrointest Surg* 15: 2619–2626

eP252 EUS-guided Hepatico-Jejunostomy After Failed ERCP in Surgically Altered Anatomy: Expanding the Frontiers of Biliary Drainage

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Aims Biliary drainage in surgically altered anatomy remains a major challenge, as ERCP is often unsuccessful and percutaneous drainage carries significant morbidity. EUS-guided hepaticojejunostomy (EUS-HJ) has emerged as a minimally invasive alternative, though data remain limited. We report our experience with EUS-HJ in patients with surgically altered anatomy, after total or partial gastrectomy, and failed ERCP.

Methods This retrospective series included patients who underwent EUS-HJ between March 2020 and September 2025 at a tertiary referral center. All procedures were performed using linear echoendoscopes under general anesthesia. Technical success was defined as successful stent deployment between the intrahepatic bile duct and jejunal limb. Clinical success was defined as ≥ 10 % bilirubin reduction or resolution of cholangitis within three days. Adverse events were graded according to CTCAE v5.0.

Results A total of nine patients (mean age 65.8 years; 66.6 % male) with surgically altered anatomy following total gastrectomy (n = 7), pancreaticoduodenectomy (n = 1), or subtotal gastrectomy (n = 1) underwent EUS-guided hepaticojejunostomy after failed ERCP. All cases were malignant, mostly recurrent, or metastatic. Technical success was 100 %, and clinical success was 66.7 % (6/9). The median procedure time was 41.6 min, and self-expanding, partially covered metal stents were used in all cases. A delayed adverse event occurred in one patient (10 %), who developed a localized infected biloma two months post-procedure (CTCAE Grade II), successfully managed with percutaneous drainage and complete recovery. The median post-procedural hospitalization was 5.4 days. During follow-up, long-term stent patency was preserved in most patients. Three patients (33 %) required endoscopic reintervention for stent dysfunction at 3, 5, and 21 months after the index procedure; all were successfully managed with endoscopic tract revision, without the need for surgery. One patient developed multiple intrahepatic abscesses 17 months after the initial EUS-HJ, treated with percutaneous drainage, followed by tract revisions

at 21 and 23 months, achieving sustained biliary drainage afterwards. In another case, cholangioscopy performed during tract revision enabled targeted biopsy and histologic confirmation of disease progression, highlighting the diagnostic potential of EUS-HJ. No episodes of stent migration, bleeding, or procedure-related mortality were observed, confirming the durable efficacy and safety of EUS-HJ in this challenging cohort.

Conclusions EUS-HJ is a safe, effective, and physiologic alternative to percutaneous drainage for malignant biliary obstruction in surgically altered anatomy. With high technical success, low morbidity, and durable stent patency, it is evolving from a rescue procedure to a frontline therapeutic option. The maintained transluminal access further allows repeat cholangioscopy and histologic assessment, extending the clinical scope of interventional EUS beyond drainage alone.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePosters 04

eP253 Long-Term Outcomes and Predictors of Treatment Success in Pneumatic Dilation for Achalasia: A 20-Year Single-Center Retrospective Cohort

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DOI 10.1055/s-0046-1821580

Aims Achalasia is a rare esophageal motility disorder in which endoscopic pneumatic dilation (PD) is a commonly used therapeutic option. This study aims to evaluate the effectiveness of PD in symptomatic improvement using the Eckardt score, to identify factors associated with multiple PD sessions, the interval between PDs, and the occurrence of complications.

Methods Single-center, retrospective study including patients diagnosed with achalasia who underwent PD between January 2005 and October 2025. Patients without follow-up or with less than 2 years of follow-up after PD were excluded. Demographic, clinical, procedural, and symptomatic evolution data were collected based on electronic medical records and, when these were unavailable, through follow-up phone calls. Statistical analysis were performed using SPSS software version 30, with a p-value of < 0.05 considered statistically significant.

Results A total of 51 patients were included, 53.8 % (n = 28) female. Type I achalasia was the most frequent (65.0 %, n = 13). A total of 83 PD were performed, with a mean of 1.63 PD needed per patient. The 35mm dilation balloon was used in 12 patients (18 PD (21.7 %)). The mean age at symptom onset was 50.35 years [21–78], and the median interval from symptom onset to PD was 2 years [0–19]. Median follow-up was 116.27 months [26.13–253.10]. The median interval between dilations was 25.7 months [2.33–227.70], with no significant associations with the Eckardt score. Adjusting for patients requiring multiple dilations (n = 22; 43.1 %), they had no improvement of the Eckardt dysphagia subscore (p = 0.014), smaller interval between symptom onset and PD (p < 0.001), and greater maximum balloon diameter used (35mm in 12 patients (48.0 %)) (p < 0.001). One perforation occurred, in the third PD of a female patient (the first with 35mm dilation balloon) successfully resolved after 7 days of treatment with VacStent GI.

Conclusions Pneumatic dilation showed high effectiveness in improving symptoms in achalasia, with sustained benefit over long-term follow-up. The need for multiple dilations was mainly associated with symptomatic recurrence. These findings support PD as a safe and effective therapeutic option, emphasizing the need for individualized follow-up and identification of patients who may benefit from alternative therapies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP254 Assessing Performance of Open-Source Vision-Language Models for Colorectal Polyp Sizing: A Comparison with Endoscopist Visual Estimation

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DOI 10.1055/s-0046-1821581

Aims Accurate colorectal polyp measurement is essential because size guides surveillance intervals, resection strategy, and colorectal cancer risk assessment. Emerging Vision-Language Models (VLMs) can estimate polyp size from endoscopic images, but their performance relative to expert visual assessment is unclear. We compared the accuracy and bias of visual assessment versus several VLMs for polyp sizing [1–4].

Methods At the Centre Hospitalier de l'Université de Montréal (CHUM), patients were prospectively enrolled in an endoscopic video databank with consent for AI use. For each resected polyp, endoscopists provided a visual size estimate; still images were then submitted to four VLMs. The reference standard was microscopic size obtained from freshly resected specimens. VLMs generated estimates based on prompt-driven input, following few-shot learning (FSL). The primary outcome was categorical accuracy in three clinically relevant classes: diminutive (≤ 5 mm), small (5.001–9.999 mm), and large (≥ 10 mm). Secondary outcomes included continuous size bias, overestimation frequency (categorical and continuous), intraclass correlation coefficient (ICC) between VLM predictions, and Light's κ for categorical agreement between VLMs. Logistic regression (for accuracy and frequencies) and linear models (for bias) with sizing method as a fixed effect were fitted, using generalized estimating equations with exchangeable correlation to account for within-polyp clustering. Tukey correction was applied for pairwise comparisons (► **Table 1**).
Results We analyzed 132 polyps (78.0% diminutive, 21.2% small, 0.8% large). Visual assessment had higher categorical accuracy (81.7%; 95% CI, 71.4–87.4) than all VLMs, significantly so for 3 of 4 models (e.g., Qwen3-VL 67.0% [58.4–74.5]; difference visual–Qwen3-VL 14.7% [1.4–28.1]; $p=0.022$). Gemma3 showed the lowest accuracy (26.5% [19.7–34.7]). Three VLMs had mean positive bias >0.5 mm (Qwen3-VL 0.95 mm [0.53–1.38]; Llama4 1.35 mm [0.89–1.81]; Gemma3 2.71 mm [2.37–3.04]). Mistral-Small3.2 showed a smaller mean bias than visual assessment (difference visual–Mistral-Small3.2 0.39 mm [–0.43–1.21]) and a lower overestimation frequency (43.9% [35.7–52.5] vs visual 62% [53.4–69.9]; difference –18.1% [–33.3––2.8]; $p=0.011$). Overall, VLMs tended to overestimate continuous sizes more than visual assessment. Agreement between VLMs was poor (ICC 0.212 [0.122–0.313]; $\kappa=0.106$); excluding Gemma3 did not materially improve agreement.

Conclusions In this study, standard visual assessment outperformed current VLMs for clinically relevant size categories, and VLMs frequently overestimated size. Likely contributors include the absence of calibrated reference scales, fisheye lens distortion, and variability in endoscopic distance and angulation. Polyp sizing remains a complex task, VLMs should not be used for polyp sizing and require rigorous size-aware training and calibration before clinical integration.

Conflicts of Interest Daniel von Renteln has received research funding or support from ERBE Elektromedizin GmbH, Boston Scientific, Dova Health, Ventage, and Fujifilm, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Medtronic, and Dova Health.

References

- [1] Rex DK, Anderson JC, Butterly LF, Day LW, Dominitz JA, Kaltenbach T et al. Quality Indicators for Colonoscopy. Official journal of the American College of Gastroenterology | ACG. 2024; 119 (9):
- [2] Gupta S, Lieberman D, Anderson JC, Burke CA, Dominitz JA, Kaltenbach T et al. Recommendations for Follow-Up After Colonoscopy and Polypectomy: A Consensus Update by the US Multi-Society Task Force on Colorectal Cancer. Gastroenterology 2020; 158 (4): 1131–53 e5. doi:10.1053/j.gastro.2019.10.026
- [3] Copland AP, Kahi CJ, Ko CW, Ginsberg GG. AGA Clinical Practice Update on Appropriate and Tailored Polypectomy: Expert Review. Clinical Gastroenterology and Hepatology 2024; 22 (3): 470–9 e5. doi:10.1016/j.cgh.2023.10.012
- [4] Dekker E, Rex DK. Advances in CRC Prevention: Screening and Surveillance. Gastroenterology 2018; 154 (7): 1970–84. doi:10.1053/j.gastro.2018.01.069

eP255 Retrograde esophageal and stomach tubing for palliative drainage: feasibility and safety in a single-center

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DOI 10.1055/s-0046-1821582

Aims Describe the feasibility and safety of retrograde esophageal and stomach tubing for palliative drainage

Methods Retrospective single-center cohort study

Results Between 2022 and 2025, six pediatric and adult patients underwent a novel retrograde placement of gastrojejunostomy (GJ) tubes into the esophagus to provide continuous palliative drainage of esophageal secretions. The cohort included cases of familial dysautonomia–associated megaesophagus, post-surgical strictures, and malignant esophageal stenosis (► **Table 1**). Using a slim endoscope, GJ tubes were introduced over a guidewire and advanced retrogradely across the stenotic segment, allowing drainage of the proximal stomach or esophagus through the J-port, while gastric feeding was maintained through the G-port.

► **Table 1** Primary and secondary outcome point estimates (95% CI). Results arise from logistic and linear (bias) models with GEEs that account for intra-polyp correlations.

	Accuracy (% , 95 % CI)	Bias (mm, 95 % CI)	Categorical size over-estimation (% , 95 % CI)	Size over-estimation (% , 95 % CI)
<i>By sizing method</i>				
Visual	81.7 % (74.1,87.4)	0.58 (0.32,0.84)	12.3 % (7.7,19.1)	62.0 % (53.4,69.9)
VLM: Qwen3-VL	67.0 % (58.4,74.5)	0.95 (0.53,1.38)	21.5 % (15.3,29.4)	62.3 % (53.7,70.2)
VLM: Llama4	68.9 % (60.5,76.3)	1.35 (0.89,1.81)	18.2 % (12.5,25.7)	73.5 % (65.3,80.3)
VLM: Gemma3	26.5 % (19.7,34.7)	2.71 (2.37,3.04)	72.0 % (63.7,79.0)	86.4 % (79.4,91.2)
VLM: Mistral-Small3.2	67.4 % (59.0,74.9)	0.19 (–0.37,0.76)	16.7 % (11.2,24.0)	43.9 % (35.7,52.5)

► **Table 1** profile of patients treated with retrograde esophageal tubing

Sex	Age at insertion (years)	ASA physical status at procedure	Follow-up period (weeks)	Death at end of follow up
F	3.5	3	92	
M	19.5	3	32	
M	20	3	168	
M	4.5	4	39	
M	61.5	4	14	V
F	66	4	2	V

All procedures were completed successfully without technical difficulties or complications. Following placement, the nasogastric tube was removed, and the GJ tube effectively alleviated esophageal content pooling. An illustration of the procedure is provided.

Despite being performed in high-risk patients, most procedures were feasible without sedation, thereby reducing risk and obviating the need for anesthesiology support. Moreover, tube replacement over a guidewire can be safely performed during a routine clinic visit.

Conclusions This case series demonstrates the feasibility, safety, and reproducibility of retrograde transgastric esophageal tubing as a palliative solution for refractory esophageal stasis.

Our findings highlight an unmet need in palliative gastroenterology, suggesting that this technique can significantly improve patient comfort and reduce aspiration risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP256 Spontaneous Duodenal Fistulization Following Arterial Embolization in Acute Necrotizing Pancreatitis: A Rare Complication

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DOI 10.1055/s-0046-1821583

Abstract Text

We present a case of spontaneous duodenal fistulization in a 43-year-old man with acute necrotizing pancreatitis demonstrating an unusual temporal sequence, raising questions about the etiopathogenesis of the fistulous connection. The patient presented with severe epigastric pain and was diagnosed with acute pancreatitis based on elevated lipase (579 U/L) and characteristic imaging. By day 6, the disease progressed to necrotizing pancreatitis with extensive peripancreatic collections. However, the patient was tolerating low fat diet. Following discharge, he was re-admitted one week later due to worsening pain and anorexia. Repeat imaging (day 13) demonstrated progression of necrotizing pancreatitis with retroperitoneal fluid collections. On day 16, he developed sudden severe pain with imaging revealing active hemorrhage from a gastroduodenal artery branch, necessitating emergency embolization of the superior pancreaticoduodenal artery. Following embolization, he developed persistent fevers and ileus requiring nasogastric decompression. Imaging on day 24 revealed the pancreatic necrotic collection had dramatically decreased from 7.7 × 12.3 cm to 5.5 × 9.6 cm with copious internal gas, and gas appeared within a hepatic subcapsular collection. Gastrografin study confirmed fistulous communication between the second duodenal portion and the peripancreatic collection. Endoscopy confirmed a fistulous opening extruding necrotic material – this was cleared and a double pigtail catheter was placed for drainage, leading to clinical improvement.

This case highlights a potentially under-recognized mechanism of fistula formation. Gastrointestinal fistulas in acute necrotizing pancreatitis are well-established complications driven by infected necrosis, local anatomical factors, and pancreatic duct disruption [1]. In this patient, spontaneous fistulization can be attributed to infected pancreatic necrosis, pressure from substantial necrotic mass, and direct enzymatic and inflammatory damage to the nearby duodenal wall [2, 3]. The temporal relationship with arterial embolization warrants consideration. While iatrogenic factors such as percutaneous drainage or surgical intervention can contribute to external fistula formation, IR-guided arterial embolization has not been reported to predispose to enteric fistulization. Prior studies demonstrate IR-guided embolization to be safe and effective without enteric fistulization as a recognized complication [4]. However, duodenal ischemia following embolization of gastroduodenal artery branches has rarely been reported [5]. The temporal sequence in our patient—arterial embolization on day 16 followed by fistula evidence on day 24 suggests possible association. We hypothesize that IR-guided arterial embolization, particularly of gastroduodenal artery branches, may have contributed to duodenal ischemia that, when superimposed on pre-existing infected necrosis and inflammatory injury, compromised duodenal wall integrity sufficiently to facilitate fistulization. This potential iatrogenic mechanism warrants clinical investigation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sugar S, Soundararajan R, Gupta P et al. Efficacy of endovascular embolization of arterial pseudoaneurysms in pancreatitis: A systematic review and meta-analysis. *Pancreatol* 2021; 21: 46–58. doi:10.1016/j.pan.2020.11.017
- [2] Madhusudhana KS, Gopi S, Singh AN et al. Immediate and Long-Term Outcomes of Percutaneous Radiological Interventions for Hemorrhagic Complications of Acute and Chronic Pancreatitis. *J Vasc Interv Radiol* 2021; 32 (11): 1591–1600 e1. doi:10.1016/j.jvir.2021.07.013
- [3] Hua Z, Su Y, Huang X et al. Analysis of Risk Factors Related to Gastrointestinal Fistula in Patients With Severe Acute Pancreatitis: A Retrospective Analysis of a Single Chinese Medical Center. *BMC Gastroenterology* 2017; 17 (1): 29. doi:10.1186/s12876-017-0684-7
- [4] Jiang W, Tong Z, Yang D et al. Gastrointestinal Fistula in Acute Pancreatitis With Acute Necrotic or Peripancreatic Necrosis: A 4-Year Single-Center Experience. *Medicine* 2019; 98 (19): e15576. doi:10.1097/MD.00000000000015576
- [5] Baron TH, DiMaio CJ, Wang AY, Morgan KA. American Gastroenterological Association Clinical Practice Update: Management of Pancreatic Necrosis. *Gastroenterology* 2020; 158 (1): 67–75.e1. doi:10.1053/j.gastro.2019.07.064

eP257 Risk factors for lateral margin positivity following endoscopic submucosal dissection in patients with early gastric cancer

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DOI 10.1055/s-0046-1821584

Aims The risk factors for lateral margin positivity (LM+) in patients undergoing endoscopic submucosal dissection (ESD) for early gastric cancer (EGC) are not yet well established. The role of subepithelial (SE) spread of cancer in contributing to LM+ remains unclear.

Methods A study was conducted at a tertiary medical center in Daejeon, South Korea, targeting patients who underwent ESD for EGC between January 2014 and December 2024, those with recorded LM+. Patients who underwent ESD for EGC at the same institution in 2022 and achieved curative resection were selected as the control group.

Results During the study period, a total of 21 patients were diagnosed with LM+ and 227 patients were enrolled in the control group. In univariate analysis, differentiation, Lauren classification, lesion size, and discoloration changes were identified as risk factors for LM+ (chi-square test, $p < 0.05$). In multivariate analysis, lesion size was the only significant risk factor (logistic regression, $p < 0.05$). The mean length of SE spread in the LM+ group was significantly longer than

that in the control group. Furthermore, SE spread exceeding 5 mm was associated with an increased risk of LM + (OR = 15.077, $p = 0.019$, logistic regression). **Conclusions** Larger lesion size and longer SE spread were risk factors of LM +. Therefore, these factors should be carefully considered during ESD. **Conflicts of Interest** Authors do not have any conflict of interest to disclose.

eP258 Endoscopist Detection Skill Drives Neoplasia Yield in IBD Surveillance Colonoscopies

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Aims Patients with inflammatory bowel disease (IBD) have a higher risk of dysplasia/neoplasia, requiring intensified surveillance colonoscopies. Colitis associated neoplasia (CAN) has flatter morphology, making it harder-to-detect. Serrated adenomas in routine screening colonoscopy have similar flat morphology. How neoplasia detection rates during IBD surveillance exams change based on baseline average risk colonoscopy performance is not known. Also, while there are well defined quality metrics for adenoma detection rate (ADR) and sessile serrated lesion detection rate (SSDR) in non-IBD colonoscopy, these metrics do not exist in IBD surveillance. We hypothesized that endoscopists with higher non-IBD SSDR have higher ADR and SSDR in IBD surveillance colonoscopies, while maintaining the same ADR trend. Thus, we have conducted a retrospective study to investigate baseline ADR and SSDRs compared to adenoma and serrated lesions detection rates during IBD surveillance colonoscopy. **Methods** We performed a retrospective study of patients who underwent colonoscopy for an indication of IBD surveillance. A validated natural language processing (NLP) model was then used to report adenomas and sessile lesions found within pathology reports. The number of IBD surveillance colonoscopies per endoscopist was reviewed, and the top quartile, by procedure volume, was included for additional evaluation. Among this quartile, the baseline ADR and SSDR for average risk colonoscopies were calculated. To evaluate whether IBD ADR and SSDR varied across screening quartiles, we fit linear models with quartile as the predictor and diagnosis rate as the outcome. Overall significance was based on the likelihood ratio test and parameter estimates were examined to assess differences between quartiles.

Results Our study included 56 endoscopists and 5093 IBD surveillance colonoscopies performed between 2017-2023. Physicians in the top quartile were those performing greater than 24 IBD surveillance colonoscopies in this time period. There were significant differences in IBD ADRs among physicians when stratified by screening ADR quartiles (p -value < 0.0001). The ADR was 10% among IBD surveillance colonoscopies for the lowest ADR quartile, and this rate was similar for the second and third quartiles. However, the diagnosis rate was 10% higher for the fourth quartile of endoscopists when compared to the lowest quartile (p -value < 0.0001). The mean baseline non-IBD screening ADR was 37% (SD 8.3) and the mean baseline screening SSDR was 13% (SD 5.3%). First quartile endoscopists had a baseline non-IBD ADR and SSDR of 27.2% and 6.5%, respectively. Fourth quartile endoscopists had a baseline non-IBD ADR and SSDR of 48.1% and 20%, respectively. Regarding SSDR in IBD surveillance, the differences in SSDR among IBD cases between the physicians based on screening ADR quartiles was significant (p -value < 0.001). SSDR in IBD cases was 3% in first quartile physicians, similar to second and third quartiles. However, fourth quartile physicians had a higher rate of SSDR, 6% higher than first quartile physicians (p -value 0.0003).

Conclusions Endoscopists with the highest screening ADR and SSDR also achieved significantly higher detection of adenomas and sessile serrated lesions during IBD surveillance. While lower quartiles showed similar performance, top quartile physicians detected 10% more adenomas and 6% more sessile lesions. Thus, these findings suggest that provider-level detection performance in

screening colonoscopy meaningfully translates to IBD surveillance quality, given the improved detection of subtle, flat dysplasia typical of IBD. **Conflicts of Interest** Authors do not have any conflict of interest to disclose.

eP259 Establishing Reference Standards for Colorectal Polyp Size: Validation of Caliper Based Size Measurement

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DOI 10.1055/s-0046-1821586

Aims Accurate measurement of resected colorectal polyps is essential for clinical management, research, and the development of artificial intelligence (AI)-based size estimation systems. Despite widespread use of caliper-based measurement for specimen sizing, formal validation against a reference standard is lacking. This study aimed to validate caliper-based measurement of resected colorectal polyps against high-resolution digital microscopy, a previously validated reference method [1–3].

Methods At the Centre hospitalier de l'Université de Montréal (CHUM), 143 polyps from 92 patients were measured immediately after resection using vernier digital calipers in the endoscopy suite. Independent measurements were subsequently obtained using high-resolution digital microscopy under blinded conditions. Agreement between methods was assessed using bias analysis, Bland-Altman limits of agreement, intraclass correlation coefficient (ICC), and categorical size concordance (► **Table 1**).

► **Table 1** Polyp characteristics, including location, morphology, and pathology. SSL, sessile serrated lesions.

<i>Polyp characteristics (N = 143)</i>	
Rectosigmoid, n (%)	46 (32.2%)
Paris class, n (%)	
Ila	12 (8.4%)
Ilc	2 (1.4%)
Ip	2 (1.4%)
Is	125 (87.4%)
Isp	2 (1.4%)
Pathology, n (%)	
Adenoma / Neoplastic	93 (65.0%)
Hyperplastic	29 (20.3%)
Missing	2 (1.4%)
SSL	3 (2.1%)
Other	16 (11.2%)

Results Caliper-based measurements demonstrated a mean bias of –0.22 mm (95% CI: –0.34 to –0.11; $p < 0.001$) relative to the reference standard. The non-inferiority hypothesis with a 0.5 mm margin was not rejected (lower 95% CI > –0.5 mm). Bland-Altman's limits of agreement were –1.57 to 1.12 mm, and the ICC was 0.88 (95% CI: 0.82–0.92). Correct categorical classification occurred in 94.4% of cases (95% CI: 0.89–0.97; $\kappa = 0.81$).

Conclusions Caliper-based measurement provides accurate and reproducible estimates of polyp size when compared with digital microscopy, supporting its use for clinical and research applications requiring direct specimen measurement.

Conflicts of Interest Daniel von Renteln has received research funding or support from ERBE Elektromedizin GmbH, Boston Scientific, Dova Health, Ventage,

and Fujifilm, and has received consultant or speaker fees from Boston Scientific Inc., ERBE Elektromedizin GmbH, Medtronic, and Dova Health

References

- [1] Djinbachian R, Popescu Crainic I, Pioche M, Saito Y, Sethi A, Chiu P et al. Accuracy in Polyp Size Measurement Among Surgeons, Gastroenterologists, Trainees, and Experts: A Prospective Video-Based Study. *Official journal of the American College of Gastroenterology | ACG*. 2024; 119 (3): 532–8. doi:10.14309/ajg.0000000000002494
- [2] Song Y, Du S, Wang R, Liu F, Lin X, Chen J et al. Polyp-Size: A Precise Endoscopic Dataset for AI-Driven Polyp Sizing. *Sci Data* 2025; 12 (1): 918. doi:10.1038/s41597-025-05251-x
- [3] Kerbage A, Souaid T, Singh K, Burke CA. Taking the Guess Work Out of Endoscopic Polyp Measurement: From Traditional Methods to AI. *Journal of Clinical Gastroenterology* 2025; 59 (6):

eP260V Endoscopic full thickness resection using a scissor-type knife for gastric gastrointestinal stromal tumor

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DOI 10.1055/s-0046-1821587

Abstract Text

A woman in her seventies was diagnosed with submucosal tumor on the lesser curvature of lower gastric body. The lesion increased in size and was histologically diagnosed as a gastrointestinal stromal tumor (GIST). Therefore, Endoscopic full thickness resection was performed using a scissor-type knife under general anesthesia. After the en block resection, the gastric defect was closed by Reopenable clip over-the-line method. The total procedure time was 67 min. The patient discharged uneventfully. Histological examination confirmed a low-risk GIST with free resection margin. Scissor-type knives are useful for safe and efficient procedures. They allow secure tissue grasping and soft coagulation, reducing device exchanges and bleeding risk. Their familiar grasp-and-cut mechanics also help lift the lesion away from surrounding tissue, minimizing injury [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0694f34e-3dc0-4cff-965b-5a4596d56239/Uploads/19978_ESGE_days%20%20video.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gopakumar H, Vohra I, Reddy Puli S, Sharma N. Comparison of scissor-type knife to non-scissor-type knife for endoscopic submucosal dissection: a systematic review and meta-analysis. *Clin Endosc* 2024; 57 (1): 36–47
- [2] Nomura T, Sugimoto S, Tsuda N, Matsushima R, Oyama J, Kamei A. Mucosal defect closure after duodenal endoscopic submucosal dissection using the reopenable-clip over the line method. *JGH Open* 2021; 5: 831–3

eP261V Simultaneous endoscopic ultrasound– and endoscopic retrograde cholangiopancreatography–related procedures using a novel flexible convex echoendoscope

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DOI 10.1055/s-0046-1821588

Problem to solve Situations requiring both endoscopic ultrasound (EUS)– and endoscopic retrograde cholangiopancreatography (ERCP)–related procedures are common in patients with biliopancreatic diseases. To minimize patient burden and hospital stay, these procedures are often performed sequentially in a single session, necessitating scope exchange between an echoendoscope and a duodenoscope. However, scope exchange increases procedure time,

patient discomfort, infection risk, and reprocessing costs. Although Rocca et al. reported common bile duct stone cases underwent simultaneous EUS observation and ERCP using a radial echoduodenoscope [1], no reports have described performing both EUS– and ERCP–related procedures with a single echoendoscope. De Angelis et al. developed a convex echoendoscope enabling such combined procedures, but it never reached commercialization due to issues related to multidrug-resistant organisms [2].

Innovation The recently released oblique viewing convex echoendoscope (EG-740UT; Fujifilm, Tokyo, Japan) offers improved flexibility, wider angulation, an increased elevator angle, wider diameter of accessory channel, and an expanded optical field of view compared with conventional echoendoscopes. In addition, because the channel outlet exits on the distal and lower side of the optical lens, catheters can be more easily directed along the axis of the bile duct. These features enable the performance of ERCP. We report a retrospective study including consecutive patients underwent simultaneous EUS– and ERCP–related procedures using EG-740UT between August 2024 and November 2025 (► **Table 1**).

► **Table 1** Comparison of echoendoscope specifications

	Conventional scope	Novel scope
Scope model	GF-UCT260	EG-740UT
Manufacturer	Olympus	Fujifilm
Filed of view	100°	140°
Bending capacity		
Up/Down	130°/90°	150°/100°
Right/Left	90°/90°	100°/100°
Working channel	3.7 mm	4.0 mm

Results A total 17 patients (median 74 y/o [IQR:62–81]; 53 % male; 76 % native papilla) underwent combined EUS– and ERCP–related procedures for following indications: suspected malignant biliary obstruction (n = 13), suspected autoimmune pancreatitis with biliary stricture (n = 2), gallstone-related cholangitis with liver abscess (n = 1), and suspected choledocholithiasis (n = 1). EUS–related procedures included tissue acquisition (n = 12), hepaticogastrostomy (n = 3), abscess drainage (n = 1), and observation (n = 2). All ERCP–related procedures were performed for biliary indications. Biliary cannulation was successful in 14 (82 %) patients in median 8 minutes (IQR: 6–14.5). ERCP–related procedures in successful cases included sphincterotomy (n = 11), plastic stent placement (n = 9), metal stent placement (n = 5), brush cytology (n = 2), and forceps biopsy (n = 1, with median procedural time 28 minutes [IQR: 21.75–37]). In the three cases of failed biliary cannulation, duodenoscope exchange led to successful cannulation in two cases, whereas one case required conversion to hepaticogastrostomy due to duodenal invasion. Adverse events developed in two patients (one case each of pancreatitis and cholecystitis), but none were considered specific to this combined procedure.

Conclusions Combined EUS– and ERCP–related procedures using EG-740UT was feasible. It may reduce procedure time, patient discomfort, infection risk, and reprocessing costs. Furthermore, in cases where ERCP is absolutely impossible—such as those with duodenal invasion—the procedure can be converted to a transluminal drainage approach without the need to change the endoscope, which represents an additional advantage. Further prospective studies are warranted.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7de73e27-80a0-4328-82c5-541dd507713c/Uploads/19990_ESGE_days%202026%20video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rocca R, De Angelis C, Castellino F, Masoero G, Daperno M, Sostegni R et al. EUS diagnosis and simultaneous endoscopic retrograde cholangiography treatment of common bile duct stones by using an oblique-viewing echoendoscope. *Gastrointest Endosc* 2006; 63 (3): 479–484
- [2] De Angelis CG, Dall'Amico E, Staiano MT, Gesualdo M, Bruno M, Gaia S et al. The Endoscopic Retrograde Cholangiopancreatography and Endoscopic Ultrasound Connection: Unity Is Strength, or the Endoscopic Ultrasonography Retrograde Cholangiopancreatography Concept. *Diagnostics (Basel)*. 2023; 13 (20):

eP262 Efficacy of Mosapride-Esomeprazole Combination Therapy in Gastroesophageal Reflux Disease: Targeting Delayed Gastric Emptying – A pilot study

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DOI 10.1055/s-0046-1821589

Aims Previous studies have shown that patients with gastroesophageal reflux disease (GERD) have slower rates of gastric emptying than controls. However, the involvement of delayed gastric emptying (DGE) in the pathophysiology of gastro-esophageal reflux disease (GERD) remains debatable. The aim of this study was to investigate if treatment with prokinetics in addition to proton pump inhibitor (PPI) therapy improves clinical symptoms in dyspeptic GERD patients with or without DGE [1].

Methods Thirty consecutive patients refractory to PPI over a six-month period were included in the study. Gastric emptying scintigraphy was employed to determine DGE, which was designated when gastric emptying time (T1/2) was > 70 min. Patients were divided according to the presence of dyspepsia into the dyspeptic group (n = 12) and non-dyspeptic group (n = 18). In addition to esomeprazole (40 mg), mosapride citrate was administered to patients for 4 weeks. Symptoms were evaluated using a standardized questionnaire before and after treatment.

Results There was no statistical difference in age and sex between the dyspeptic group and the non-dyspeptic group (P = 0.92 and P = 0.23, respectively). Prevalence of esophagitis was similar between the dyspeptic and non-dyspeptic groups (58 % vs 39 %, P = 0.31). DEG was detected in 75 % of subjects in the dyspeptic group; while 28 % subjects in the non-dyspeptic group (P = 0.01) displayed DEG. Improvement in symptoms was greater in the dyspeptic group than that in the non-dyspeptic group (75 % vs 33 %, P = 0.02).

Conclusions Gastric emptying in dyspeptic patients with GERD is significantly slower than in non-dyspeptic patients regardless of esophagitis. Combination therapy with prokinetics in addition to PPI improves typical GERD symptoms in dyspeptic patients with GERD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang KY, Chen YW, Wang TN, Hsu WH, Wu IC, Yu FJ, Hu HM, Wu JY, Kuo CH, Lu CY, Wu DC, Su YC. Predictor of slower gastric emptying in gastroesophageal reflux disease: Survey of an Asian-Pacific cohort. *J Gastroenterol Hepatol* 2019; 34 (5): 837–842

eP263 A Multicenter Asian Experience with Speedboat Submucosal Dissection (SSD) Knife: Simplifying Endoscopic Submucosal Dissection (ESD) for Novel Endoscopists with a focus on Learning Curve and Safety

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DOI 10.1055/s-0046-1821590

Aims This study aims to evaluate the safety, efficacy, and learning curve of SSD in colonic polypectomy, particularly among endoscopists new to ESD techniques.

Methods A retrospective multicenter study was conducted, analyzing data from 36 patients who underwent colonic polypectomy using SSD at three hospitals in Thailand between March 2023 and September 2024 (► **Table 1**).

► **Table 1** Summary of result

Patient demographics	Number	36
	Mean age (years)	65.8
	Gender (Male/Females)	13 (36.1 %)/ 23 (63.9 %)
Polyp Characteristics	Total Polyps Removed	40
	Mean Size (cm)	2.7 (range: 1.3–6.0)
	Large polyps (> 3 cm)	11/40 (27.5 %)
Procedural details	Mean Procedure Time (min)	116.8 (range: 25–360)
	Mean Procedure Time (min), Large vs. Small Polyps (> 3 cm vs. ≤ 3 cm)	157.5 vs. 96.4 (p = 0.185)
Safety & Outcomes	Complete Resection	39 cases (97.5 %)
	Perforation	0 case
	Bleeding	2 cases, mild bleeding (5.6 %)

Procedures were performed by three trained endoscopists, each initially trained on live porcine models under expert supervision, followed by supervised clinical procedures before performing independently.

Results Of the 40 resected polyps, 50 % (20/40) were located in the sigmoid region, and 20 % (8/40) were rectal polyps. 7 (17.5 %) were adenocarcinoma, 16 (40 %) high-grade adenomas, 14 (35 %) low-grade adenomas, and 3 (7.5 %) sessile serrated lesions. 39 (97.5 %) polyp has complete resection without perforation. 2 (5.6 %) cases have a minor bleeding.

Conclusions - High Efficacy & Safety: SSD achieved a 97.5 % complete resection rate with no perforations and only 5.6 % (2 cases) of mild bleeding, managed conservatively.

- Procedure Time: Mean procedure duration was 116.8 minutes, with no significant difference between larger (> 3 cm) and smaller (≤ 3 cm) polyps (157.5 mins vs. 96.4 min, p = 0.185).

- Clinical Impact: SSD simplifies ESD, making it a promising tool for broader clinical adoption, particularly for novice endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP264 Profile of CA19-9 according to endosonographic phenotypes of pancreatic tumors: a monocentric observational study

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DOI 10.1055/s-0046-1821591

Aims CA19-9 remains the most widely used serum biomarker for the assessment of pancreatic tumors, particularly pancreatic ductal adenocarcinoma (PDAC). Its levels are influenced by tumor burden, cholestasis, inflammation and secretor status, which limits its diagnostic specificity. Meanwhile, endoscopic ultrasound (EUS) provides unmatched accuracy for characterizing pan-

creatic masses, allowing detailed assessment of tumor size, echostructure, necrosis, vascular invasion and ductal dilatation. However, the relationship between CA19-9 levels and EUS tumor phenotypes remains poorly defined. Understanding this association may help refine diagnostic performance and improve prognostic stratification. The objective of this study was to evaluate the relationship between CA19-9 and the endosonographic characteristics of both primary and metastatic pancreatic tumors in a real-life cohort.

Methods We conducted a monocentric, retrospective observational study including all patients who underwent EUS for suspicion of a pancreatic mass between 2023 and 2025. Clinical data included age, sex, comorbidities and risk factors. EUS variables included tumor location (head/body/tail), maximal diameter, shape, echostructure (homogeneous/heterogeneous), echogenicity, presence of necrosis, vascular infiltration, Wirsung duct dilatation and biliary dilatation. Serum CA19-9 levels were collected at the time of diagnosis. Histology and metastatic status were retrieved when available.

Results Among the 81 patients, 43 had a fully analysable CA19-9 value and documented metastatic status. Of these, 18 (42 %) had metastatic disease and 25 (58 %) had localized tumors. Tumors were predominantly located in the pancreatic head. Tumor size ranged from small focal lesions to large infiltrative masses.

CA19-9 levels showed very high variability across patients (range: 2 to 12,000 U/mL). Median CA19-9 did not differ significantly between metastatic and non-metastatic tumors ($p=0.57$), reflecting both biological heterogeneity and the confounding effect of biliary obstruction, which was common in tumors of the pancreatic head.

A positive trend was observed between tumor size and CA19-9, although not statistically significant. Tumors with heterogeneous echostructure, intra-tumoral necrosis or vascular infiltration showed higher median CA19-9 levels compared to homogeneous, non-necrotic or non-infiltrative lesions, although again without statistical significance. Tumors located in the pancreatic head displayed the highest CA19-9 levels, likely due to associated cholestasis.

Non-adenocarcinoma tumors (notably neuroendocrine tumors) exhibited very low CA19-9 values, consistent with the known poor sensitivity of the marker in these subtypes.

Taken together, these results illustrate the complex interplay between tumor biology, local aggressiveness assessed by EUS, and CA19-9 expression. They also highlight the limitations of relying solely on CA19-9 for diagnostic or prognostic evaluation, particularly in the presence of biliary obstruction.

Conclusions In this cohort, CA19-9 levels did not significantly differ between metastatic and non-metastatic pancreatic tumors, but tended to increase in lesions with more aggressive EUS features, including larger size, heterogeneous echostructure, tumor necrosis and vascular infiltration. While CA19-9 remains an imperfect biomarker, its interpretation in conjunction with detailed EUS morphology may enhance diagnostic accuracy and help refine therapeutic decision-making. A larger, prospective multicentric study is warranted to confirm these findings and develop combined EUS–CA19-9 predictive models.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP265 Time-Dependent Tissue Response After CO₂-Based Cryoablation Using a Prototype Needle in a Porcine Survival Model

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Aims To evaluate the time-dependent tissue response to CO₂-based cryoablation using a prototype cryoneedle—currently under development for EUS-guided pancreatic cancer therapy—by analyzing histologic changes in a porcine liver model. The goal was to determine whether the ablation bounda-

ry shows regeneration or evolves into fibrosis and sustained cellular destruction over several days.

Methods A custom-designed CO₂-driven prototype cryo-needle developed for future EUS-guided pancreatic tumor ablation was tested in porcine liver. Cryoablation was performed laparoscopically at two liver sites per animal using the following protocol:

Rapid cooling: temperature reaching -60°C within ~ 30 seconds

Active freeze: 200–240 seconds of continuous cooling, maintaining -50 to -60°C at the needle surface and -5 to -15°C at 3–4 mm from the needle

Thaw phase: passive rewarming for ~ 60 seconds

Three pigs were sacrificed at 4 hours, 5 days, and 7 days. Liver tissues underwent macroscopic inspection and microscopic evaluation (H&E, trichrome) to characterize necrosis, boundary-zone evolution, and fibrosis.

Results Laparoscopic cryoablation produced consistent ablation zones comparable to prior open procedures.

At 4 hours, clear coagulative necrosis was identified.

At 5 and 7 days, cryo-injured hepatocytes showed **progressive, time-dependent loss of viability**, accompanied by fibroblast proliferation, granulation tissue, and collagen deposition. Fibrotic changes extended beyond the necrotic core, indicating ongoing biologic injury rather than passive recovery.

Conclusions The prototype CO₂ cryo-needle, developed for eventual EUS-guided pancreatic cancer treatment, induces predictable acute necrosis followed by **sustained cellular destruction and progressive peri-ablational fibrosis** in porcine liver tissue. These findings demonstrate that cryoablation elicits a dynamic remodeling response and support continued optimization and miniaturization of the device for pancreatic cancer therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP266 Ambulatory endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) with early discharge: a safety evaluation in selected outpatients

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DOI 10.1055/s-0046-1821593

Aims EUS-guided fine-needle biopsy (EUS-FNB) is essential for diagnosing pancreatic lesions, but evidence on its safety in a fully ambulatory setting with very early discharge is limited. We assessed the safety and feasibility of EUS-FNB in outpatients discharged after brief observation [1–4].

Methods Single-centre retrospective study of consecutive ASA I–II outpatients undergoing EUS-FNB for solid pancreatic lesions between 2024 and 2025. Procedures were performed with anesthesiology assistance using propofol, spontaneous breathing and continuous monitoring. After the procedure, patients were observed for 2 hours and discharged if fit according to the Post-Anesthetic Discharge Scoring System (PADSS). Patients were contacted by telephone at 48 hours to assess post-procedural symptoms and unplanned healthcare use. The primary endpoint was successful early discharge after 2 hours with adequate PADSS. Secondary endpoints were emergency department (ED) visits within 48 hours and major procedure-related adverse events (pancreatitis, clinically relevant bleeding, perforation).

Results One hundred ninety-five patients were included. All procedures were completed, and all patients achieved an adequate PADSS score allowing discharge after 2 hours (primary endpoint met in 100 % of cases). Within 48 hours, 3/195 patients (1.5 %) accessed the ED: two for severe abdominal pain (one requiring opioid analgesia) and one for fever with leukocytosis. Imaging excluded EUS-FNB-related complications in all cases, and no major adverse events occurred (0 %).

Conclusions Ambulatory EUS-FNB with anesthesiologist-guided propofol sedation and a standardised 2-hour observation period appears safe and feasible in carefully selected ASA I–II outpatients. This pathway may reduce hos-

pital bed occupancy and workload and accelerate diagnostic work-up for pancreatic diseases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mizuide M, Itonaga M, Kitano M. Complications of endoscopic ultrasound-guided fine needle aspiration: a narrative review. *Diagnostics*. 2020; 10 (11): 964
- [2] Eloubeidi MA, Tamhane A, Varadarajulu S, Wilcox CM. Frequency of major complications after EUS-guided FNA of solid pancreatic masses: a prospective evaluation. *Gastrointestinal Endoscopy* 2006; 63 (4): 622–629
- [3] Tian G, Ye Z, Zhao Q, Jiang T. Complication incidence of EUS-guided pancreas biopsy: a systematic review and meta-analysis of 11 thousand population from 78 cohort studies. *Asian Journal of Surgery* 2020; 43 (11): 1049–1055
- [4] Yoshinaga S, Itoi T, Yamao K et al. Safety and efficacy of endoscopic ultrasound-guided fine needle aspiration for pancreatic masses: A prospective multicenter study. *Digestive Endoscopy* 2020; 32 (1): 114–126

eP267 Food Bolus Impaction and Eosinophilic Esophagitis: A Retrospective Analysis of Endoscopic Management and Outcomes (2020-2025)

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DOI 10.1055/s-0046-1821594

Aims In adults in Western countries, foreign body ingestion typically presents as esophageal food impaction (EFI), often associated with underlying esophageal pathology, that should be diagnosed [1, 2]. We retrospectively analyzed endoscopic management, techniques (push vs. pull), and outcomes of EFI. Special attention was given to the prevalence of eosinophilic esophagitis (EoE) and the role of mucosal biopsies in diagnosis and management.

Methods We conducted a retrospective analysis of EFI cases using the hospital endoscopy database (OPS code 8-100.6) from 01/2020–09/2025. Outcomes included EFI frequency, endoscopic techniques, complication rates (minor vs. major), prevalence of EoE, baseline characteristics, aspiration, 30-day mortality, and biopsy rates during index endoscopy or short-term follow-up.

Results Of 109 cases identified, 32 were excluded, leaving 77 for analysis. Patients were at 77.92% male, mean age 63 years. Hospital admission occurred in 41.56%, with 53.25% discharged and 5.2% treated during hospitalization. Endoscopic management used the push technique in 54.55% and the pull technique in 41.56%; in 11.69%, the technique was unspecified. Overall complications occurred in 11.69% (push 7.14%, pull 15.625%, with respect to the respective technique), aspiration in 2.6%, and mortality was 1.3%. Biopsies were performed in 66.23%, revealing underlying EoE in 15.58% of patients.

Conclusions Consistent with other data, we also showed that EFI predominantly affects adult men [3]. The push-technique, said to be the primary technique, was applied more frequently than the pull-technique [1, 2, 4]. Complication rates were higher than previously reported, slightly more frequent with pull [3]. Biopsies revealed EoE in a substantial proportion, underscoring their importance during index endoscopy when the underlying cause is unclear. Although the push-technique seems to be associated with less complications and therefore the primary technique, endoscopic management should be individualized based on patient condition and clinical context.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ikenberry S.O. et al. Management of ingested foreign bodies and food impactions. *Gastrointest Endosc* 2011; 73 (6): p 1085–91
- [2] Birk M. et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: European Society of Gastrointestinal. Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2016; 48 (5): p 489–96
- [3] Gangwani M.K. et al. Comparable Efficacy for Push Versus Pull Technique in Esophageal Food Impaction: Systematic Review with Meta-Analysis. *Dig Dis Sci* 2023; 68 (8): p 3354–3364

[4] Fung B.M. et al. Foreign object ingestion and esophageal food impaction: An update and review on endoscopic management. *World J Gastrointest Endosc* 2019; 11 (3): p 174–192

eP268 Safety of non-anesthesiologist administration of propofol for gastrointestinal endoscopic procedures: a systematic review and pooled results analysis

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DOI 10.1055/s-0046-1821595

Aims Although there is strong evidence that non-anesthesiologist-administered propofol (NAAP) sedation is safe, the Anesthesiology community remains reluctant to endorse such a practice. We aimed to evaluate the safety of NAAP in comparison to the anesthesia propofol provider (AP) published in recent literature.

Methods A systematic review was performed across MEDLINE and Cochrane Central Register for all types of trials evaluating the safety of NAAP compared to AP sedation in GI endoscopic procedures from 2019 to 2024 to pool the rates of adverse events (AEs) related to NAAP. The effect size on study outcomes is presented either as the event rate or as the Risk Ratio (RR) with 95% confidence interval (CI). A sensitivity analysis was performed by 1) severity of AE (Major: endotracheal intubation, hospitalization, permanent neurologic impairment, or death. Non-major: transient oxygen saturation 75%–90%, transient apnea, transient airway obstruction, allergic reaction, failed sedation, bradycardia or tachycardia (> 25% change from baseline), hypo- or hypertension (> 25% change from baseline); 2) non-advanced (gastroscopy, colonoscopy) versus advanced procedures 3) Patients' low (I-II) or high (III) ASA classification. We assessed the quality of evidence using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results One RCT and eleven cohort studies were included. In low-risk (ASA I-II) outpatients undergoing non-advanced GI endoscopic procedures, the pooled rates of major and non-major AEs were 0.00% [95% CI (0-0.01%); I² = 0%] and 11.60% [95% CI (4.01-27.2%); I² = 100%], respectively; there was very low confidence in estimates. In low-risk patients undergoing advanced GI endoscopic procedures, the pooled rate of major AEs was 0.05% [95% CI (0.01-0.10%); I² = 98%] and non-major AEs 14.74% [95% CI (6.28-35.77%); I² = 100%], respectively. The pooled rate of non-major respiratory AEs in patients undergoing both non-advanced and advanced gastrointestinal endoscopic procedures with NAAP sedation was deemed low [1.26%, 95% CI (0.73-1.78%); I² = 100%, and 5.28%, 95% CI (0.70-9.85%); I² = 100%, respectively]. Comparing NAAP vs. AP in one RCT and three cohort studies, including 21223 patients, there were 82 AEs in the NAAP group and 907 AEs in the control AP group. Regarding major adverse events, there was no significant difference between the two groups in low-risk patients undergoing advanced GI endoscopic procedures [OR 0.50, 95% CI (0.07-3.59); I² = 0%] and in low-risk patients undergoing non-advanced GI endoscopic procedures. In terms of non-major AEs, no significant difference was detected between NAAP and AP in advanced endoscopic and non-ad-

vanced procedures [OR 0.91, 95% CI (0.54-1.52); $I^2=5\%$ and OR 1.03, 95% CI (0.79-1.36); $I^2=0\%$]. Interestingly, NAAP was not associated with a higher rate of endoscopy-related AEs compared to AP [OR 1.24; 95% CI (0.59-2.61); $I^2=0\%$]. The certainty of evidence was very low.

Conclusions The rate of adverse events in patients undergoing GI endoscopic procedures with NAAP sedation is extremely low, regardless of the patients' ASA score and the invasiveness of the endoscopic procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP269V Multifocal low grade dysplasia of the stomach-ESD removal with the method of 2 wings butterfly

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DOI 10.1055/s-0046-1821596

Abstract Text

This video shows 2 cases of patients with extended multifocal low-grade dysplasia in the antrum with proximal extension. The lesions were removed en-block via ESD with the method of 2 wings butterfly. This technique involves the creation of two submucosal flaps bilaterally while preserving a central submucosal septum between the two flaps, creating a structure which resembles the body of a butterfly between its wings. The flaps are created in the anterior and posterior wall of the stomach, while gravity reveals the central submucosal septum. The incision is then advanced from the distal to the proximal end of the lesion. Aim of this method is to use the gravitational effect in order to accelerate the dissection of large gastric lesions [1-3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/869eefcb-bb41-4444-9479-70e9b20f35ef/Uploads/19978_2_wings%20butterfly%20esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Current Gastroenterology Reports (2025) Traction Techniques for Endoscopic Submucosal Dissection (ESD): Organ-Specific Best Practices and Western Outcomes Emmanuel Palomera-Tejeda # 1, Farhan Kawsar # 2, Salmaan Jawaid
- [2] Libânio D, Pimentel-Nunes P, Bastiaansen B, Bisschops R, Bourke MJ, Deprez PH, Esposito G, Lemmers A, Leclercq P, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, Fuccio L, Bhandari P, Dinis-Ribeiro M. Endoscopic submucosal dissection techniques and technology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. Endoscopy. 2023;
- [3] VideoGIE . 2020 Jan Double-tunneling butterfly method for endoscopic submucosal dissection of extensive rectal neoplasms Ioannis Stasinis 1, Takashi Toyonaga 2, Noriko Suzuki 1

eP270 Time for a change? Rethinking the Rutgeerts Score in Postoperative Crohn's Disease with SES-CD and MM-SES-CD

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DOI 10.1055/s-0046-1821597

Aims Crohn's disease (CD) often recurs after ileocolic resection, requiring reliable endoscopic assessment. While the Rutgeerts score is standard, its limitations highlight the need for alternatives. Simplified Endoscopic Score for Crohn's Disease (SES-CD) and Modified Multiplier SES-CD (MM-SES-CD) assess both ileal and colonic disease, potentially providing a more comprehensive evaluation. This study evaluates their predictive value for postoperative disease progression compared to Rutgeerts score [1].

Methods Longitudinal study of consecutive CD patients undergoing ileocolonoscopy for postoperative surveillance. Receiver operating characteristic (ROC) curve analyses compared Rutgeerts, SES-CD, and MM-SES-CD scores for predicting disease progression within one year after ileocolonoscopy. Multivariate logistic regression assessed score cutoffs, adjusting for confounders. Disease progression was defined as a composite endpoint, including clinical recurrence (Harvey-Bradshaw Index ≥ 4), therapy intensification, CD-related hospitalization, endoscopic balloon dilation, or surgery.

Results A total of 81 patients (48 ± 13 years; 55.6% female) with 128 ileocolonoscopies were included. Regarding Montreal classification, 37 (45.7%) patients had ileal and 44 (54.3%) ileocolonic disease; 9 (11.1%) patients had nonstricturing, nonpenetrating disease, 35 (43.2%) structuring and 37 (45.7%) penetrating disease. Nineteen (23.5%) had perianal disease. The mean time between surgery and ileocolonoscopy was 133 ± 83 months.

Disease progression occurred in 44 (34.4%) cases at one-year follow-up. Rutgeerts score demonstrated fair accuracy (AUC 0.73; 95% CI 0.64-0.80), which was similar to SES-CD (AUC 0.72; 95% CI 0.63-0.79) and MM-SES-CD (AUC 0.72; 95% CI 0.63-0.80).

The optimal thresholds for predicting disease progression were SES-CD > 4 (sensitivity 70.45%; specificity 69.05%) and MM-SES-CD > 17 (sensitivity 59.09%; specificity 77.38%). However, comparing scores cutoffs, Rutgeerts score > 1 showed the highest odds ratio for disease progression (OR 9.02, 95% CI 3.20-25.46, $p < 0.001$).

Conclusions Rutgeerts score, SES-CD, and MM-SES-CD demonstrated similar predictive accuracy for postoperative disease progression. However, the Rutgeerts score > 1 had the strongest predictive value, supporting its continued use while also suggesting that SES-CD and MM-SES-CD can serve as viable alternatives for monitoring postoperative recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Narula N, Wong ECL, Colombel JF et al. Predicting endoscopic remission in Crohn's disease by the modified multiplier SES-CD (MM-SES-CD). Gut. 2022; 71 (6): 1078-1087. doi:10.1136/gutjnl-2020-323799

eP271 The Unaddressed Gap in EUS-FNB: A Structured Evidence Review and Research Framework for AI-Enhanced Targeting Accuracy

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DOI 10.1055/s-0046-1821598

Problem to solve Endoscopic ultrasound (EUS) with fine-needle biopsy (FNB) remains a cornerstone of morphological verification for subepithelial and pancreaticobiliary lesions. However, diagnostic performance varies considerably depending on operator expertise, needle selection, and subjective image interpretation. Across studies published between 2018 and 2024, the sensitivity of EUS-FNB ranges from 68% to 89%, and the proportion of nondiagnostic samples reaches 10-25%, particularly in small, fibrotic, or heterogeneous lesions. Recent developments in artificial intelligence (AI)-including convolutional neural networks (CNN), radiomics, and automated texture analysis- have demonstrated promising results in improving reproducibility and reducing subjectivity in EUS interpretation. Existing AI-EUS studies show AUROC values between 0.86 and 0.95 for differentiating pancreatic mass types and identifying suspicious echotextural patterns. These advancements suggest that incorporating AI into EUS-guided sampling may enhance the precision and consistency of morphological diagnosis.

Innovation Based on the collected evidence, we propose the rationale for developing an AI-supported concept- EUS-Precision- aimed at improving the targeting strategy and morphological yield of EUS-FNB through automated pattern recognition and real-time decision guidance. This is not presented as a ready-to-use system, but as a justified direction derived from existing evidence.

Results The literature analysis revealed several consistent trends:

- AI-enhanced EUS image interpretation improves interobserver agreement and reduces variability in assessing echogenicity, margins, vascular patterns, and internal heterogeneity. CNN-based models in pancreatic lesion analysis demonstrate classification accuracies of 82–94%, surpassing non-expert interpretation.
- Radiomic feature extraction provides quantitative descriptors (texture, entropy, wavelet-based metrics) associated with malignant transformation in pancreatic solid lesions and gastrointestinal subepithelial tumors. Some studies report radiomic AUROC values of 0.87–0.93 for differentiating GIST from benign mesenchymal lesions.
- Factors associated with nondiagnostic FNB samples include lesion size < 15 mm, necrotic/heterogeneous internal architecture, and suboptimal targeting. Up to 20–30% of sampling errors occur due to inaccurate selection of the puncture zone rather than needle type.
- AI-supported guidance systems tested in simulation environments or retrospective datasets improve selection of optimal puncture trajectories, reducing simulated nondiagnostic sampling by 15–22%.

These data collectively justify the feasibility of an AI-supported concept such as EUS-Precision, which would integrate: (1) automated echotexture recognition, (2) radiomic-based risk stratification, (3) real-time highlighting of potentially optimal biopsy targets, and (4) decision-support cues to minimize sampling errors.

Conclusions AI-enhanced EUS interpretation represents a promising direction for improving the diagnostic performance of EUS-guided tissue acquisition. Based on existing evidence, integrating automated echotexture analysis and radiomic markers may improve reproducibility, reduce nondiagnostic sample rates, and support more accurate morphological verification—especially in small or visually challenging lesions.

The conceptual framework of EUS-Precision aligns with ESGE priorities in digital endoscopy, standardization, and operator-independent diagnostic pathways. In the future, such systems may be incorporated into endoscopic workstations as real-time decision-support tools, enhancing diagnostic precision and offering an educational resource for early-career endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP272V Treatment of huge retroperitoneal abscess caused by duodenal perforation, endoscopy or surgery?

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DOI 10.1055/s-0046-1821599

Abstract Text

In the case of duodenal perforation complicated by retroperitoneal enveloping purulent cavity, full irrigation and closure of the wound under an endoscope can achieve a good therapeutic effect, with less trauma and faster recovery than surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/17db901f-1130-4734-89d3-0cf10b5120fd/Uploads/19978_Treatment_of%20huge%20retroperitoneal%20abscess%20caused%20by%20duodenal%20pe....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP273 Patient Radiation Exposure During Fluoroscopy-Guided Gastrointestinal Endoscopic Procedures

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DOI 10.1055/s-0046-1821600

Aims The use of ionizing radiation in interventional gastroenterology is essential for performing complex procedures such as endoscopic retrograde cholangiopancreatography (ERCP), endoscopic placement of digestive stents via esophagogastroduodenoscopy (EGD), and biliodigestive anastomosis or cystogastrostomy performed under endoscopic ultrasound (EUS) guidance. However, prolonged exposure to X-rays represents a non-negligible risk for both patients and operators. This study aimed to assess patient exposure to ionizing radiation during these procedures and to identify factors influencing radiation dose.

Methods We conducted a retrospective study of procedures requiring fluoroscopy—ERCP, digestive stent placement, EUS-guided biliodigestive anastomosis, and EUS-guided cystogastrostomy—performed between May 2023 and August 2024 in the Internal Medicine B Department. Collected data included demographic characteristics, indication for the procedure, procedure type, fluoroscopy time, reference-point air kerma (Ka,r, expressed in mGy), and clinical or technical variables potentially influencing radiation exposure. Procedure complexity was assessed using an adapted scale inspired by classifications of the American Society for Gastrointestinal Endoscopy (ASGE). An analytical study was performed to evaluate risk factors using JAMOVI software.

Results A total of 146 procedures were analyzed: 129 ERCPs (88.4%), 7 EUS-guided biliodigestive anastomoses (4.4%), 6 digestive stent placements (4.1%), and 4 EUS-guided cystogastrostomies (3.1%). The cumulative radiation dose (Ka,r) ranged from **2.59 to 297 mGy**, with a **median of 64.5 mGy (36.9–124)**.

Median fluoroscopy time was **5 min 30 s (3 min 40 s – 9 min 17 s)**, and the median total procedure duration was **100 minutes (83–120)**.

ERCPs were associated with significantly higher radiation exposure compared to EUS- or EGD-related procedures, with median doses of: **65 mGy (37–123.74)** for ERCP, **57.7 mGy (45.7–65)** for EUS-guided procedures and **33.3 mGy (27.6–73.6)** for digestive stent placement via EGD.

ERCPs classified as **ASGE GRADE II** showed slightly higher radiation doses, with a median of **69.7 mGy (37.6–123.1)**.

In our analysis, **age** was the only factor significantly influencing the total duration of ERCP procedures. Radiation exposure varied significantly according to ERCP indication ($p = 0.023$; $p < 0.05$). Patients undergoing biliary drainage for **obstructive jaundice due to lithiasis or malignancy** received higher radiation doses.

Conclusions Assessment of ionizing radiation exposure in the interventional endoscopy suite demonstrates significant variation according to procedure type, indication, and technical factors. Procedure complexity plays a key role; however, more complex procedures did **not** result in significantly higher radiation exposure. A better understanding of risk factors for elevated radiation dose—such as body habitus or operator expertise—may help strengthen radiation-protection strategies and optimize patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP274 Psychological Impact of Endoscopy Practice: Evaluation of Stress, Anxiety and Professional Satisfaction

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DOI 10.1055/s-0046-1821601

Aims Endoscopic practice is a demanding activity that may generate substantial stress among healthcare professionals due to the technical complexity of procedures, the associated cognitive load, and the high level of responsibility inherent to these interventions. This study aims to analyze the psychological impact of endoscopy by assessing several dimensions, including procedural stress, anticipatory anxiety, and professional satisfaction, in relation to individual and occupational characteristics of endoscopists.

Methods An observational study was conducted among healthcare professionals involved in endoscopic procedures. Data were collected using a structured questionnaire including demographic variables (age, sex, city, years of experience, practice of physical activity, caffeine consumption, smoking habits) and elements related to endoscopy workflow organization (number of staff in rotation, years of endoscopic experience). Stress and satisfaction were assessed using the New Job Stress Scale and the Job Satisfaction Score, adapted to endoscopic practice. The questionnaire consisted of multiple items rated on a 1-to-5 Likert scale (1 = strongly disagree, 5 = strongly agree), and scores were summed. Higher scores reflected greater levels of work-related stress or job satisfaction.

Results Preliminary results included 27 participants: 22 residents, 3 professors/attending physicians, and 2 nurses, with respective endoscopic experience of 1 year (0–2 years), 5 years (4.5–5.5 years), and 1 year and 7 months (11 months–2 years and 3 months). A total of 48.1 % of participants were aged between 25 and 31 years. On a 1-to-10 scale, procedural stress had a median value of 6.5 (3–9) among residents, 9 (7–9.5) among professors/attending physicians, and 6 (5.5–6.5) among nurses. Anticipatory anxiety scores were 6 (5–9.75), 7 (4.5–8.5), and 5, respectively. Technical proficiency at the end of training was self-rated at 6 (1–7) out of 10. According to the New Job Stress Scale, the “work overload” section had a mean score of 15.1 ± 7.7 out of 30, the “ambiguity with healthcare personnel” section a score of 14.4 ± 5.8 out of 20, and the “professional relationships and support” section a score of 9.1 ± 4.1 out of 20. The Job Satisfaction Score showed an overall mean satisfaction of 8.67 ± 3.81 out of 15, and satisfaction regarding the work environment was 7.67 ± 3.14 out of 15.

Conclusions This study highlights the psychological impact of endoscopic practice, with varying degrees of stress and satisfaction according to professional status, experience, and working conditions. These findings emphasize the importance of optimizing organizational strategies to improve practitioners’ well-being and enhance the acquisition of endoscopic skills. Better stress management within endoscopic practice may contribute to increased professional satisfaction and ultimately improve the quality of patient care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP275V Dysplastic lesions of the duodenum: Removal via ESD

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DOI 10.1055/s-0046-1821602

Abstract Text

We present two cases involving 50- and 75-year-old patients with large dysplastic lesions (40 mm and 50 mm) located in the second portion of the duodenum. Histology showed low-grade dysplasia with focal high-grade areas in the first case and predominant high-grade dysplasia in the second. Both lesions were situated near, but not involving, the ampulla of Vater, with a safety distance of more than 10 mm. En bloc resection was achieved using endoscopic submucosal dissection (ESD). Traction was applied in one case to clarify the cutting plane. The mucosal defects were successfully closed with a combination of the zipper-closure technique and the clip-and-string method. Both patients were discharged on postoperative day two. Follow-up endoscopy at three months showed no residual or recurrent lesions [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/e2abcaa8-62f9-4a9e-b7db-84ca1220dd86/Uploads/19978_ESD_Duodenum%20esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Annals of Laparoscopic and Endoscopic Surgery January 2023 Endoscopic resection of non-papillary neoplastic lesions of the duodenum: a narrative review of clinical application and techniques Ross C. D. Buerlein, Andrew Y. Wang
- [2] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ, Esposito G, Lemmers A, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, van Hooft JE, Deprez PH, Dinis-Ribeiro M. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. Endoscopy. 2022
- [3] Gastrointest Endoscopy 2025 Outcomes and safety of duodenal endoscopic submucosal dissection for nonampullary lesions: systematic review and meta-analysis Alessandro Rimondi MD 1, Elisabetta Dell'Unto MD 1 2, Rui Moraes MD 3, Gianluca Esposito MD, PhD 2, João Santos-Antunes MD, PhD 3 4 5, Gian Eugenio Tontini MD, PhD 6 7, Rehan Haidry BSc (Hons), MD, FRCP 8, Jérémie Jacques MD, PhD 9, Edward John Despott MD, FRCP, FEBGH, FASGE, MD (Res) 1, Alberto Murino MD 1 8

eP276V Mucosal Incision and Decompression for Giant Esophageal and Gastric Hematoma: A Novel Therapeutic Approach

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DOI 10.1055/s-0046-1821603

Abstract Text

Endoscopic mucosal incision and decompression appears to be a safe and effective treatment for submucosal hematomas of the esophagus and stomach. This technique can rapidly relieve retrosternal pain, prevent dysphagia caused by luminal compression, and reduce the risk of mucosal ischemia, necrosis, and related complications.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/36bbd711-399e-4788-aa22-92a83b6b020b/Uploads/19978_%E8%A1%80%E8%82%BF%E5%B8%A6%E5%AD%97%E5%B9%95%E5%8F%8A%E9%9F%B3%E9%A2%911102%E4%B8%AD%E6%AF%94%E7%89%B9%E7%8E%87.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP277 Predictive Factors of Failure of Common Bile Duct Clearance in Patients with Bile Duct Stones Without Cholangitis

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DOI 10.1055/s-0046-1821604

Aims To identify the predictors of failed CBD stone clearance without cholangitis during ERCP

Methods retrospective analysis of patients who underwent ERCP for CBD stone clearance at a tertiary care centre in New Delhi between January 2023 and July 2023. Univariate and multivariate analyses were performed to identify predictors of CBD stone clearance (► Table 1).

► **Table 1** Univariate analysis on predictors of CBD Clearance

(A) Baseline Lab parameters				
S. No	Parameters	Not cleared (66)	Cleared (179)	P value
1	Hb (g/dL)	11.9 (10.5-12.97)	11.9 (10.9-12.7)	0.83
3	Platelets (cells × 10 ⁵ /mm ³)	2.3 (1.63-2.87)	2.3 (1.7-3.0)	0.59
4	Total Bilirubin (mg/dl)	0.9 (0.5-2.05)	0.7 (0.5-1.3)	0.076
5	ALT (IU/L)	34 (20-94)	42 (23-83)	0.28
6	AST (IU/L)	38.5 (27-75.5)	41 (26-78)	0.97
7	ALP (IU/L)	188 (129-346)	180 (127-312)	0.86
8	CBD Diameter > 15mm	13 (19.7 %)	19 (10.6 %)	0.06
9	CBD Diameter in mm	11.93 ± 4.57	10.68 ± 3.41	0.02
10	Stone No (> 3)	3 (4.5 %)	12 (6.7 %)	0.52
11	Stone Size > 12 mm	16 (24.2 %)	16 (8.9 %)	0.001
12	Stone Size in mm	9.97 ± 4.90	7.73 ± 3.36	0.0001
13	Location of stone (proximal)	12 (18.2 %)	18 (10.1 %)	0.57
14	PAD	6 (9.1 %)	17 (9.5 %)	0.94
15	Bulky Papilla	6 (9.1 %)	5 (2.8 %)	0.03
16	Difficult cannulation	16 (24.2 %)	14 (7.8 %)	0.001
17	CBD Diameter > 15mm	9 (13.6 %)	20 (11.2 %)	0.10
18	CBD Diameter in mm	13.11 ± 5.10	11.72 ± 3.34	0.02
19	Stone No (> 3)	3 (4.5 %)	19 (10.6 %)	0.51
20	Stone Size in mm	13.77 ± 6.03	8.93 ± 3.89	0.0001
21	Location of stone (proximal)	8 (12.1 %)	18 (10.05 %)	0.02
22	CBD stricture	4 (6.1 %)	3 (1.6 %)	0.06
23	Hepatolithiasis	8 (12.1 %)	10 (5.6 %)	0.08
24	Impacted stone	16 (24.2 %)	5 (2.8 %)	0.0001
25	Use of a Basket for Extraction	1 (1.5 %)	3 (1.7 %)	0.94

Results A total of 245 patients were included in the analysis. Successful clearance was achieved in 73.06 % of the cases. Univariate analysis revealed that abdominal pain, CBD diameter, stone size > 12 mm, and stone size/CBD diameter > 1 on magnetic resonance cholangiopancreatography (MRCP) were significantly associated with failed clearance. Endoscopic and cholangiographic parameters, such as bulky papilla, difficult cannulation, CBD diameter, stone size > 12 mm, middle location of the stone, stone size/CBD diameter > 1, impacted stone, and CBD stricture, were also significantly associated with failed clearance. On multivariate analysis, middle stone location (odds ratio [OR] 4.44; 95 % CI, 1.67-11.75), stone size/CBD diameter > 1 (OR 5.22; 95 % CI, 1.14-23.78), CBD stricture (OR 5.06; 95 % CI, 1.006-25.52), and impacted stone (OR 9.33; 95 % CI, 2.17-39.99) were identified as independent predictors of failed CBD clearance [1–7].

Conclusions Identifying these predictive factors may help stratify patients for appropriate advanced management strategies, such as cholangioscopy-assisted extraction, electrohydraulic lithotripsy, or surgical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lauri A., Horton R.C., Davidson B.R., Burroughs A.K., Dooley J.S. Endoscopic extraction of bile duct stones: management related to stone size. *Gut*. 1993; 34 (12): 1718–1721

[2] Üsküdar O., Parlak E., Dısıbeyaz S., Koksall A.S., Çiçek B., Kılıç Z.M.Y. et al. Major predictors for difficult common bile duct stone. *Turk. J. Gastroenterol* 2013; 24 (5): 423–429

[3] Aljebreen AM, Alharbi OR, Azzam N, Almadi MA. Efficacy of spyglass-guided electrohydraulic lithotripsy in difficult bile duct stones. *Saudi J Gastroenterol* 2014; 20: 366–70

[4] Manes G., Paspatis G., Aabakken L., Anderloni A., Arvanitakis M., Ah-Soune P. et al. Endoscopic management of common bile duct stones: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy*. 2019; 51 (5): 472–491

[5] Odemis B., Kuzu U.B., Oztas E., Saygili F., Suna N., Coskun O. et al. Endoscopic management of the difficult bile duct stones: a single tertiary center experience. *Gastroent. Res. Pract.* 2016; 2016: 1–7

[6] Almadi M., Eltayeb M., Thaniyah S., Alrashed F., Aljebreen M., Alharbi O. et al. Predictors of failure of endoscopic retrograde cholangiography in clearing bile duct stone on the initial procedure. *Saudi J. Gastroenterol.* 2019; 25 (2): 132–138

[7] Sabbah M, Nakhli A, Bellil N, Ouakaa A, Bibani N, Trad D et al. Predictors of failure of endoscopic retrograde pancreaticholangiography during common bile duct stones. *Heliyon*. 2020; 6 (11): e05515

eP278 Digital Decision Support in Acute Gastrointestinal Bleeding: Addressing Clinical Variability and the Need for a Standardized Care Pathway

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DOI 10.1055/s-0046-1821605

Problem to solve

Acute gastrointestinal bleeding (GIB) requires rapid risk stratification, timely intervention decisions, and accurate triage. Despite validated risk scores (Rockall, Glasgow-Blatchford), substantial variability in clinical decision-making persists. CDSS interest is growing, yet no unified approach integrates prognostic models, endoscopic findings, and clinical parameters.

Key gaps include:

- variability in therapeutic decisions across experience levels;
- limited calibration of scores in high-risk patients;
- absence of a standardized early triage and management pathway;
- limited integration of guideline-based recommendations into routine workflow.

Innovation

A literature review (PubMed, Embase, Scopus; 2018-2025) assessed:

- prognostic value of Rockall and GBS for rebleeding, mortality, and urgent intervention;
- management algorithms for non-variceal GIB;
- existing digital tools and CDSS components;
- factors driving decision-making variability.

Non-clinical, low-quality, and non-representative studies were excluded. The review highlights the potential of digital CDSS to integrate clinical, laboratory, and endoscopic parameters into a structured and standardized decision pathway.

Results 1. Risk score performance.

- GBS shows high sensitivity for identifying low-risk patients (GBS 0-1 = minimal adverse event risk).
- Rockall score offers acceptable accuracy for rebleeding prediction (AUC ≈ 0.73) but is less reliable for mortality.
- Both tools insufficiently incorporate real-time endoscopy and dynamic hemodynamics.

2. Clinical gaps.

- large decision variability;
- weak calibration in high-risk groups;
- lack of unified triage pathway;
- limited incorporation of guidelines into workflow.

3. Potential of digital CDSS.

CDSS studies show improved structure of clinical decisions, better adherence to recommendations, greater consistency across clinicians, and reduced assessment time. No validated GIB-specific digital model currently integrates endoscopic, clinical, and dynamic parameters.

Conclusions Rockall and GBS remain important but fail to incorporate endoscopic stigmata and dynamic patient changes. Persistent gaps – decision variability, absence of standardized triage, and limited implementation of guidelines – underline the need for updated digital solutions.

Digital CDSS represent a promising direction for standardizing GIB management. The literature supports developing multifactorial algorithms that combine laboratory, clinical, and endoscopic data.

Future Directions.

Future work should focus on developing and validating digital CDSS, including web-based and EMR-integrated tools, capable of real-time adaptation and reducing clinician variability. Integration within the ESGE framework could support the creation of a unified standardized pathway for GIB management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP279V A mass in rectum

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DOI 10.1055/s-0046-1821606

Abstract Text

This case presents an 18-year-old male patient with a complex five-year history of intermittent rectal bleeding, marked by recurrent symptoms and multiple failed surgical interventions, culminating in a diagnosis of Mucosal Prolapse Syndrome (MPS) following the exclusion of other potential benign and malignant pathologies.

The patient ultimately underwent underwater endoscopic mucosal resection (UEMR) was successfully cured. UEMR enables rapid and precise mucosal resection while significantly minimizing electrical injury, thereby safeguarding adjacent tissues and effectively mitigating the risk of complications such as delayed bleeding or stricture formation.

The patient's postoperative recovery was uneventful, with no recurrence of symptoms at three-month and six-month follow-ups.

Video http://data.process.y-congress.com/ScientificProcess/Data/1106/660/1670/18af9831-d884-464d-be93-c10926915a88/Uploads/19978_%E8%84%B1%E5%9E%82%E4%B8%AD%E6%AF%94%E7%89%B9%E7%8E%8720251123.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP280 Cystotome use for impassable biliopancreatic strictures: efficacy and safety — Systematic review and single center case series

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Aims Most biliary or pancreatic duct strictures can be passed with a guidewire but a subset of especially tight ones remain impassable by standard dilation devices. Alternative techniques, such as drilling into the stricture, may be needed in such instances. Data on the efficacy and safety of this rescue technique are scarce. We conducted a systematic literature review complemented by our single-center experience using a 6Fr electrocautery device for “impassable” biliopancreatic strictures.

Methods A systematic review of PubMed, Embase, Google Scholar, and Cochrane library was performed, including studies using a cystotome for biliary or pancreatic strictures that could not be dilated with standard accessories. Alternative devices (e.g., Soehendra stent retriever) were excluded. Primary outcomes was the combination of technical success (ability to traverse the stricture and deploy a stent) and safety (absence of procedure-related adverse event). Clinical success (short- and long-term) were collected if available. Our review was supplemented with cases performed at Beaujon Hospital (Clichy, France) from 2020 to 2025.

Results A total of 99 patients were included (90 patients from 9 studies and 9 from our center). The primary composite outcome, combining technical success and safety, was achieved in 90 % of patients. Technical success, allowing stent insertion in the desired position, was 100 % (99/99). Clinical success was achieved in 94 % (81/86).

Adverse events occurred in 10 % of patients (11/99). All complications were considered mild or moderate, with no case of perforation or severe (Clavien-Dindo grade ≥ 3) adverse event observed. Four Patients (4 %) had papillary bleeding following ERCP (including one during sphincterotomy, before the use of the cystotome in our cohort and without information for the others), three patients (3 %) had mild pancreatitis developed after a pancreatic ERCP. One patient (1 %) had a cholangitis. One study included transient abdominal pain as an adverse event and reported 3 cases without documented pancreatitis.

Conclusions Cystotome-assisted electrosurgical drilling appears to be technically reliable and effective for complex biliopancreatic strictures that are resistant to standard dilation. This comprehensive study could encourage to integrate the cystotome in the endoscopists' ERCP toolbox.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP281 Advanced Endoscopic Solutions for Foreign Body Extraction in the Pancreatobiliary System: Eliminating the Need for Surgical Intervention

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DOI 10.1055/s-0046-1821608

Aims The retrieval of complex foreign bodies lodged deep within the pancreatic and biliary ducts (PBDs) often constitutes a high-risk procedure, frequently necessitating surgical intervention when conventional methods fail. The primary aim of this case presentation is to validate and demonstrate the decisive therapeutic benefit and safety profile of cholangioscopy/pancreatocopy-assisted ERCP for the extraction of highly challenging, proximally migrated foreign objects. This work supports the establishment of advanced endoscopic techniques as the definitive, non-surgical first-line treatment in specialized endoscopy centers [1–3].

Methods We present two illustrative clinical cases requiring advanced endoscopic visualization and retrieval:

Case 1 (Pancreatic Duct): A female patient presented with right upper quadrant pain indicating complications from a proximally migrated prophylactic pancreatic stent, which had moved deep into the pancreatic tail. Due to the deep position and technical challenges of the migrated stent, the extraction required direct visualization via SpyGlass Pancreatocopy. The retrieval was successfully accomplished using SpyBite Biopsy Forceps under real-time endoscopic guidance, as standard techniques were rendered ineffective.

Case 2 (Biliary Duct): A complex case involving a patient with a history of complicated open cholecystectomy. The patient suffered from recurrent, severe episodes of cholangitis and associated symptoms. Imaging confirmed the presence of an inadvertent surgical foreign body—a protective drainage tube—which had been retained within the Ductus Choledochus (common bile duct). Definitive management was achieved via ERCP guided by SpyGlass Cholangioscopy, allowing for the precise targeting and safe removal of the intra-choledochal drain.

Both procedures were performed to eliminate the necessity for high-morbidity surgical exploration.

Results The endoscopic procedures achieved a 100 % technical success rate for the complete retrieval of both complex foreign bodies. Crucially, both patients successfully avoided major surgery, demonstrating the profound clinical impact of the technology. Both individuals were managed minimally invasively, leading to rapid recovery and discharge within 48 hours without major post-ERCP complications.

Conclusions The successful management of a deeply migrated pancreatic stent and a surgically retained biliary drain, both previously challenging indications, underscores the decisive role of cholangioscopy/pancreatocopy-assisted ERCP. The integration of direct visualization and specialized tools significantly expands the therapeutic reach of endoscopy. This strategy is established as the first-line definitive therapy for complex pancreatobiliary foreign body extraction, significantly reducing patient morbidity and accelerating convalescence by eliminating the need for surgical intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Chen Y et al. Novel retrieval techniques for migrated pancreatic and biliary stents: a systematic review. *World J Gastroenterol* 2020; 26 (16): 1949–1960

[2] Wally L et al. Endoscopic management of retained surgical drains in the biliary tract: A systematic review and meta-analysis. *Surg Endosc* 2024; 38 (1): 15–25

[3] Cotton PB et al. A review of endoscopic methods for removing foreign bodies from the gastrointestinal tract and biliary system. *Am J Gastroenterol* 2021; 116 (11): 2204–2212

eP282 Belgian Barrett's Esophagus RFA Registry: improved efficacy and maintained safety after reimbursement-driven centralization

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DOI 10.1055/s-0046-1821609

Aims Volume expansion following reimbursement of advanced procedures typically raises concerns about quality dilution, particularly when techniques disseminate beyond specialized centers. This prospective Belgian registry investigated whether national reimbursement for radiofrequency ablation (RFA) of Barrett's esophagus affected treatment outcomes, comparing two 7-year periods before and after reimbursement implementation (2010–2016 vs 2017–2023) across 12 designated expert centres. We assessed changes in case volume, patient characteristics, treatment patterns, efficacy, and safety (► Table 1).

Methods Patients were allocated according to their first RFA procedure into pre-reimbursement (2010–2016) and post-reimbursement (2017–2023) cohorts. Variables included demographics, Prague C/M classification, worst pre-RFA histology, pre-RFA endoscopic resection (ER), number of RFA sessions, efficacy outcomes (complete eradication of intestinal metaplasia [CE-IM], complete eradication of dysplasia [CE-D]), and adverse events. Efficacy required ≥ 1 surveillance biopsy within 12 months after final RFA. Statistical comparisons used chi-square or Fisher's exact tests for categorical variables and Mann–Whitney U tests for continuous variables.

Results RFA case volume increased 71 % following reimbursement (345 vs 589 patients, $p < 0.001$). Post-reimbursement patients presented with shorter Barrett's segments (Prague C: 3 vs 2, $p = 0.039$; M: 5 vs 4, $p = 0.031$) and lower HGIN prevalence (62 % vs 55 %, $p = 0.024$). Contrary to concerns about quality dilution, efficacy improved significantly (CE-IM: 83.1 % vs 87.5 %, $p = 0.048$), with a strong trend for CE-D (94.0 % vs 96.5 %, $p = 0.079$), despite higher volumes. Median RFA sessions remained unchanged (2, $p = 0.052$). Safety profiles were excellent and equivalent: bleeding (5 % vs 6 %, $p = 0.62$), stenosis (9 % vs 8 %, $p = 0.71$), with zero RFA-related perforations in either period.

Conclusions RFA efficacy improved despite a 71 % post-reimbursement volume increase, likely driven by strict centralisation within accredited expert centres and earlier-stage disease at presentation. These findings challenge assumptions about volume–quality trade-offs and show that centralised delivery can expand access while improving outcomes.

► Table 1

	Pre (2010–2016)	Post (2017–2023)	p-value
Patients	345	589	<0.001
Median age (years)	66	65	0.41
Sex (male)	72 %	72 %	0.92
Prague C (median, IQR, min–max)	3 (0–6), 0–15	2 (0–5), 0–18	0.039
Prague M (median, IQR, min–max)	5 (2–8), 1–17	4 (2–7), 0–20	0.031
NDBE	4 %	5 %	0.44
LGD	7 %	9 %	0.28
HGIN	62 %	55 %	0.024
EAC pT1a	20 %	22 %	0.57
EAC pT1b	7 %	9 %	0.33
Any ER	58 %	61 %	0.55
EMR	55 %	56 %	0.77
ESD	3 %	5 %	0.18
Median RFA sessions (IQR, min–max)	2 (1–3), 1–5	2 (1–3), 1–5	0.052
CE-IM	83.1 %	87.5 %	0.048
CE-D	94.0 %	96.5 %	0.079
Bleeding	5 %	6 %	0.62
Stenosis requiring dilation	9 %	8 %	0.71
Perforation	0 after RFA 4 after ER	0 after RFA 4 after ER	1.00

Conflicts of Interest Speaker's fee for Medtronic

eP283 Carbon and Financial Impact of reusing Bite Blocks in Upper Gastrointestinal Endoscopy

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DOI 10.1055/s-0046-1821610

Aims Over one million upper endoscopies are performed annually in France. Although no regulation mandates it, single-use (SU) bite blocks remain the standard practice. We evaluated the environmental benefit of switchint to reusable (RU) bite blocks for upper gastrointestinal endoscopy.

Methods Reusable polyoxymethylene (POM) bite blocks (TEC-CARE, Chavelot, France) combined with rubber bands were tested. Preliminary tests consisted of subjecting the bite blocks to repeated steam sterilization cycles (134 °C, 18 min) after real-life patient use.

After confirming their integrity through successive sterilization cycles, a comparison was done between standard SU bite blocks (ALTON-Medical, China) and the reusable model under several scenarios (with or without reusing the

rubber band, disinfection in automated endoscope reprocessors, or steam sterilization). A simplified life cycle assessment focusing exclusively on greenhouse gas emissions (kgCO₂e) was then performed using the CAREBONE tool developed by AP-HP (<https://bit.ly/carebone>).

Results Twenty reusable bite blocks were used over two months. All tolerated at least ten sterilization cycles with no visible degradation impairing their use. However, the rubber bands did not withstand sterilization, requiring continued use of single-use bands due to the lack of suitable reusable alternatives.

Several scenarios were compared, assuming ten uses per RU bite block:

- Single-use bite block + single-use band: **1.05 kgCO₂e**
- Reusable bite block (sterilized) + single-use band: **1.25 kgCO₂e**
- Reusable bite block (disinfected) + single-use band: **0.62 kgCO₂e**
- Reusable bite block (disinfected) + reusable band (hypothetical due to lack of a readily available model): **0.12 kgCO₂e**

If reusable bite blocks with reusable bands were implemented nationwide (≈ 1 million oral procedures/year), emissions avoided would amount to 930 tCO₂e per year, equivalent to 260,000 cheeseburgers or to the carbon footprint of building 20 new detached houses (French Ecological Agency ADEME).

Conclusions We demonstrated that POM reusable bite blocks withstand repeated sterilization

Sterilizing reusable bite blocks combined with disposable bands does not provide an ecological advantage over single-use devices due to the environmental burden of sterilization. In contrast, disinfection in automated endoscope washer-disinfectors reduces CO₂ emissions by approximately 40 %. These findings led to a change in practice in our department, with the adoption of reusable bite blocks (combined initially with disposable bands) disinfected together with the endoscope after each procedure.

Acknowledgement: POM bite blocks were graciously manufactured and provided for free by Tec-Care

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP284 The Carbon Footprint of Colonoscopy: Algorithmic Analysis of the Patient Pathway

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DOI 10.1055/s-0046-1821611

Aims Medical and technical activities have a significant environmental impact. Various national recommendations and local initiatives aim to reduce it, but it remains difficult to identify which changes in patient pathways can most effectively lower emissions without compromising quality of care. To help prioritize potential measures, we analyzed all possible colonoscopy pathways to develop a digital comparative tool assessing the environmental impact of different care scenarios.

Methods Interviews were conducted with engineers, clinical teams, and support staff (administrative, logistics, pharmacy, sterilization, biomedical, etc.) to map every step of the colonoscopy process (outpatient, day-case, and inpatient). The analysis included the preparation phase (scheduling, medical visits, bowel preparation), the procedure itself (anesthesia type, endoscope and accessories, consumables, procedural steps achieved), and the post-procedure phase (disinfection, patient recovery, sample management, waste processing, follow-up).

For each step, the carbon footprint of alternative practices was calculated (e.g., general vs local anesthesia, CO₂ insufflation vs water irrigation, reusable (RU) vs single-use (SU) accessories, digital data storage methods etc.). A simplified life cycle assessment (LCA) was performed using the CAREBONE tool developed by AP-HP (open source, <https://bit.ly/carebone>), expressing greenhouse gas emissions in kgCO₂e. We will aggregate this data into a digital tool allowing

users to explore each step of the care pathway, quantify its total carbon impact, and assess the CO₂e difference associated with any modification.

Results Calculation of an illustrative colonoscopy pathway including the following main steps was performed. Carbon emissions (KgCO₂e) are reported when available for each step.

- **Pre-Endoscopy:** A remote pre-anaesthetic consultation (0.078); standard bowel preparation (0.51); patient dressing with single-use pyjamas (0.79); reusable bedsheets (0.032) with single-use bed protection (0.25)
- **During-Endoscopy:** Propofol-based deep sedation (9.98); use of a reusable endoscope (3.39) and its associated components (1.52) (aspiration and insufflation tubing, pistons, sterile water for the water-jet system); CO₂ insufflation (0.078); use of a polypectomy snare (0.36) and formol biopsy tube (0.48); disposal of liquid waste (0.29); protective equipment for the endoscopist (0.56)
- **After-Endoscopy:** Endoscope reprocessing (1.30) including nurse protective gear, manual pre-cleaning, and disinfection in automated endoscope reprocessor, drying and storage; Patient recovery with a light snack and a SU water bottle (0.37).

Under this pathway, total CO₂ emissions of a single colonoscopy was 20KgCO₂e. Highest CO₂-emitting sectors were anaesthesia, SU devices and endoscope reprocessing. Patient transport was excluded from the initial analysis as many tools already exist to estimate their burden (For instance, 30km drive in a petrol car would add 6.53Kg CO₂e)

Conclusions Our study aimed to identify the key steps in the patient pathway where professionals in an endoscopy unit can directly influence the reduction of the environmental footprint by implementing targeted measures. Our digital tool will provide healthcare facilities with a simple and interactive way to (re)organize their workflow, thereby minimizing the environmental footprint of colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP285 Clinical utility of endoscopic ultrasound-guided fine-needle biopsy in the diagnosis of deep-seated lymphadenopathy and splenic lesions

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DOI 10.1055/s-0046-1821612

Aims Endoscopic ultrasound-guided (EUS-guided) biopsy has become a promising option for diagnosing hematological disorders, especially in cases of nodal and extranodal lymphomas that are not accessible by conventional surgical biopsy. This study evaluates the diagnostic performance, clinical utility, and safety of EUS-guided fine-needle biopsy (FNB) in the assessment of deep-seated lymphadenopathy and splenic lesions suspected of lymphoproliferative disease or malignancy [1–5].

Methods Of the 28 biopsy specimens obtained, 25 demonstrated diagnostically adequate material, yielding a diagnostic adequacy rate of 89.3%. Among the 25 adequate samples, lymphoma was diagnosed in 13 cases (52%). In 9 cases (36%) a metastatic involvement of lymph nodes was identified. The remaining cases included single instances of sarcoidosis, tuberculosis, and gastrointestinal stromal tumor (GIST), each representing 4% of the sample. Two patients (8%) demonstrated benign inflammatory changes without evidence of neoplastic disease and remained negative on follow-up examination. No procedural complications were documented.

Results Of the 28 biopsy specimens obtained, 25 demonstrated diagnostically adequate material, yielding a diagnostic adequacy rate of 89.3%. Among the 25 adequate samples, lymphoma was diagnosed in 13 cases (52%). In 9 cases (36%) a metastatic involvement of lymph nodes was identified. The remaining cases included single instances of sarcoidosis, tuberculosis, and gastrointestinal stromal tumor (GIST), each representing 4% of the sample. Two patients

(8%) demonstrated benign inflammatory changes without evidence of neoplastic disease and remained negative on follow-up examination. No procedural complications were documented.

Conclusions Endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) is an effective modality for histologic assessment of deep-seated lymphadenopathy and splenic lesions. Its ability to obtain diagnostically adequate tissue with a favorable safety profile supports its use as a first-line diagnostic approach for these lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bellisario F et al. Endoscopic Ultrasound-Guided Fine Needle Biopsy in the Diagnostic Work-Up of Deep-Seated Lymphadenopathies and Spleen Lesions: A Monocentric Experience. *Diagnostics* (Basel, Switzerland) vol. 13 (17): 2839 2023. doi:10.3390/diagnostics13172839
- [2] Bellisario F et al. Endoscopic Ultrasound-Guided Fine Needle Biopsy in the Diagnostic Work-Up of Deep-Seated Lymphadenopathies and Spleen Lesions: A Monocentric Experience. *Diagnostics* (Basel, Switzerland) vol. 13 (17): 2839 2023. doi:10.3390/diagnostics13172839
- [3] Bellisario F et al. Endoscopic Ultrasound-Guided Fine Needle Biopsy in the Diagnostic Work-Up of Deep-Seated Lymphadenopathies and Spleen Lesions: A Monocentric Experience. *Diagnostics* (Basel, Switzerland) vol. 13 (17): 2839 2023. doi:10.3390/diagnostics13172839
- [4] Bellisario F et al. Endoscopic Ultrasound-Guided Fine Needle Biopsy in the Diagnostic Work-Up of Deep-Seated Lymphadenopathies and Spleen Lesions: A Monocentric Experience. *Diagnostics* (Basel, Switzerland) vol. 13 (17): 2839 2023. doi:10.3390/diagnostics13172839
- [5] EUS-guided biopsy has emerged as a dependable method for diagnosing hematologic diseases, particularly nodal and extranodal lymphomas that cannot be reached through surgical biopsy. This study evaluates the diagnostic performance of EUS-guided fine-needle biopsy (FNB) in hematologic disease assessment

eP286 Endoscopic Full-Thickness Resection (eFTR) for Complex Colorectal Lesions: A Single-Centre Outcomes Analysis of 22 Patients

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DOI 10.1055/s-0046-1821613

Aims To analyse the efficacy and safety profile of eFTR in patients with complex colorectal lesions in a District General Hospital.

Methods A retrospective analysis was carried out between 2021–2025. We identified 22 patients undergoing eFTR during this period. Data collected included patients' demographics, indications for eFTR, lesion size, and Charlson Comorbidity Score. Primary outcomes were defined as technical and histological success of R0 resection. Secondary outcomes included time from multidisciplinary team (MDT) discussion to eFTR, length of hospital stay, duration of the procedure, lesion site, complications and follow up, including recurrence rates. All patients referred to eFTR were discussed at our complex polyp MDT meeting [1–3].

Results The cohort consists of 17 males and 5 females. The median age was 75.5 years, with a median Charlson score of 6.0. Indications for eFTR included features of malignancy on superficial endoscopic assessment (n = 11), benign polyps but morphologically suspicious for advanced histology (n = 4), recurrent polyps (n = 5), and submucosal lesions (n = 2). The median lesion size was 17mm. Technical success was achieved in 20/22 cases (90.9%). Histological R0 resection was successful in 18 cases (81.8%) and R1 resection in 4 cases (18.2%). The median time from MDT discussion to eFTR was 25 days. Twenty-one cases (95.5%) were discharged on the same day, with one admission due to diabetic ketoacidosis unrelated to the procedure. The median duration of the procedure was 32 minutes. Of note, 16/22 cases were followed up, as the rest (n = 6) were either managed conservatively (n = 4), referred for chemotherapy (n = 1) and lost to follow-up (n = 1). One of the sixteen patients had a recurrence and was referred for surgery. There were no complications directly from eFTR (► **Table 1**).

► Table 1

Size	Location	Histology
6mm	Rectum	Benign vascular lesion
6mm	Rectum	Hyperplastic crypts
11mm	Distal Sigmoid	Adenocarcinoma
13mm	Splenic flexure	Adenocarcinoma
14mm	Proximal Sigmoid	Adenocarcinoma
15mm	Rectum	Adenocarcinoma
15mm	Rectum	Adenocarcinoma
15mm	Proximal descending	Adenocarcinoma
15mm	Caecum	Low grade tubular adenoma
15mm	Distal Sigmoid	Tubular adenoma
17mm	Proximal transverse	Adenocarcinoma
17mm	Distal Sigmoid	Adenocarcinoma
18mm	Rectum	Adenocarcinoma
18mm	Proximal transverse	Low grade tubular adenoma
20mm	Rectum	Benign tubulovillous adenoma
20mm	Hepatic flexure	Adenocarcinoma
20mm	Distal Sigmoid	Hyperplastic polyp and adenomatous component
23mm	Distal Sigmoid	Adenocarcinoma
23mm	Proximal Sigmoid	Hyperplastic polyp
25mm	Proximal transverse	Adenocarcinoma
27mm	Distal Sigmoid	Low grade tubular adenoma
No size	Proximal transverse	Focal epithelial hyperplasia

Conclusions EFTR is an effective, safe, and minimally invasive alternative procedure that can be used in managing complex colorectal lesions, including in elderly and frail patients, even in a District General Hospital setting, provided robust Governance and MDT processes are in place. We plan to longitudinally evaluate eFTR to further evaluate long-term outcomes in complex colorectal lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nabi Z., Samanta J., Dhar J., Mohan B.P., Facciorusso A., Reddy D.N. 2024; Device-assisted endoscopic full-thickness resection in colorectum: Systematic review and meta-analysis. *Digestive Endoscopy* 36: 116–128. doi:10.1111/den.14631
- [2] Endoscopic full thickness removal of non-lifting colonic polyps. *Interventional procedures guidance* Published: 24 May 2017 www.nice.org.uk/guidance/ipg5803
- [3] Raju GS, Lum PJ, Ross WA, Thirumurthi S, Miller E, Lynch PM, Lee JH, Bhutani MS, Shafi MA, Weston BR, Pande M, Bresalier RS, Rashid A, Mishra L, Davila ML, Stroehlein JR. Outcome of EMR as an alternative to surgery in patients with complex colon polyps. *Gastrointest Endosc.* 2016; 84 (2): 315–25. doi:10.1016/j.gie.2016.01.067 Epub 2016 Feb 6 PMID: 26859866 PMID: PMC4949087

eP287 Diagnostic yield of endoscopic ultrasound in biliary obstruction with inconclusive conventional imaging

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DOI 10.1055/s-0046-1821614

Aims The identification of a biliary obstruction remains a major diagnostic challenge in the management of pancreatobiliary disorders. Despite advances in conventional imaging, certain obstructions may go undetected, making etiological diagnosis uncertain. Endoscopic ultrasound (EUS) provides higher resolution and direct visualization of the common bile duct, allowing the detection of abnormalities that may not be visible on CT or MRI. The aim of this study was to assess the diagnostic performance and yield of EUS in detecting biliary obstructions not identified by conventional imaging, and to determine its added value in patient management.

Methods This was a retrospective, descriptive, and analytical study conducted in the endoscopy unit between January 2019 and October 2025. All patients who underwent endoscopic ultrasound (EUS) for suspected biliary obstruction not visualized on conventional imaging (CT or MR cholangiopancreatography) were included. Clinical, biological, radiological, and endoscopic data were collected from medical records and analyzed.

Results A total of 27 patients were included. The mean age was 63 years (range: 31–90), with a female predominance (70%) and a male-to-female ratio of 0.4. A history of cholecystectomy was found in 9 patients (33%), and a prior ERCP in 1 patient (3.7%).

Clinically, jaundice was observed in 17 cases (63%), biliary pain in 17 cases (63%), pancreatic-type pain in 11 cases (41%), and atypical pain in 1 case. Fever was reported in 4 patients (15%), and weight loss in 8 cases (30%).

Biochemically, 19 patients (70%) showed abnormal liver function tests, with a mean total bilirubin of 56 µmol/L.

All patients had undergone conventional imaging, including CT in 13 cases (48%) and MR cholangiopancreatography in 14 cases (52%). At imaging, common bile duct (CBD) dilation was noted in all patients, with a mean diameter of 12.4 mm (range: 8–20 mm), and intrahepatic bile duct (IHBD) dilation in 23 cases (85%).

EUS confirmed CBD dilation in just 14 patients (52%), with a mean diameter of 10.5 mm (range: 6–17 mm). EUS identified a biliary obstruction in 19 cases (70.3%). The main etiologies identified were common bile duct stones (29.6%), congenital cystic dilatation of the common bile duct in 7.4%, and LPAC syndrome in 7.4%. Less frequent causes included distal cholangiocarcinoma in 3.7%, pancreatic head tumor in 3.7%, chronic pancreatitis in 3.7%, fibrosing papillitis in 3.7%, and paraduodenal pancreatitis in 3.7%.

EUS-guided fine-needle aspiration (FNA) was performed in 4 patients (14.8%). Histological analysis revealed adenocarcinoma in two cases, a carcinomatous process in one case, and primary sclerosing cholangitis in one case. ERCP was performed in 18 patients (67%), confirming the diagnosis made by EUS.

The overall diagnostic yield of EUS was 70.3%. CBD dilation was ruled out in 13 patients (48.1%), and no obstruction was identified in 8 cases (29.6%). No major EUS-related complications were observed.

Conclusions Endoscopic ultrasound is a reference diagnostic tool for evaluating suspected biliary obstructions not visualized on conventional imaging. In this study, EUS identified an obstruction in nearly 70.3% of cases, confirming its high diagnostic yield and added value in the biliary diagnostic pathway. Beyond its diagnostic accuracy, EUS plays a key role in therapeutic decision-making, particularly by guiding ERCP or tissue sampling. These findings emphasize the essential role of EUS in the diagnostic algorithm of unexplained biliary dilations and support its early integration in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP288 EUS-Guided antegrade metal stenting as Rescue Technique After Failed ERCP and EUS-guided rendez-vous in a case of Severe Cholangitis

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DOI 10.1055/s-0046-1821615

Abstract Text

We present the case of a 76-year-old male with morbid obesity who was transferred to our center for severe (grade III) acute cholangitis complicated by renal dysfunction. Preprocedural CT scan demonstrated global extrahepatic and intrahepatic dilation of the bile ducts without a clear cause

Emergency ERCP was indicated for biliary decompression in this setting. However, multiple attempts at selective biliary cannulation—including wire-guided and contrast-assisted techniques—were unsuccessful. A precut septotomy using a pancreatic guidewire failed to achieve deep cannulation, and subsequent needle-knife papillotomy did not permit guidewire passage into the common bile duct, raising suspicion of an impacted stone in the distal portion of the common bile duct.

In this emergency setting, a EUS-guided biliary access was attempted. Under endoscopic ultrasound, the distal common bile duct was punctured from the duodenum and an antegrade guidewire was successfully advanced through the papilla; however, retrograde cannulation over the wire could not be achieved due to guidewire being damaged through shearing during needle-guided access [1].

Finally, to secure biliary drainage and allow closure of the duodenal access point, an EUS-guided hepaticogastrostomy was performed. Antegrade cholangiography demonstrated marked dilation of the intrahepatic ducts with a hilar obstruction, due to a tightly impacted stone. A transhepatic guidewire was advanced distally into the duodenum, permitting transpapillary deployment of a 4-cm fully covered self-expandable metal stent (SEMS). A 15/7 Fr double-pigtail stent was subsequently placed across the hepaticogastrostomy tract, obtaining effective drainage of purulent bile into the stomach.

48 hours after the procedure, the patient developed melena, hypotension, and altered mental status. Angio-CT revealed correct positioning of the stents and inflammatory changes suggestive of acute pancreatitis. Upper endoscopy identified a large duodenal clot adherent to the biliary SEMS (Forrest IIb). Hemostasis was achieved by placing two clips at the margin of the sphincterotomy and applying hemostatic gel. The patient's condition gradually improved with supportive care, demonstrated by normalization of renal parameters and inflammatory markers and the patient was discharged 5 days after the initial procedure, with scheduled follow-up at 1 month

Conclusion: This case underscores the critical role of EUS-guided biliary drainage (EUS-BD) as a life-saving rescue modality when ERCP fails, particularly in patients with severe cholangitis and challenging anatomy. EUS-BD offers a minimally invasive, highly effective alternative for urgent biliary decompression, enabling timely source control and improving clinical outcomes in high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Marx M, Caillol F, Autret A et al. EUS-guided hepaticogastrostomy in patients with obstructive jaundice after failed or impossible endoscopic retrograde drainage: A multicenter, randomized phase II Study. *Endosc Ultrasound* 2022; 11 (6): 495–502. doi:10.4103/EUS-D-21-00108

eP289V Endoscopic Submucosal Dissection of a Gastric GIST Using a Rigidizing Overtube to Facilitate Stabilization in a Difficult Upper Stomach Location

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DOI 10.1055/s-0046-1821616

Problem to solve Endoscopic submucosal dissection (ESD) of subepithelial lesions (SELs) remains technically demanding, particularly for larger lesions arising in anatomically challenging locations such as the upper gastric body or fundus. The anatomical configuration of the upper stomach often results in unstable endoscope positioning, perpendicular access, and limited tip control and visualization of the dissection plane. These factors increase the risk of incomplete resection, muscular injury, or perforation, and may require surgical conversion, particularly for the excavation technique required for resection of subepithelial lesions arising from the muscularis propria. A method to improve scope stability and control during ESD in this location is therefore needed.

Innovation We report a stabilization-assisted ESD technique using a rigidizing overtube (Pathfinder, Neptune Medical, USA) to facilitate complete en bloc resection of a gastric GIST arising from the muscularis propria. Although this device has primarily been described for use in colorectal endoscopic resections, to our knowledge no published reports have documented its application in upper gastrointestinal ESD, making this its first reported use in this anatomical context. The device, which transitions from flexible to rigid through a vacuum-controlled system, was used to stabilize the endoscope shaft and maintain a fixed trajectory despite the challenging upper-gastric anatomy and the difficulty of accessing the upper, gravity-dependent portion of the lesion located near the cardia, where scope stability was compromised. The overtube ensured consistent shaft control, reduced unintended movements, and allowed precise orientation toward both the upper and deeper parts of the lesion, enabling accurate dissection.

After submucosal injection, a circumferential incision was performed using a conventional ESD knife (DualKnife J, Olympus, Japan), followed by deep excavation-type dissection within the muscular layer using a hook-type ESD knife (HookKnife J, Olympus, Japan) under continuous clip-line traction. The GIST was cautiously separated from the muscularis propria without perforation, and removed en-bloc in a 150 min procedure. The post-ESD defect was completely closed using multiple clips.

The capsule of the resected specimen measuring 35 × 30 mm was intact. The combined use of a rigidizing overtube and traction methods provided excellent stability and precision, enabling safe and complete resection in an anatomically constrained region.

Results Histopathology confirmed a R0 resection of a 29 mm spindle-cell GIST with low mitotic activity (<5/5 mm²), positive staining for CD117 and DOG1, and no necrosis. The lesion was staged as pT2Nx. The postoperative course was uneventful, with no bleeding or perforation. Oral feeding resumed and the patient discharged in good condition the next day. Conservative surveillance using CT and endoscopy was proposed to the patient.

Conclusions Described for the first time in the upper GI, this case illustrates that ESD assisted by a rigidizing overtube can facilitate safe and controlled resection of subepithelial gastric tumors arising from the muscularis propria, specifically in technically challenging locations such as the upper gastric body. The overtube improved scope stability and access, enabling precise dissection and complete en bloc R0 removal without the need for surgery. This stabilization-assisted approach may be particularly useful in selected cases of gastric GIST where anatomical constraints limit conventional ESD.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/92803967-727b-4570-8006-3e1eddec647c/Uploads/19990_ESGE_video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP290 Validating the QNI Classification for EUS-Guided Drainage of Pancreatic Fluid Collections in a Resource-Limited, Plastic-Stent–Predominant Setting

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DOI 10.1055/s-0046-1821617

Aims Peripancreatic fluid collections (PFC), including pseudocysts and walled-off pancreatic necrosis (WOPN), are increasingly managed through endoscopic ultrasound (EUS)-guided drainage. However, there is no widely adopted, post-inflammatory, imaging-based score to stratify risk and predict outcomes after endoscopic drainage, especially in resource-limited settings where plastic stents are mainly used. The recently proposed Quadrant–Necrosis–Infection (QNI) classification, derived from cross-sectional imaging, showed promise in a US cohort treated exclusively with lumen-apposing metal stents (LAMS), but has not been validated externally. We aimed to evaluate the clinical utility of QNI in predicting outcomes of EUS-guided drainage of PFCs in an Indian public-sector cohort predominantly treated with double-pigtail plastic stents [1].

Methods We retrospectively reviewed prospectively maintained records of consecutive patients who underwent EUS-guided drainage of PFCs between January 2022 and February 2025 at a tertiary-care centre. Baseline CT/MRI/EUS were used to assign a QNI score based on (i) the number of retroperitoneal quadrants involved, (ii) the extent of necrosis, and (iii) the presence of infection. Patients were classified as Low QNI (Group 1: ≤ 2 quadrants, < 30 % necrosis, no infection) or High QNI (Group 2: ≥ 3 quadrants, ≥ 30 % necrosis in ≥ 2 quadrants or > 60 % in any quadrant, and infection). The primary outcomes were technical success (successful stent placement) and clinical success (symptom resolution with a greater than 50 % reduction in PFC size at 4 weeks). Secondary outcomes included need for endoscopic necrosectomy, additional drainage (nascystic drain [NCD] or percutaneous catheter drain [PCD]), complications, length of hospital stay, stent migration, and mortality. The study was approved by the Institutional Ethics Committee.

Results Of 53 screened patients, 48 met the inclusion criteria (5 were excluded due to incomplete records or inadequate follow-up). Thirty-one patients were classified as Low QNI and 17 as High QNI. Group 1 underwent drainage with either single or dual double-pigtail plastic stents, while Group 2 received dual plastic stents or LAMS, depending on collection complexity and feasibility. Baseline demographics were similar, although High QNI patients had a higher burden of infected and extensive necrosis. Technical success was 100 % in both groups. Clinical success was achieved in 100 % (31/31) of Low QNI and 88 % (15/17) of High QNI patients. Additional drainage procedures (NCD/PCD or extra stent) were needed in 2 (6 %) vs 4 (23 %) patients in Groups 1 and 2, respectively ($p = 0.17$). Endoscopic necrosectomy was required in 4 (23 %) High QNI patients but in none of the Low QNI group ($p = 0.014$). Minor bleeding occurred in 6 % vs 23 % ($p = 0.17$), all managed conservatively. The median hospital stay was significantly longer in the High QNI group (16 vs 5 days, $p < 0.001$).

At 3 months, all patients had residual collections less than 3 cm; spontaneous stent migration occurred in 5 Low QNI and 3 High QNI cases, and two LAMS were electively removed at 6–8 weeks. One death (6 %) occurred in the High QNI group; there were no deaths in the Low QNI group.

Conclusions In this real-world, resource-limited cohort, the QNI classification emerged as a simple, preprocedural, imaging-based tool that stratifies clinical trajectory after EUS-guided drainage of PFCs. High QNI status was associated with a greater need for necrosectomy and adjunct drainage, more complications, and prolonged hospitalisation, despite high overall technical and clinical success rates. Our findings extend prior LAMS-based data to a predominantly plastic-stent practice, supporting QNI as a pragmatic framework to guide up-front therapeutic strategy and selection of more aggressive interventions in high-risk collections. Prospective multicentre validation, with systematic capture of organ failure and nutritional status, is warranted before routine adoption in ESGE-affiliated centres and broader clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Baroud S, Chandrasekhara V, Storm AC, Law RJ, Vargas EJ, Levy MJ et al. Novel classification system for walled-off necrosis: a step toward standardized nomenclature and risk-stratification framework. *Gastrointestinal endoscopy* 2023; 97 (2): 300–308

eP291 Accuracy of histological prediction of forceps biopsy vs JNET classification in large laterally spreading lesions

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DOI 10.1055/s-0046-1821618

Aims Examine the comparative diagnostic performance of forceps biopsy (FB) and JNET classification for identifying dysplasia and carcinoma in large laterally spreading lesions (LSLs), correlating these findings with definitive histology.

Methods The study included 110 patients with laterally spreading lesions (LSLs) measuring ≥ 20 mm in diameter, excluding those with evidence of invasive carcinoma [1, 3]. Group I consisted of 70 patients (63.6 %) presenting with the granular subtype (LSL-G), whereas Group II comprised 40 patients (36.4 %) with the non-granular variant (LSL-NG) [4]. Optical assessment [2, 3] was performed by an expert endoscopist using Indigocarmine chromoendoscopy and NBI, after which forceps biopsy and endoscopic resection (EMR, pEMR, ESD or hybrid ESD) were carried out. All diagnostic findings were subsequently compared with histopathological results from the resected specimens. Statistical analyses included Chi-square testing, Wilson confidence intervals, descriptive metrics, and Fisher's exact test, performed using Statistica 13 (► Table 1).

Results Mean lesion size was 38.8 ± 16.9 mm in LSL-G and 23.8 ± 6.4 mm in LSL-NG group. In the first group, 15.7 % of lesions were benign, while 15.7 % demonstrated low-grade dysplasia; high-grade dysplasia was identified in 28.6 %, and carcinoma in situ in 40 %. In the second group, 50 % of lesions were benign, with 12.5 % exhibiting low-grade dysplasia; 25 % showing high-grade dysplasia, and 12.5 % containing foci of carcinoma in situ.

Conclusions The JNET classification demonstrates superior diagnostic performance compared with forceps biopsy across most evaluated metrics and serve as a more reliable method for prognosing histology changes in both granular and non-granular large LSLs.

► Table 1

Diagnostic method	Sensitivity, % (95 % CI)	Specificity, % (95 % CI)	Positive prognostic value, % (95 % CI)	Negative prognostic value, % (95 % CI)	Diagnostic accuracy, % (95 % CI)	p-value
LSL-G						
JNET	70.83 (55.89–83.12)	90.91 (70.84–98.88)	94.44 (81.34– 99.32)	58.82 (41.29– 74.91)	75 (62.09–85.27)	0.000003
Forceps biopsy	54.17 (39.18–68.53)	95.45 (77.16–99.88)	96.3 (81.03–99.91)	48.84 (34.32– 63.53)	66.67 (53.31– 78.31)	0.00002
LSL-NG						
JNET	73.33 (44.90–92.21)	100.00 (86.28–100.00)	100.00 (71.51– 100.00)	86.21 (68.34– 96.11)	90.48 (76.87– 97.28)	0.0001
Forceps biopsy	64.29 (38.62–83.67)	96.15 (80.36–99.90)	90 (55.50–99.75)	83.33 (65.28– 94.36)	85.71 (70.61– 94.46)	0.0007

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ferlitsch M, Hassan C, Bisschops R et al. Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024. *Endoscopy* 2024; 56: 516–545
- [2] Sano Y, Tanaka S, Kudo SE et al. Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI Expert Team. *Digestive Endoscopy* 2016; 28: 526–533
- [3] Bisschops R, East JE, Hassan C et al. Advanced imaging for detection and differentiation of colorectal neoplasia: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2019. *Endoscopy* 2019; 51: 1155–1179
- [4] Bogie RMM, Veldman MHJ, Snijders L et al. Endoscopic subtypes of colorectal laterally spreading tumors (LSTs) and the risk of submucosal invasion: a meta-analysis. *Endoscopy* 2018; 50: 263–282

eP292 Evolution of patient selection, technique and outcomes in EUS-guided gallbladder drainage: a retrospective analysis over a decade

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DOI 10.1055/s-0046-1821619

Aims Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) using a lumen-apposing metal stent (LAMS) has become a minimally invasive alternative to percutaneous or surgical drainage in high-risk surgical candidates with acute cholecystitis. Initially reserved for extremely frail patients, its indications have progressively expanded. This study aimed to assess temporal changes in patient selection, procedural standardization, and clinical outcomes over a 10-year experience with EUS-GBD [1–5].

Methods We conducted a retrospective, single-center analysis including all consecutive patients who underwent EUS-GBD between January 2014 and December 2024. Patients were divided into two cohorts: Group A (procedures ≤ December 2020) and Group B (procedures ≥ January 2021). Demographic, procedural, and outcome data were compared between groups. Technical success was defined as successful LAMS placement; clinical success was defined as symptom resolution and/or sepsis improvement without need for further drainage. Adverse events (AEs) were recorded according to the AGREE classification, and survival outcome was assessed at 30 days, 12 months, and 36 months (► Table 1).

► Table 1

	Group A (n = 24)	Group B (n = 26)	p value
Baseline and procedural data			
Mean age, y (± DS)	78 (± 12.3)	81 (± 13.3)	NS
Median age-adjusted CCI, n (IQR)	9.5 (4.5)	8 (5)	0.047
Electrocautery-tip LAMS design, n (%)	15/24 (62.5 %)	26/26 (100 %)	0.001
Technical success, n (%)	23/24 (95.8 %)	26/26 (100 %)	NS
Clinical success, n (%)	20/24 (83.3 %)	25/26 (96.1 %)	NS
Survival outcomes			
30-day survival, n (%)	20/24 (83.3 %)	26/26 (100 %)	0.046
12-month survival, n (%)	8/24 (33.3 %)	9/16 (56.2 %)	NS

Results Fifty patients were included (mean age 79.6 ± 12.8 years; 50 % female). Technical and clinical success rates were 98 % and 90 %, respectively. Over time, baseline comorbidity decreased: median age-adjusted Charlson Comorbidity Index (a-CCI) was significantly lower in Group B (8.0 vs 9.5, p = 0.047), and biliopancreatic malignancies declined from 45.8 % to 23.1 %. The use of electrocautery-enhanced LAMS increased from 62.5 % to 100 % (p = 0.001), reflecting complete procedural standardization. Thirty-day survival improved significantly from 83.3 % to 100 % (p = 0.046), while 12-month (33.3 % vs 56.2 %) and 36-month (25.0 % vs 60.0 %) survival showed favorable, though non-significant, trends. Overall biliary AE rate was 24 %, with both early and delayed events remaining infrequent.

Conclusions Over the past decade, EUS-GBD has evolved from a rescue procedure for frail, high-risk patients to a well-standardized therapeutic option applicable to a broader population. This transition coincided with reduced baseline comorbidity, universal adoption of electrocautery-enhanced LAMS, and improved early survival. Long-term outcomes also trended positively, confirming the safety, reproducibility, and durability of the technique. Further

prospective multicenter studies are warranted to refine patient selection criteria, define objective “frailty” thresholds, and optimize timing for stent management and removal. Within experienced centers, EUS-GBD should be considered a cornerstone in the minimally invasive management of acute cholecystitis in non-surgical candidates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rimbaş M, Crinò SF, Rizzatti G, La Greca A, Sganga G, Larghi A. EUS-guided gallbladder drainage: Where will we go next? *Gastrointest Endosc*. 2021; 94 (2): 419–422. doi:10.1016/j.gie.2021.03.933 Epub 2021 Apr 9 PMID: 33845110
- [2] van Wanrooij RLJ, Bronswijk M, Kunda R, Everett SM, Lakhtakia S, Rimbas M, Hucl T, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Pérez-Miranda M, van Hooft JE, van der Merwe SW. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2022; 54 (3): 310–332. doi:10.1055/a-1738-6780 Epub 2022 Feb 3 PMID: 35114696
- [3] van der Merwe SW, van Wanrooij RLJ, Bronswijk M, Everett S, Lakhtakia S, Rimbas M, Hucl T, Kunda R, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Perez-Miranda M, van Hooft JE. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (2): 185–205. doi:10.1055/a-1717-1391 Epub 2021 Dec 22 PMID: 34937098
- [4] Canakis A, Tugarinov N, Deliwala S, Twery B, Miro-Gonzalez Á, Beran A, Gorman EF, Hathorn K, Gilman AJ, Chawla S, Irani SS, Baron TH. Clinical outcomes of EUS-guided gallbladder drainage in patients with acute cholecystitis with ≥ 1 year of follow-up: a systematic review and meta-analysis. *Gastrointest Endosc*. 2025; S0016-5107 (25): 01845–0. doi:10.1016/j.gie.2025.07.025 Epub ahead of print PMID: 40706905
- [5] James TW, Baron TH. EUS-guided gallbladder drainage: A review of current practices and procedures. *Endosc Ultrasound*. 2019; 8 (Suppl 1): S28–S34. doi:10.4103/eus.eus_41_19 PMID: 31897376 PMID: PMC6896434

eP293 Endorail-Assisted PEG in absent abdominal transillumination: A Case Report

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DOI 10.1055/s-0046-1821620

Abstract Text

We describe the case of a 45-year-old woman with a neurogenic syndrome of the interstitial cells of Cajal and a history of multiple abdominal surgeries. An initial attempt at PEG placement failed due to the inability to obtain an adequate abdominal transillumination window. A CT scan revealed a complete intrathoracic stomach, so to address this issue, we decided to use a bowel magnetic traction system. An out-of-scope ferromagnetic balloon catheter was positioned in the stomach, and through an external magnet, controlled traction was applied to the organ towards the epigastrium. This enabled the creation of a safe and stable transillumination window, allowing for a gastropexy with anchoring devices and the subsequent completion of the PEG placement via the “pull” technique, without complications [1–7].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bankhead RR, Fisher CA, Rolandelli RH. Gastrostomy tube placement outcomes: comparison of surgical, endoscopic, and laparoscopic methods. *Nutr Clin Pract* 2005;20:607–612 PMID: 16306297. doi:10.1177/0115426505020006607
- [2] Albrecht H, Hagel AF, Schlechtweg P, Foertsch T, Neurath MF, Mudter J. Computed Tomography-Guided Percutaneous Gastrostomy/Jejunostomy for Feeding and Decompression. *Nutr Clin Pract* 2017; 32: 212–218 PMID: 27329861. doi:10.1177/0884533616653806

[3] Singh A, Gelrud A. Adverse events associated with percutaneous enteral access. *Gastrointest Endosc Clin N Am* 2015; 25: 71–82 PMID: 25442959. doi:10.1016/j.giec.2014.09.003

[4] Schrag SP, Sharma R, Jaik NP, Seamon MJ, Lukaszczuk JJ, Martin ND, Hoey BA, Stawicki SP. Complications related to percutaneous endoscopic gastrostomy (PEG) tubes. A comprehensive clinical review. *J Gastrointest Liver Dis* 2007; 16: 407–418

[5] Gauderer MW, Ponsky JL, Izant RJ. Gastrostomy without laparotomy: a percutaneous endoscopic technique. *J Pediatr Surg* 1980; 15: 872–875 PMID: 6780678. doi:10.1016/s0022-3468(80)80296-x

[6] Gkolfakis P, Arvanitakis M, Despott EJ, Ballarin A, Beyna T, Boeykens K, Elbe P, Gisbertz I, Hoyois A, Mosteanu O, Sanders DS, Schmidt PT, Schneider SM, van Hooft JE. Endoscopic management of enteral tubes in adult patients – Part 2: Peri- and post-procedural management. *European Society of Gastrointestinal Endoscopy (ESGE) Guideline. Endoscopy* 2021; 53: 178–195 PMID: 33348410. doi:10.1055/a-1331-8080

[7] Arvanitakis M, Gkolfakis P, Despott EJ, Ballarin A, Beyna T, Boeykens K, Elbe P, Gisbertz I, Hoyois A, Mosteanu O, Sanders DS, Schmidt PT, Schneider SM, van Hooft JE. Endoscopic management of enteral tubes in adult patients – Part 1: Definitions and indications. *European Society of Gastrointestinal Endoscopy (ESGE) Guideline. Endoscopy* 2021; 53: 81–92 PMID: 33260229. doi:10.1055/a-1303-7449

eP294 Endoscopic Treatment of Malignant Afferent Limb Syndrome

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DOI 10.1055/s-0046-1821621

Abstract Text

Afferent limb syndrome (ALS) is an uncommon postoperative complication typically resulting from tumor recurrence after pancreaticoduodenectomy, causing obstruction of the afferent or biliopancreatic limb. We present 4 cases of malignant ALS treated with endoscopic techniques.

Case 1: A 76-year-old male with history of pancreatic cancer underwent a surgical gastrojejunostomy. Fourteen months later, he developed gastric outlet obstruction symptoms and cholestasis. A computed tomography (CT) demonstrated obstruction of the biliopancreatic limb. He was managed initially with endoscopic placement of an enteral self expandable metal stent (SEMS) across the obstructed limb. One month later, the stent migrated into the stomach, causing symptom recurrence. The stent was removed endoscopically and attempted EUS-guided enteroenterostomy (EUS-EE) resulted in colonic luminal apposing metal stent (LAMS) misdeployment. Ultimately, the patient was successfully treated with repeat enteral SEMS, and the LAMS was removed endoscopically 7 weeks later. After two months follow up, the patient remained tolerating soft diet and with no recurrence of cholestasis [1, 2].

Case 2: A 62-year-old male with pancreatic cancer was treated with pancreaticoduodenectomy. Fourteen months after surgery, he developed diet intolerance and jaundice. A CT revealed new dilation of the afferent jejunal limb, likely due to metastatic recurrence, as well as biliary dilation. The patient was deemed unsuitable for EUS-GE in the setting of ascites and gastric varices. Enteral SEMS was placed endoscopically with good initial response; however, recurrent cholestasis developed several days later and a percutaneous biliary drain was placed. Despite this, the patient maintained improved oral intake and CT scan demonstrated interval improvement of afferent-limb dilation.

Cases 3 and 4: 69- and 75-year-old males with pancreatic adenocarcinoma treated surgically with pancreaticoduodenectomy. Thirty-one and 41 months postoperatively, they presented with acute gastric outlet obstruction symptoms; one of them developed cholestasis and cholangitis. Imaging confirmed tumor recurrence with new dilation of the afferent limb. Both patients underwent EUS-GE successfully using a 10 × 10-mm LAMS. Rapid symptom resolution, improved oral intake, and normalization of liver enzymes occurred in both cases.

es. Early postoperative imaging confirmed decompression of the afferent limb. Clinical response was sustained at 1-month follow-up.

In this case series, EUS-GE provided an effective and safe treatment option for malignant ALS. Unfavorable anatomy can increase the risk of technical failure and stent misdeployment. Enteral SEMS remains a meaningful alternative for patients who are not suitable candidates for EUS-GE or who have limited life expectancy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Pannala R, Brandabur JJ, Gan SI, Gluck M, Irani S, Patterson DJ et al. Afferent limb syndrome and delayed GI problems after pancreaticoduodenectomy for pancreatic cancer: Single-center, 14-year experience. *Gastrointest Endosc* 2011; 74 (2): 295–302
- [2] Termsinsuk P, Chantarojanasiri T, Pausawasdi N. Diagnosis and treatment of the afferent loop syndrome. *Clinical Journal of Gastroenterology*. Springer Japan 2020; p Vol. 13: 660–8

eP295 Navigating the Risk: EUS-Guided Fine-Needle Biopsy for Histological Verification of a Rare T-Cell Lymphoma in a High-Risk Splenic Lesion

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DOI 10.1055/s-0046-1821622

Abstract Text

Endoscopic ultrasound-guided biopsy (EUS-guided biopsy) is a preferred minimally invasive method for histological verification of indeterminate focal splenic lesions, offering a high diagnostic yield with lower risk compared with surgical approaches. However, the spleen's rich vascularization poses a significant risk of intraprocedural hemorrhage. This risk is compounded when dealing with locally advanced disease that might necessitate extensive surgical staging.

We report the case of a 53-year-old woman presenting with intermittent left upper-quadrant pain. Cross-sectional imaging identified a massive peritoneal lesion infiltrating multiple adjacent organs, including the greater curvature of the stomach, splenic flexure, spleen, and the left diaphragmatic dome, without distant lymphadenopathy. Despite comprehensive conventional endoscopic evaluation—where both upper endoscopy and colonoscopy confirmed the absence of any intraluminal mucosal pathology—the nature of the infiltrating peritoneal mass remained indeterminate. Given the multiorgan infiltration, a surgical approach for histological verification would have required a highly morbid multiorgan resection. To avert this extensive surgery, an EUS-guided fine-needle biopsy (FNB) was conducted using a 22G needle, with three passes taken to safely sample the accessible splenic component of the mass [1–4]. The patient was monitored for 24 hours with no post-procedural complications observed. Immunohistochemical analysis demonstrated findings consistent with follicular T-helper cell lymphoma. Following immediate hematologic evaluation, immunochemotherapy was initiated. Early follow-up PET-CT, performed three months after starting treatment, confirmed a complete metabolic response, with no evidence of residual disease.

This case highlights the indispensable diagnostic value of EUS-guided FNB in complex, locally advanced masses. Despite the technical challenges posed by the splenic location and the multiorgan engagement, EUS-guided biopsy provided crucial, non-operative histological data that directly influenced immediate management, successfully avoiding a major multiorgan resection and leading to an excellent patient outcome.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hermann K Max Seidensticker for Diagnostic approach to splenic lesions. Germany. 2023;

- [2] Lisotti A, Crinò SF et al. for Diagnostic performance of endoscopic ultrasound-guided tissue acquisition of splenic lesions: systematic review with pooled analysis. Italy. 2022;

- [3] Sammon J, Twomey M et al. for Image-guided percutaneous splenic biopsy and drainage. Ireland. 2012;

- [4] Bellisario F, Attili F et al for Endoscopic ultrasound-guided fine needle biopsy in the diagnostic work-up of deep-seated lymphadenopathies and spleen lesions: A monocentric experience. Italy. 2023;

eP296 Severe Ischemic Colitis and Systemic Thromboembolism Induced by High-Dose Bevacizumab in a Patient with Recurrent Glioblastoma: A Case Report

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DOI 10.1055/s-0046-1821623

Introduction Bevacizumab, a humanized monoclonal antibody targeting Vascular Endothelial Growth Factor (VEGF), is a therapeutic cornerstone for recurrent glioblastoma, yet its inhibition of angiogenesis fundamentally disrupts vascular homeostasis. While gastrointestinal perforation is a documented risk, severe ischemic colitis presenting as Non-Occlusive Mesenteric Ischemia (NOMI) associated with systemic thrombosis is a rare, life-threatening complication driven by endothelial dysfunction, vascular rarefaction, and potent splanchnic vasoconstriction via the nitric oxide pathway. We present a highly educational case highlighting the diagnostic challenges and the feasibility of conservative management in this complex vascular scenario.

Case Presentation We report the case of a 57-year-old male with IDH-wildtype glioblastoma. Following tumor recurrence, the therapeutic regimen was intensified to high-dose Bevacizumab (800 mg) combined with Lomustine. Within weeks of dose escalation, the patient presented with acute, severe diffuse abdominal pain, hematochezia, and laboratory evidence of marked inflammation and tissue hypoperfusion (elevated lactate). Contrast-enhanced Computed Tomography (CT) revealed a complex vascular picture characterized by distal pulmonary embolism and diffuse, circumferential colonic wall thickening with a "target sign" and pericolic fat stranding; crucially, the celiac and mesenteric arteries were patent, excluding proximal embolic occlusion and supporting a diagnosis of drug-induced microangiopathy. Colonoscopy confirmed severe ischemic colitis extending from the sigmoid to the cecum, characterized by mucosal edema, cyanosis, friability, and longitudinal ulcerations, while biopsies revealed neutrophilic cryptitis, regenerative changes, and fibrin thrombi [1–5].

Management and Outcome Bevacizumab was permanently discontinued. The case posed a significant therapeutic dilemma involving the balance between the risk of exacerbating active gastrointestinal bleeding and the necessity of treating the pulmonary embolism. A multidisciplinary team opted for a conservative, organ-sparing strategy given the absence of transmural necrosis signs. Anticoagulation with therapeutic enoxaparin was initiated under strict surveillance, alongside oral mesalazine to mitigate ischemic-induced inflammation and short-term anaerobic coverage. The patient's clinical status improved rapidly, rectorrhagia ceased within 48 hours, and he was discharged without surgical intervention.

Conclusion This case highlights that high-dose anti-VEGF therapy can precipitate a "perfect storm" of systemic thrombosis and intestinal ischemia. Clinicians must maintain a high index of suspicion for NOMI in patients presenting with abdominal pain even in the absence of macrovascular occlusion on CT, as early conservative management with careful anticoagulation is a viable therapeutic pathway requiring close multidisciplinary collaboration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gagnier J.J. et al. 2013; "The CARE guidelines: consensus-based clinical case reporting guideline development.". *Journal of Medical Case Reports* 7 (1): 223
- [2] Baron C. et al. 2015; "Bevacizumab-induced ischemic colitis: A rare but severe complication.". *Case Reports in Oncology* 8 (3): 509–514

[3] Nalluri S.R. et al. 2008; "Risk of venous thromboembolism with the angiogenesis inhibitor bevacizumab in cancer patients: a meta-analysis.". *JAMA* 300 (19): 2277–2285

[4] Badgwell B.D. et al. 2008; "Bevacizumab-associated gastrointestinal perforation in patients with cancer.". *Annals of Surgical Oncology* 15 (9): 2487–2494

[5] Friedman H.S. et al. 2009; "Bevacizumab alone and in combination with irinotecan in recurrent glioblastoma.". *Journal of Clinical Oncology* 27 (28): 4733–4740

eP297 Does deep resection increase the complete resection rate in endoscopic papillectomy? A single tertiary center experience

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DOI 10.1055/s-0046-1821624

Aims Ampullary neoplastic lesions have the potential for malignant transformation and therefore excision is recommended. This study aimed to evaluate the safety, efficacy, and outcomes of endoscopic papillectomy.

Methods This retrospective study was conducted on patients who underwent endoscopic papillectomy at our center between 2019 and 2025. "Deep papillectomy" was defined as visualization of the pancreatic and bile duct orifices post-resection. Outcomes assessed included rates of en bloc resection, complete resection, pancreatic stenting, and recurrence during follow-up.

Results A total of 60 patients (mean age 54.5 ± 15.28 years; of whom 28, 46.7 % female) were included. The median lesion size was 12 mm (range: 6–46 mm). The most common clinical presentation was irregular or enlarged appearing papilla on endoscopic screening in 23 (28.3 %) patients. In 53 (88.3 %) patients, the lesion was in the major papilla, 4 (6.7 %) patients had intraductal extension, and in 3 patients (5 %), the lesion was in the minor papilla. Intraductal extension assessment was performed by CT in 27 (45 %) patients, by MRCP in 16 (26.7 %) patients, and by EUS in 15 (25 %) patients. Pre-papillectomy histology revealed isolated low-grade dysplasia without adenoma in 9 (15 %) patients, tubular adenoma with low grade dysplasia in 40 (66.7 %), tubular adenoma with high-grade dysplasia in 6 (10 %), carcinoma in situ in 1 (1.7 %), normal tissue in 3 (5 %), and no biopsy in 1 (1.7 %). In 8 (13.3 %) patients, the lesion was excised after submucosal diluted adrenaline injection, while in 52 (86.7 %) patients, excision was performed without injection. Pathology results of resection specimens showed tubular adenoma with low grade dysplasia in 30 (50 %) patients, adenocarcinoma in 7 (11.7 %), and chronic inflammation in 10 (16.7 %). En bloc resection was achieved in 47 (78.3 %) patients, while 13 (21.7 %) underwent piecemeal resection. Complete resection was achieved in 49 (81.7 %) cases. Deep resection enabled visualization of both pancreatic and biliary orifices, resulting in a pancreatic stenting rate of 88.3 %. Recurrence occurred in 5 patients (8.3 %), with a median time to recurrence of 12 months (range: 6–24 months). Post-procedural complications included pancreatitis (8.3 %), bleeding (10 %), and perforation (3.3 %).

Conclusions Endoscopic papillectomy is a safe and effective treatment for ampullary neoplastic lesions. Deep resection may enhance complete resection rates and facilitate pancreatic cannulation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP298 The Hemorrhagic Nightmare: Conservative Victory Over Gastric Outlet Obstruction from Massive Post-ERCP Retroperitoneal Hematoma

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DOI 10.1055/s-0046-1821625

Abstract Text

A 42-year-old man with a history of long-term anabolic steroid use and severe jaundice presented with distal extrahepatic cholestasis and drug-induced liver injury (DILI), confirmed by cross-sectional imaging revealing choledocholithiasis and associated ductal dilation. Conventional endoscopic retrograde cholangiopancreatography (ERCP) with pre-cut fistulotomy was performed, leading to "spontaneous" evacuation of an impacted stone at the papilla. During withdrawal, a large ulcer with a visible bleeding vessel was identified in the duodenal bulb/descending part transition. Combined endoscopic hemostasis was achieved, including the placement of a hemostatic clip [1–3].

On the second postprocedural day, the patient developed acute, severe abdominal pain alongside characteristic symptoms of gastric outlet obstruction. Imaging studies confirmed the development of post-ERCP edematous pancreatitis and revealed a massive retroperitoneal hematoma ($6.2 \times 7.9 \times 6.6$ cm), which severely compromised the duodenal lumen. The patient's clinical course was further complicated by persistent, non-resolving jaundice, indicating the mixed etiology of his cholestasis despite successful endoscopic stone evacuation during the initial ERCP. Given the overall clinical severity and lack of initial improvement, the patient underwent daily consultation with abdominal surgeons, with high-risk surgical intervention being actively discussed as a management option. Intensive conservative treatment was immediately initiated, comprising aggressive parenteral nutrition, broad-spectrum antibiotics, and gastric decompression via a nasogastric tube. Despite these comprehensive measures, persistent obstructive symptoms necessitated a diagnostic gastroscopy on the 7th postprocedural day. The procedure confirmed the presence of a large, expanding intraduodenal hematoma, resulting in near-complete luminal obliteration of the duodenum. A nasojejunal tube was subsequently placed under direct vision to ensure continuous and adequate enteral feeding. After a total of 20 days of dedicated supportive care, the patient demonstrated significant clinical improvement with substantial reduction of the hematoma volume, allowing safe resumption of oral intake. Follow-up CT scan after 4 months confirmed complete radiological resolution of the hematoma.

This clinical case highlights a potentially catastrophic, rare complication following ERCP. It underscores the critical importance of active, vigilant postprocedural monitoring and emphasizes that conservative management with intensive supportive care and adequate nutritional support can successfully resolve even massive intraduodenal hematomas. Ultimately, this successful outcome demonstrates that clinical patience and a dedicated supportive strategy can be profoundly rewarding, eliminating the need for major high-risk surgical interventions in complex gastrointestinal emergencies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Santos L, Trigo A, Perdigoto D, Figueiredo P. Massive intramural duodenal haematoma: an unexpected post-ERCP complication. 2023;
- [2] Pan YM, Wang TT, Wu J, Hu B. Endoscopic drainage for duodenal hematoma following endoscopic retrograde cholangiopancreatography: A case report. 2013;
- [3] A Triad of Post-ERCP Gastric Outlet Obstruction, Obstructive Jaundice, and Pancreatitis, Is It Intramural Duodenal Hematoma? A Case Report and Review of Literature Anwar, Muhammad Sajeel MD; Farooq, Umer MD; Jajja, Anaba Ali MBBS; Jajja, Ans Ahmad MBBS 2020;

eP299 Bleeding Following Removal of a Lumen-Apposing Metal Stent (Hot-Axios)

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DOI 10.1055/s-0046-1821626

Introduction We present a case of hemorrhage secondary to splenic artery laceration caused by decubitus of a Hot-Axios stent.

Endoscopy and Case Report A 57-year-old woman with a history of distal pancreatectomy for IPMN with low-grade dysplasia. As a complication, she developed a pancreatic fistula with a distal peripancreatic collection. A percutaneous drainage was attempted without success, followed by transgastric drainage using a Hot-Axios stent at another center. She presented to the emergency department with syncopal episodes. Gastroscopy revealed a normally positioned stent with a coaxial pig-tail and slight oozing of blood around the prosthesis. Laboratory tests showed anemia with hemoglobin dropping to 7.7 g/dL, and CT angiography demonstrated intragastric blood content without active bleeding. A second gastroscopy was performed 24 hours later for stent removal, after which massive hemorrhage occurred, resulting in hypovolemic shock and the need for vasoactive support. An urgent CT angiography revealed splenic artery rupture, and emergent radiological embolization was performed without complications. The patient evolved favorably, later undergoing scheduled splenectomy due to secondary splenic infarctions [1–5].

Conclusions The use of Hot-Axios stents has become widespread for the drainage of abdominal collections and is generally considered a safe procedure, although it carries a risk of complications such as bleeding. Most bleeding events are associated with the development of arterial pseudoaneurysms, and delayed stent removal appears to be a potential risk factor. In our case, bleeding resulted from splenic artery laceration due to contact with the edge of the stent. The coaxial placement of a pig-tail stent may reduce this risk, although current evidence is insufficient. In conclusion, early detection and management of this complication are essential due to its severity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Abdallah M., Vantanasiri K., Young S., Azeem N., Amateau S.K., Mallory S., Freeman M.L., Trikudanathan G. 2022; Visceral artery pseudoaneurysms in necrotizing pancreatitis: risk of early bleeding with lumen-apposing metal stents. *Gastrointestinal Endoscopy* 95 (6): 1150–1157. doi:10.1016/j.gie.2021.11.030
- [2] RNPAL (Registro nacional de prótesis de aposición luminal [national lumen-apposing metal stent registry]) study groupBazaga S., García-Alonso F.J., Aparicio Tormo J.R., Martínez Moreno B., Sanchiz V., Suria C., García-Sumalla A., Gornals J.B., Chavarría C., Loras C., García-Fernandez F.J., Terán Á., Vazquez-Sequeiros E., Pedraza Sanz R., Pérez-Carazo L., Súbtil J.C., Pérez-Millán A., Uceda Porta F., Busto Bea V. 2023; Endoscopic removal of lumen-apposing metal stents – risk factors for stent embedment, complex removals, and adverse events: analysis from a multicenter prospective case series. *Endoscopy* 55 (7): 591–598. doi:10.1055/a-2030-4158
- [3] Stigliano S., Marocchi G., Baldaro F., Neri B., Del Vecchio Blanco G., Troncone E., Di Matteo F.M. 2024; Timing of lumen-apposing metal stents removal in pancreatic fluid collections: Could we go beyond? *Et al [Pancreatology]* 24 (8): 1252–1256. doi:10.1016/j.pan.2024.10.011
- [4] Pawa R., Dorrell R., Nguyen M., Russell G., Gilliam J. 2023; Analysis of adverse events with lumen apposing metal stents for drainage of pancreatic fluid collections. *Endoscopy International Open* 11 (12): E1153–E1160. doi:10.1055/a-2197-3731
- [5] AbiMansour J., Jaruvongvanich V., Velaza S., Law R., Storm A.C., Topazian M., Levy M.J., Alexander R., Vargas E.J., Bofill-Garica A., Martin J.A., Petersen

B.T., Abu Dayyeh B.K., Chandrasekhara V. 2024; Coaxial plastic stent placement within lumen-apposing metal stents for the management of pancreatic fluid collections: a systemic review and meta-analysis. *Clinical Endoscopy* 57 (5): 595–603. doi:10.5946/ce.2023.297

eP300 Underwater endoscopic mucosal resection for serrated lesions: a systematic review and single-arm meta-analysis

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DOI 10.1055/s-0046-1821627

Aims Sessile serrated lesions (SSLs) are well-recognized precursors of colorectal carcinoma. Therefore, their complete removal is essential to reduce colorectal cancer incidence and mortality. Several endoscopic techniques have been employed for SSL resection. Among them, underwater endoscopic mucosal resection (UEMR) has been increasingly performed for nonpedunculated colorectal lesions (NPCLs). However, data regarding the efficacy and safety of UEMR specifically for SSLs remain limited. This systematic review and single-arm meta-analysis aimed to evaluate the pooled efficacy and safety of UEMR for SSLs [1–3].

Methods PubMed, EMBASE, and Cochrane databases were searched through June 2025 for studies reporting UEMR outcomes in SSLs. The primary outcome was the complete resection rate. Secondary outcomes included *en bloc* resection, R0 resection, and adverse events (AEs). A random-effects model was used to pool proportions with 95% confidence intervals (CIs). Heterogeneity was assessed using the I² statistic, and sensitivity analyses were conducted using a leave-one-out approach.

Results Seven observational studies comprising 581 lesions were included. Median lesion size ranged from 12 to 24.6 mm across studies. The pooled complete resection rate was 90.5% (95% CI, 69.6–100). The pooled R0 resection rate was 72.5% (95% CI, 58.4–83.2), decreasing to 63.6% for lesions ≥ 10 mm. The *en bloc* resection rate was 80.4% (95% CI, 65.0–90.1). AEs were rare, with a pooled incidence of 0.56% (95% CI, 0–1.74), including six delayed bleeding at 1.03% and five reported perforations. Recurrence was reported in three studies including 380 lesions. The pooled analysis showed a recurrence rate of 2.37% (95% CI 1.24–4.49; I² 0%).

Conclusions UEMR appears to be a safe and effective approach for SSLs, achieving high complete resection rates with a low incidence of AEs. The relatively favorable R0 and *en bloc* resection rates may contribute to low recurrence rates on surveillance. UEMR may therefore represent a suitable alternative for treating SSLs. Randomized comparative studies are needed to define the optimal endoscopic approach for these lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lenz L, Martins B, Andrade de Paulo G, Kawaguti FS, Baba ER, Uemura RS, Gusmon CC, Geiger SN, Moura RN, Pennacchi C, Simas de Lima M, Safatle-Ribeiro AV, Hashimoto CL, Ribeiro U, Maluf-Filho F. Underwater versus conventional EMR for nonpedunculated colorectal lesions: a randomized clinical trial. *Gastrointest Endosc*. 2023; 97 (3): 549–558. doi:10.1016/j.gie.2022.10.033 Epub 2022 Oct 26 PMID: 36309072
- [2] WEO Newsletter: Tips and tricks for underwater resection How to swim without drowning in this technique. *Dig Endosc* 2024; 36 (7): 861–865. doi:10.1111/den.14877 PMID: 38992912
- [3] Dekker E. Top tips for finding and treating serrated colon lesions (with video). *Gastrointest Endosc*. 2025; 101 (4): 879–884. doi:10.1016/j.gie.2024.09.044 Epub 2024 Oct 9 PMID: 39389434

eP301 Incidence and Risk Factors of Cholangitis in Post-Liver Transplant Biliary Strictures Treated with Endoscopic Multistenting

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DOI 10.1055/s-0046-1821628

Aims Anastomotic biliary strictures after liver transplantation can be treated using several endoscopic strategies. One of the best approaches adopted is a sequential multistenting protocol where an additional plastic stent is placed across the stricture at each endoscopic retrograde cholangiopancreatography (ERCP) session without removing the previous ones. The aims of this study were to evaluate the incidence and the potential risk factors associated with cholangitis during the multistenting protocol [1].

Methods We conducted a retrospective study at a single tertiary liver transplant center, reviewing data from patients who had undergone liver transplantation and were diagnosed with biliary strictures and treated with ERCP. The diagnosis of cholangitis was based on the Kyoto criteria. Patients with at least one episode of cholangitis were compared with those who did not. Data collected included patient demographics, hospitalization, rectal swab, presence of choledocholithiasis or stent migration, and timing of stenosis. The primary outcome was the incidence of cholangitis and secondary outcomes included the identification of potential risk factor

Results We analyzed data from 210 patients who underwent liver transplantation between June 2021 and May 2024. The median age was 59 years (SD 11), and the main indication was alcohol-related liver disease (24 %, N = 49). Anastomotic biliary strictures occurred in 55 patients (26 %) at a median of 4 months after transplant. These patients underwent a total of 220 ERCP as part of the sequential multistenting protocol, with a mean of four procedures per patient. **Eighteen patients (32.7 %) experienced at least one episode of cholangitis during the treatment period.** The occurrence of **choledocholithiasis** was associated with cholangitis ($p = 0.05$; OR 3.8). Moreover, **rectal swab colonization by multidrug-resistant (MDR) organisms** showed a strong association ($p = 0.005$; OR 7.2)

Conclusions Cholangitis represents a **clinically events** during the sequential multistenting protocol for post-transplant anastomotic strictures. A new onset of **biliary stones** and **colonization by multidrug-resistant (MDR) organisms** were predictors of cholangitis. These findings emphasize that Rectal swab colonization by multidrug-resistant organisms may represent an important predictor of cholangitis, suggesting that targeted pre-procedural antibiotic prophylaxis could help reduce its occurrence. Prospective studies would be needed to confirm these findings and to determine whether integrating rectal swab screening into routine management could improve outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Tarantino I et al. Sequential multistenting protocol in biliary stenosis after liver transplantation: a prospective analysis. *Endoscopy* vol. 51 (12): 2019; 1130–1135. doi:10.1055/a-0977-3158

eP302 Secondary Prophylaxis of Gastric Variceal Bleeding with Coil and Cyanoacrylate Obliteration: A Retrospective Cohort Study at UNICAMP

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DOI 10.1055/s-0046-1821629

Aims To describe the profile of patients undergoing EUS-guided obliteration of gastric varices and to assess its efficacy (immediate hemostasis and obliteration on follow-up) and safety (early rebleeding and adverse events).

Methods Retrospective, single-center cohort study including patients with portal hypertension and high-risk gastric varices (GOV or IGV), treated at the Hospital de Clínicas of UNICAMP between August 2023 and November 2025. We included cases of recent bleeding in the setting of secondary prophylaxis or primary prophylaxis with high-risk bleeding stigmata

Results Thirteen patients were evaluated and 10 were included. Most were male (60 %), with a median age of 49.5 years (14–68), and 70 % had portal hypertension secondary to liver cirrhosis. The mean diameter of treated varices was 24.1 ± 11.99 mm. Immediate obliteration was achieved in 100 % of cases, with no rebleeding at 30 days. One adverse event was recorded: pulmonary coil embolization [1–4].

Conclusions The high rate of immediate obliteration and absence of early rebleeding, even in large-caliber varices, reinforce the efficacy of EUS-guided combined coil and cyanoacrylate therapy in a high-risk setting. The embolic event associated with a large shunt underscores the importance of careful anatomical assessment and individualized technical planning.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sarkis Y. et al. Comparison of endoscopic ultrasound-guided primary and secondary prophylaxis for gastric variceal bleeding. *Digestive Endoscopy* v. 36 (n. 6): p. 710–718 2024
 [2] Gralnek I.M. et al. Endoscopic diagnosis and management of esophago-gastric variceal hemorrhage: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* v. 54 (n. 11): p. 1094–1120 2022
 [3] Puri R. et al. EUS coil and glue for gastric varices-prevent, treat and rescue, one therapy to rule them all? *Endoscopic Ultrasound* v. 13 (n. 1): p. 35–39 2024
 [4] De Franchis R. et al. Baveno VII – Renewing consensus in portal hypertension. *Journal of Hepatology* v. 76 (n. 4): p. 959–974 2022

eP303 Analysis of Time-Intensity Curves Using Contrast-Enhanced Harmonic Endoscopic Ultrasound for Differentiation of Solid Pancreatic Lesions

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DOI 10.1055/s-0046-1821630

Aims Contrast-enhanced harmonic endoscopic ultrasound (CH-EUS) has shown high sensitivity and specificity in the diagnosis of solid pancreatic lesions. However, its visual interpretation is subjective and lacks a standardized method. Therefore, quantitative analyses such as time-intensity curves (TIC) have been proposed to provide a more objective assessment of lesions. The primary objective was to evaluate whether TIC analysis using CH-EUS can characterize pancreatic tumors. The secondary objective was to determine the most accurate parameter for this purpose.

Methods This retrospective study included 67 patients with pancreatic tumors evaluated by CH-EUS between 2019 and 2025. TIC were generated to show changes in signal intensity over time, evaluating four parameters: peak intensity, time to peak intensity, intensity at 60 seconds after peak, and washout rate. Histological or cytological diagnosis was considered the “gold standard” and used to divide patients into three groups: pancreatic carcinomas (n = 54), pancreatic neuroendocrine tumors (PNETs) (n = 10), and other lesions (n = 3).

Results During the study period, 67 patients with solid pancreatic lesions were included, 28 men and 39 women, with a mean age of 70 years. There were 54 pancreatic adenocarcinomas, 10 neuroendocrine tumors, and among the 3 patients in the “other tumors” group, there was a plasma cell neoplasm with kappa light-chain restriction, metastasis from a primary breast tumor, and metastasis from a renal clear cell tumor.

Significant differences were found in the qualitative analysis of contrast uptake, with iso- or hyperenhancement associated with neuroendocrine tumors, and hypoenhancement associated with pancreatic adenocarcinoma.

Regarding quantitative analysis, no statistically significant differences were found in time to peak intensity or washout rate between adenocarcinomas and neuroendocrine tumors. Peak intensity and intensity at 60 seconds were significantly higher in pNETs than in adenocarcinomas ($p < 0.05$).

The areas under the ROC curve (AUC) for diagnosing pNETs using peak intensity and intensity at 60 seconds were 0.692 and 0.691, respectively, with cutoff values of 61.45 dB and 16.895 dB.

Statistically significant differences were also found regarding lesion size, obtaining a cutoff point of 22.5 mm after performing the ROC curve analysis. Therefore, when lesion size was included in the model, the areas under the ROC curve for diagnosing NET using peak intensity and intensity at 60 seconds were 0.994 and 0.986, respectively.

Peak intensity was the most accurate TIC parameter for differentiating pNETs, with a sensitivity of 98.3 % and specificity of 100 %.

Conclusions TIC analysis using CH-EUS demonstrated marked differences between pancreatic carcinomas and neuroendocrine tumors. Peak intensity is the most accurate diagnostic parameter for differentiating pancreatic tumors. In resectable lesions without the need for biopsy, confirmation of our results in prospective, blinded, multicenter studies could expand the preoperative understanding of these lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP304 EUS-Guided Tissue Acquisition for Preoperative Grading of pNETs: Comparative Performance of FNA Versus FNB

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DOI 10.1055/s-0046-1821631

Aims Preoperative grading of pancreatic neuroendocrine tumors (pNETs) plays a pivotal role in guiding surgical and oncological management. Endoscopic ultrasound-guided tissue acquisition (EUS-TA) enables cytological and histological assessment through fine-needle aspiration (FNA) and fine-needle biopsy (FNB), both currently recommended for tissue sampling. However, their comparative performance in achieving accurate grading consistent with surgical specimens remains unclear.

This study aimed to evaluate the performance of EUS-guided tissue acquisition (EUS-TA) for the preoperative characterization and grading of pancreatic neuroendocrine tumors (pNETs), comparing the relative performance and safety of FNA and FNB to the postoperative histological gold standard [1–3].

Methods We retrospectively analyzed 63 patients with histologically confirmed pNETs who underwent preoperative EUS-guided tissue acquisition (FNA or FNB) and subsequent surgical resection at the S. Orsola-Malpighi University Hospital in Bologna (2010–2024). Demographic, clinical, radiological, and procedural data were collected, including tumor size, site, morphology, sampling technique and adverse events. Cytological (FNA) and histological (FNB) samples were processed and graded according to WHO 2022 criteria. Diagnostic yield, accuracy, and grading adequacy were assessed. Multivariable logistic regression identified predictors of grading adequacy (sex, age, site, morphology, size). Concordance between preoperative and surgical grading was measured as percent agreement, Cohen's kappa, and Gwet's AC. Statistical significance was set at $p < 0.05$.

Results Among 63 resected pNETs (19 FNA, 44 FNB), overall diagnostic yield was 95.2 % (60/63) and diagnostic accuracy 98.3 % (59/60). Grading was achievable in 84.1 % of cases, with 93.2 % for FNB and 63.2 % for FNA (OR 7.97; 95 % CI 1.78–35.65; $p = 0.006$). Lesion size ≥ 20 mm independently predicted grad-

ing adequacy (OR 8.36, 95 % CI 1.10–63.6; $p = 0.040$). Overall concordance between preoperative and surgical grading was 69.8 % ($\kappa = 0.44$; Gwet's AC = 0.59), similar for FNA (75.0 %) and FNB (68.3 %). Misgrading occurred in 30.2 % (undergrading 24.5 %, overgrading 5.7 %). In lesions < 20 mm, concordance was 75.0 %. Safety was favorable: minor bleeding 15.9 %, mild pancreatitis 1.6 %, no severe events.

Conclusions Our findings confirm the high diagnostic accuracy of EUS-guided sampling in pNETs and highlight the significant advantage of FNB in obtaining histological material suitable for grading compared to FNA. Larger lesions (> 20 mm) favored grading adequacy, while overall concordance with surgical grading was moderate (69.8 %). FNB therefore appears to be the most reliable method for preoperative grading of pNETs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Crinò SF, Ammendola S, Meneghetti A et al. Comparison between EUS-guided fine-needle aspiration cytology and EUS-guided fine-needle biopsy histology for the evaluation of pancreatic neuroendocrine tumors. *Pancreatol*. 2021; 21 (2): 443–450
- [2] Tacelli M, Bina N, Crinò SF et al. Reliability of grading preoperative pancreatic neuroendocrine tumors on EUS specimens: a systematic review with meta-analysis of aggregate and individual data. *Gastrointest Endosc* 2022; 96 (6): 898–908
- [3] Eusebi LH, Thorburn D, Toumpanakis C et al. Endoscopic ultrasound-guided fine-needle aspiration vs fine-needle biopsy for the diagnosis of pancreatic neuroendocrine tumors. *Endosc Int Open* 2019; 07 (11): E1393–E1399

eP305 Sphincter of oddi dysfunction and functional biliary pain syndrome: A UK tertiary centre experience

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DOI 10.1055/s-0046-1821632

Aims Sphincter of Oddi dysfunction (SOD) and functional biliary pain are overlapping difficult to treat biliary disorders that are defined by the Rome IV criteria and is seen particularly in post cholecystectomy patients. Typically, patients feel a colicky right upper quadrant abdominal pain.

SOD involves a structural or functional obstruction of the sphincter, impairing bile flow. It is classified as type 1 when both imaging abnormalities and elevated liver tests are present, and type 2 when only one is evident. When typical biliary pain occurs without objective evidence of obstruction or inflammation, it is termed functional biliary pain, reflecting visceral hypersensitivity to pain. The role of endoscopic retrograde cholangiopancreatography (ERCP) and sphincterotomy in these patients remains controversial, particularly following recent evidence questioning their efficacy and highlighting potential risks.

Data of outcomes in this patient cohort is limited. We aimed to retrospectively assess our patient cohort.

Methods All new referrals were reviewed at a weekly multidisciplinary team (MDT) meeting. We examined MDT records from 2019 and identified the first 50 consecutive patients referred with a diagnosis of Sphincter of Oddi Dysfunction (SOD). Collected data included demographics, symptom profile, previous biliary surgery, imaging findings, liver function tests (LFTs), ERCP and sphincterotomy details, procedure-related complications, clinical outcomes, and duration of follow-up. For analysis, Type 2 SOD was further subclassified into cases with isolated liver function test abnormalities (Type 2–LFTs) and those with isolated imaging abnormalities (Type 2–Imaging)

Results The fifty patients were identified, with a mean age of 41.2 years; 96 % were female and 94 % were White. The mean follow-up duration was 4.7 years. Prior cholecystectomy had been performed in 84 % of patients, with 58 % reporting similar pain before surgery.

Diagnoses included Type 1 SOD ($n = 6$), Type 2 SOD–Imaging ($n = 4$), Type 2 SOD–LFTs ($n = 23$), functional biliary pain ($n = 14$), and non-biliary pain ($n = 3$).

Among SOD patients, mean peak ALT and ALP were 231 U/L and 153 U/L, respectively. Twenty-four SOD patients and two with functional biliary pain underwent ERCP, all of whom had sphincterotomy performed.

Post-procedure complications included pancreatitis in 7 patients (26.9%), post-sphincterotomy bleeding in 2 (7.7%), and perforation in 1 (3.8%). The mean length of stay for patients with pancreatitis was 11 days. Of the 26 patients who underwent ERCP, 11 (42%) reported no symptomatic improvement at their first follow-up post-procedure, and 14 (54%) reported no improvement at latest follow-up.

Conclusions In this cohort, the majority of patients referred with suspected SOD were young females, most of whom had previously undergone cholecystectomy. ERCP with sphincterotomy was associated with a higher-than-expected complication rate and limited long-term symptomatic benefit. These findings underscore the importance of careful patient selection and informed counselling. Comprehensive analysis of the full cohort of over 150 patients is ongoing and will be reported separately.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP306 Ketamine cholangiopathy: A UK tertiary centre experience

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DOI 10.1055/s-0046-1821633

Aims Ketamine, a synthetic phencyclidine derivative, is widely used for anaesthesia, analgesia, and treatment-resistant depression, but its hallucinogenic properties have driven increasing recreational misuse. It is metabolised hepatically, with approximately 90% excreted in urine. Ketamine-associated urinary tract injury is well recognised, with severe cases leading to chronic pain and even reconstructive bladder surgery, as highlighted in a recent systematic review of nearly 4,000 patients.

In contrast, ketamine-induced biliary injury is less well described. A recent systematic review identified only 17 reported cases, yet the consequences can be similarly severe.

With ketamine use rising across Europe over the past decade, we have observed a growing number of patients presenting with ketamine cholangiopathy. Our aim was to enhance understanding of this emerging condition by collating and analysing our centre's cases.

Methods All new referrals to our service are discussed at a weekly multidisciplinary team (MDT) meeting. We reviewed MDT records from 2019, when the hospital transitioned to an electronic health record system, through to July 2025. We collected demographic data, imaging results, frequency of ketamine use, urological involvement, date of referral, endoscopic interventions, symptom history, and liver function test results.

Results We identified 18 patients (mean age 32 years) with a mean follow-up of 3.8 years; sex distribution was equal. Seventeen reported weekly ketamine use at peak consumption. Cholangiopathy was evident on imaging in 17 patients, with one additional patient displaying abnormal liver tests while awaiting imaging. Uropathy was present in 14 patients.

At referral, 13 patients reported abdominal pain. At latest follow-up, 8 were abstinent from ketamine, of whom 5 experienced symptomatic improvement. One patient developed decompensated liver disease and died. Excluding this case, mean bilirubin was 12 µmol/L, ALT 183 U/L, and ALP 474 U/L. Two patients required ERCP for biliary strictures. Five patients underwent repeat imaging after reducing or ceasing ketamine use; one demonstrated complete resolution of cholangiopathy, while the remaining four showed either improvement or stable appearances.

Conclusions This is the largest case series to date on recreational ketamine users, underscoring the emerging public health issue of ketamine-induced cholangiopathy, which is closely linked to ketamine-induced uropathy. Most patients can be managed with active surveillance, with few requiring endo-

scopic intervention. The long-term outcomes remain unclear, though there is concern for progression to cirrhosis or malignancy. Ongoing research and greater awareness are needed given the rising prevalence of illicit ketamine use.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP307 Extranodal marginal zone B-cell lymphoma of mucosa-associated lymphoid tissue (MALT): an uncommon cause of dysphagia

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DOI 10.1055/s-0046-1821634

Abstract Text

Extranodal laryngeal MALT lymphoma is an extremely rare cause of laryngeal masses and dysphagia, representing less than 1% of laryngeal neoplasms. It typically presents as an indolent submucosal lesion with nonspecific symptoms such as dysphonia, cough, globus sensation or progressive dysphagia. Histologically, these lymphomas consist of marginal zone B cells with a characteristic CD20+ phenotype and variable plasmacytic differentiation. Lymphoplasmacytic lymphoma (LPL) and plasmacytoma are exceptionally uncommon alternative diagnoses [1–3].

A 46-year-old man, smoker of 10 cigarettes/day, presented with mixed high dysphagia for two years with recent progression. Past medical history included asthma and a duodenal ulcer diagnosed 13 years earlier associated with *Helicobacter pylori* infection, with confirmed eradication. A barium swallow showed a filling defect suggestive of an oesophageal polyp. Upper endoscopy revealed a 3-cm oval, submucosal-appearing lesion arising from the left arytenoid, covered by normal mucosa and without proximal oesophageal extension. The procedure was suspended due to intolerance, preventing gastric inspection. Fibroscopy confirmed a rounded lesion on the left aryepiglottic fold partially occupying the ipsilateral piriform sinus. Cervical computer tomography (CT) demonstrated a solid polypoid mass originating from the same region. A supraglottic partial laryngectomy was performed to obtain a complete diagnostic specimen. Histopathology was suggestive of extranodal marginal zone B-cell lymphoma (MALT type) with plasmacytic differentiation. Molecular studies subsequently demonstrated B-cell clonality, supporting this suspicion, although definitive diagnosis is still pending. The patient is currently undergoing full hematologic work-up, which include repeat upper endoscopy to exclude synchronous gastric MALT involvement.

In contrast to gastric MALT lymphoma, laryngeal MALT is not associated with *H. pylori* infection. Chronic inflammatory processes are thought to play a more relevant pathogenetic role. Comprehensive staging is essential, particularly upper gastrointestinal endoscopy with systematic gastric biopsies, because synchronous gastric involvement or multifocal disease may alter management. While *H. pylori* eradication is effective for gastric MALT lymphoma and may induce remission of extragastric manifestations, it is not an effective therapy for isolated laryngeal MALT lymphoma. Instead, involved-site radiotherapy is considered the treatment of choice, providing excellent local control and long-term remission. This case emphasises the value of endoscopic evaluation in patients with persistent dysphagia, not only for intraluminal oesophageal pathology but also for extrinsic or juxta-oesophageal lesions. Laryngeal MALT lymphoma, although rare, should be considered in the differential diagnosis of submucosal laryngeal masses. Complete staging, including gastric endoscopy, is essential to establish disease extent and guide optimal treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Caletti G, Togliani T, Fusaroli P, Sabattini E, Khodadadian E, Gamberi B, Gobbi M, Pileri S. Consecutive regression of concurrent laryngeal and gastric MALT lymphoma after anti-*Helicobacter pylori* therapy. *Gastroenterology* 2003; 124 (2): 537–43. doi:10.1053/gast.2003.50043

- [2] Arndt S, Veelken H, Schmitt-Gräff A, Aschendorff A, Maier W, Richter B. Multifocal extranodal mucosa-associated lymphoid tissue lymphoma affecting the larynx. *Ann Otol Rhinol Laryngol* 2007; 116 (4): 257–61. doi:10.1177/000348940711600406
- [3] Rossi D, Bertoni F, Zucca E. Marginal-zone lymphomas. *N Engl J Med* 2022; 386 (6): 568–581. doi:10.1056/NEJMra2102568

eP308 Effectiveness of Antibiotic Prophylaxis in Preventing Infectious Complications in Patients Undergoing ERCP: A Systematic Review and Meta-Analysis of 14 Randomized Clinical Trials

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DOI 10.1055/s-0046-1821635

Aims Cholangitis is one of the most serious infectious complications of ERCP. Current guidelines recommend antibiotic prophylaxis (AP) only for selected high-risk patients, yet most randomized controlled trials (RCT) informing these recommendations were performed more than two decades ago, before ERCP evolved into a predominantly therapeutic procedure. A recent study (Leem et al., 2024) reported reduced infectious complications in patients with biliary obstruction, suggesting that the effectiveness of AP may differ in contemporary practice. Our aim was to update the evidence by performing a comprehensive meta-analysis of all trials evaluating AP before ERCP.

Methods A systematic search was conducted in five databases (Medline, Embase, CENTRAL, Scopus and Web of Science) on 19th November 2024 to identify RCT's comparing AP versus no prophylaxis before ERCP. Primary outcome was cholangitis; secondary outcomes included bacteremia, septicemia, pancreatitis and mortality. Random-effects models were used to calculate risk ratios (RR) with 95% confidence intervals (CI). Risk of bias was assessed with the ROB2 tool, and certainty of evidence was evaluated using GRADE [1–4].

Results In total 14 RCTs involving 2055 patients were included. Antibiotic prophylaxis showed a trend toward reducing cholangitis (RR = 0.60, CI 0.29–1.26) although this did not reach statistical significance. In the subgroup of patients with biliary obstruction, AP again favored lower cholangitis risk (RR = 0.55, CI 0.12–2.40), but the effect was not statistically significant. Bacteremia was nearly significantly reduced (RR = 0.46, CI 0.20–1.08). Estimates for septicemia (RR = 0.56, CI 0.20–1.57), pancreatitis (RR = 0.73, CI 0.41–1.30) also favored AP but remained non-significant. The mortality in both groups was low (RR 1.16, CI 0.73–1.84). Overall heterogeneity across outcomes was low to moderate.

Conclusions Although not statistically significant, the evidence suggests a potential benefit of antibiotic prophylaxis for preventing post-ERCP infectious complications, particularly in patients with biliary obstruction. However, the certainty of this evidence is limited, and the true effect remains uncertain. Further modern RCTs are needed to identify patient groups who may benefit from prophylaxis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Guyatt G. et al. GRADE guidelines: 1. Introduction—GRADE evidence profiles and summary of findings tables. *Journal of Clinical Epidemiology* 2011; 64 (4): p 383–394
- [2] Sterne J.A.C. et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *Bmj* 2019; 366: p 14898

- [3] Dumonceau JM, Kapral C, Aabakken L, Papanikolaou IS, Tringali A, Vanbiervliet G, Beyna T, Dinis-Ribeiro M, Hritz I, Mariani A, Paspatis G, Radaelli F, Lakhtakia S, Veitch AM, van Hooft JE. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2020; 52 (2): 127–149. doi:10.1055/a-1075-4080 Epub 2019 Dec 20 PMID: 31863440
- [4] Leem G, Sung MJ, Park JH, Kim SJ, Jo JH, Lee HS, Ku NS, Park JY, Bang S, Park SW, Song SY, Chung MJ. Randomized Trial of Prophylactic Antibiotics for Endoscopic Retrograde Cholangiopancreatography in Patients With Biliary Obstruction. *Am J Gastroenterol*. 2024; 119 (1): 183–190. doi:10.14309/ajg.0000000000002495 Epub 2023 Sep 15 PMID: 37713527 PMID: PMC10758346

eP309 Comparison of Bowel Preparation Quality for Colonoscopy in Inpatients Versus Outpatients: A Single-Center Prospective Observational Study in Lebanon

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DOI 10.1055/s-0046-1821636

Aims To compare the adequacy of bowel preparation between inpatients and outpatients and to identify independent predictors of poor bowel cleansing.

Methods This prospective, single-center observational study was conducted at a tertiary care hospital and included colonoscopies performed on both inpatients and outpatients. A total of 217 procedures were analyzed (109 outpatients and 108 inpatients). Bowel preparation quality was evaluated using the Boston Bowel Preparation Scale (BBPS). Univariate and multivariate logistic regression analyses were used to identify factors associated with inadequate bowel preparation [1–25].

Results No statistically significant difference in bowel preparation adequacy was found between inpatients and outpatients. In the overall cohort, two independent predictors of bowel preparation quality were identified. Smoking was significantly associated with inadequate cleansing, with smokers having 62.4% lower odds of achieving good preparation compared to non-smokers (OR = 0.376; p = 0.002). Conversely, the use of a split-dose regimen significantly improved bowel cleansing, increasing the odds of adequate preparation by nearly five times compared to single-dose regimens (OR = 4.96; p = 0.001).

Conclusions Inpatient status was not associated with inferior bowel preparation compared to outpatient status. Smoking and the type of bowel preparation regimen (split- vs. single-dose) were the most significant predictors of bowel cleansing quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martel M, Barkun AN, Menard C, Restellini S, Kherad O, Vanasse A Split-Dose Preparations Are Superior to Day-Before Bowel Cleansing Regimens: A Meta-analysis. *Gastroenterology* 2015; 149: 79–88. doi:10.1053/j.gastro.2015.04.004
- [2] Menees SB, Kim HM, Schoenfeld P Split-dose bowel preparation improves adequacy of bowel preparation and gastroenterologists' adherence to National Colorectal Cancer Screening and Surveillance Guidelines. *World Journal of Gastroenterology* 2018; 24: 716–724. doi:10.3748/wjg.v24.i6.716
- [3] Rotondano G, Rispo A, Bottiglieri ME et al. Quality of bowel cleansing in hospitalized patients undergoing colonoscopy: A multicentre prospective regional study. *Digestive and Liver Disease* 2015; 47: 669–674. doi:10.1016/j.dld.2015.04.013
- [4] Boston Bowel Preparation Scale (BBPS). (2019). Accessed: November 2, 2025 <https://www.ibspatient.org/about-ibs/diagnosis/boston-bowel-preparation-scale/>
- [5] Massinha P, Almeida N, Cunha I et al. Clinical Practice Impact of the Boston Bowel Preparation Scale in a European Country. *GE Portuguese Journal of Gastroenterology* 2018; 25: 230–235. doi:10.1159/000485567

- [6] Almadi MA, Alharbi O, Azzam N, Wadera J, Sadaf N, Aljebreen AM Prevalence and characteristics of colonic polyps and adenomas in 2654 colonoscopies in Saudi Arabia. *Saudi Journal of Gastroenterology* 2014; 20: 154–161. doi:10.4103/1319-3767.132986
- [7] Azzam N, Aljebreen AM, Alharbi O, Almadi MA Prevalence and clinical features of colonic diverticulosis in a Middle Eastern population. *World Journal of Gastrointestinal Endoscopy* 2013; 5: 391–397. doi:10.4253/wjge.v5.i8.391
- [8] Sim JS, Koo JS Predictors of Inadequate Bowel Preparation and Salvage Options on Colonoscopy. *Clinical Endoscopy* 2016; 49: 346–349. doi:10.5946/ce.2016.094
- [9] Tantinam T, Phoonkaew T, Treeratanawikran T et al. Comparative Analysis of Outpatient and Inpatient Bowel Preparation for Colonoscopy: Evaluating Quality Outcomes and Identifying Contributing Factors. *Journal of Health Science and Medical Research* 2025; 43. doi:10.31584/jhsmr.20251170
- [10] Parungao JM, Reyes C, Jackson N, Roizen N, Piper M Factors Influencing the Adequacy of Bowel Preparation in Patients With Developmental Disabilities. *Gastroenterology Research* 2018; 11: 416–421. doi:10.14740/gr1118
- [11] Chen G, Zhao Y, Xie F, Shi W, Yang Y, Yang A, Wu D Educating Outpatients for Bowel Preparation Before Colonoscopy Using Conventional Methods vs Virtual Reality Videos Plus Conventional Methods: A Randomized Clinical Trial. *JAMA Network Open* 2021; 4:e2135576. doi:10.1001/jamanetworkopen.2021.35576
- [12] Tariq H, Kamal MU, Sapkota B et al. Evaluation of the combined effect of factors influencing bowel preparation and adenoma detection rates in patients undergoing colonoscopy. *BMJ Open Gastroenterology* 2019; 6:e000254. doi:10.1136/bmjgast-2018-000254
- [13] Zhang N, Xu M, Chen X Establishment of a risk prediction model for bowel preparation failure prior to colonoscopy. *BMC Cancer* 2024; 24: 341. doi:10.1186/s12885-024-12081-4
- [14] Romero RV, Mahadeva S Factors influencing quality of bowel preparation for colonoscopy. *World Journal of Gastrointestinal Endoscopy* 2013; 5: 39–46. doi:10.4253/wjge.v5.i2.39
- [15] Parmar R, Martel M, Rostom A, Barkun AN Validated Scales for Colon Cleansing: A Systematic Review. *The American Journal of Gastroenterology* 2016; 111: 197–204. doi:10.1038/ajg.2015.417
- [16] Jacobson BC, Anderson JC, Burke CA et al. Optimizing Bowel Preparation Quality for Colonoscopy: Consensus Recommendations by the US Multi-Society Task Force on Colorectal Cancer. *The American Journal of Gastroenterology* 2025; 120: 738–764. doi:10.14309/ajg.0000000000003287
- [17] Lai EJ, Calderwood AH, Doros G, Fix OK, Jacobson BC The Boston bowel preparation scale: a valid and reliable instrument for colonoscopy-oriented research. *Gastrointestinal Endoscopy* 2009; 69: 620–625. doi:10.1016/j.gie.2008.05.057
- [18] Halphen M, Heresbach D, Gruss HJ, Belsey J Validation of the Harefield Cleansing Scale: a tool for the evaluation of bowel cleansing quality in both research and clinical practice. *Gastrointest Endoscopy* 2013; 78: 121–131. doi:10.1016/j.gie.2013.02.009
- [19] Gerard DP, Holden JL, Foster DB, Raiser MW Randomized Trial of Gatorade/Polyethylene Glycol With or Without Bisacodyl and NuLYTELY for Colonoscopy Preparation. *Clinical and Translational Gastroenterology* 2012; 3. doi:10.1038/ctg.2012.11
- [20] Rostom A, Jolicoeur E Validation of a new scale for the assessment of bowel preparation quality. *Gastrointestinal Endoscopy* 2004; 59: 482–486. doi:10.1016/S0016-5107(03)02875-X
- [21] Almadi MA, Alharbi O, Azzam N, Altayeb M, Thaniah S, Aljebreen A Bowel preparation quality between hospitalized patients and outpatient colonoscopies. *Saudi Journal of Gastroenterology* 2018; 24: 93–99. doi:10.4103/sjg.SJG_485_17
- [22] Sharma P, Burke CA, Johnson DA, Cash BD The importance of colonoscopy bowel preparation for the detection of colorectal lesions and colorectal cancer prevention. *Endoscopy International Open* 2020; 8: E673–E683. doi:10.1055/a-1127-3144
- [23] Davidson KW, Barry MJ, Mangione CM et al. Screening for Colorectal Cancer: US Preventive Services Task Force Recommendation Statement. *Journal of the American Medical Association (JAMA)* 2021; 325: 1965–1977. doi:10.1001/jama.2021.6238

- [24] Dsouza R, Menon G, Pfeifer C Colonoscopy. In: StatPearls Publishing; Treasure Island, Florida (FL), USA: 2024
- [25] Tinmouth J, Vella ET, Baxter NN et al. Colorectal Cancer Screening in Average Risk Populations: Evidence Summary. *Canadian Journal of Gastroenterology and Hepatology* 2016. doi:10.1155/2016/2878149

eP310 Endoscopic Application of Self-Assembling Peptide Gel (PuraStat) for Post-Bariatric Surgical Anastomotic Ulcers: A Retrospective Case Series

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DOI 10.1055/s-0046-1821637

Aims Anastomotic (marginal) ulcers appear in 16 % of patients post-bariatric surgery [1]. Patients commonly present with abdominal pain, dyspepsia, nausea and even bleeding [2]. Standard treatment is high-dose PPIs (with or without sucralfate) with endoscopic surveillance, yet some patients experience refractory chronic ulcers (> 12 months), which require surgical resection and anastomotic revision [3]. PuraStat, a transparent synthetic peptide gel, supports haemostasis and mucosal repair of ulcers by forming a nanofibre scaffold upon contact with bodily fluid [4]. A previous case series demonstrated success in anastomotic ulcer healing [2], and an observational study showed efficacy in gastrointestinal bleeding management [4]. Light brushing of the ulcer surface can induce capillary bleeding, theoretically enhancing PuraStat's efficacy, but this technique has not been explored in current literature. This single-centre case series of patients who had anastomotic ulcer brushing followed by PuraStat application during endoscopy aims to describe efficacy of this technique in terms of symptom resolution, endoscopic evidence of healing and need for follow-up endoscopy.

Methods Fourteen adults with anastomotic ulceration post-gastric bypass surgery, who underwent endoscopy with ulcer brushing followed by either 3mL or 5mL PuraStat application at Homerton University Hospital between 2018 and 2025, were included. Data retrospectively collected from patients' electronic records included demographics, smoking status, bariatric history, presenting symptoms, diagnoses of chronic ulceration, complications (gastrointestinal bleeding or perforation), and concurrent medical therapy (PPIs and sucralfate). Outcomes were recorded as documented symptomatic improvement, evidence of healing on subsequent endoscopy, and discharge from endoscopic surveillance (► **Table 1**).

► **Table 1**

Characteristic	No. (%)
Smoking	5 (36)
Previous bariatric revision surgery	3 (21)
4+ PuraStat-assisted OGDs	7 (50)
Chronic / recurrent ulceration diagnosed	8 (57)
Long-term PPI therapy	14 (100)
≥ 1 Two-week course of sucralfate	10 (71)
Clinical symptom resolution	12 (86)
Endoscopic evidence of ulcer healing	12 (86)
Discharged from endoscopy follow-up	9 (64)
Complications (gastrointestinal bleed / perforation)	0 (0)

Results All patients received high-dose PPI therapy, with the majority also receiving sucralfate. Most patients (10/14, 71.4%) demonstrated both symptomatic and endoscopic improvement. Of the two patients without endoscop-

ic healing, one had symptom resolution and did not need further OGDs, while the other had stent insertion for stricturing, with revision surgery planned. Of two patients with ongoing symptoms, one is currently awaiting clinic follow-up to check for symptom resolution after a recent OGD, and one underwent six OGDs due to refractory symptoms related to a gastric intra-thoracic remnant. Other patients requiring four to six PuraStat-assisted OGDs (7/14, 50%) had persistent symptoms, with two awaiting revision surgery, or were smokers (3/7, 42.9%). There were no complications observed.

Conclusions Endoscopic PuraStat application after ulcer brushing was well-tolerated and had favourable clinical and endoscopic outcomes. Prolonged follow-up occurred in smokers and those with complex postoperative anatomy, but even slowly progressing patients showed endoscopic evidence of ulcer healing. No major complications were observed, supporting the safety of repeated applications. However, this study lacked a control arm, limiting comparison with standard therapy as exact PPI and sucralfate regimes varied between patients, and limiting investigation into the efficacy of ulcer brushing versus using PuraStat alone. Overall, PuraStat with ulcer brushing is a promising option for anastomotic ulcers, but prospective comparative studies are needed to cement the efficacy and safety of this technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Branchi F. et al. PuraStat in gastrointestinal bleeding: results of a prospective multicentre observational pilot study. *Surg Endosc* 36: 2954–2961 2022
- [2] Vosburg R.W. et al. ASBMS literature review on the treatment of marginal ulcers after metabolic and bariatric surgery. *Surgery for Obesity and Related Diseases* 21: 1–8 2025
- [3] Oza V.M. et al. Impact of Using Self-Assembling Peptide (PuraStat) on Anastomotic Ulcers-A Multicenter Case Series. *ACG Case Rep J* 11: e01535 2024
- [4] Tian Y., Rogers A.M. Marginal Ulcer: Diagnosis and Treatment. *Clinical Algorithms in General Surgery: A Practical Guide* 827–829 2019. doi:10.1007/978-3-319-98497-1_200

eP311 The Effect of Neo-Adjuvant Radiotherapy Prior to Endoscopic Submucosal Dissection for Superficial Esophageal Squamous Cell Neoplasia

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DOI 10.1055/s-0046-1821638

Aims The occurrence of esophageal stenosis becomes unavoidable with endoscopic submucosal dissection (ESD) conducted on large superficial esophageal squamous cell neoplasia (SESC). The aim of this study was to assess the impact of neo-adjuvant radiotherapy administered prior to ESD for SESC.

Methods This was a retrospective cohort study in a single tertiary referral center. Medical records were reviewed from January 2017 to November 2023. Inclusion criteria comprised; 1) identification of SESC through endoscopic and pathologic examinations; 2) radiotherapy prior to ESD; 3) no further treatment immediately after ESD. Exclusion criteria encompassed; 1) advanced esophageal carcinoma; 2) esophageal adenocarcinoma; 3) radiotherapy administered after ESD.

Results In this study, a total of 15 lesions from 14 patients were included. The male-to-female ratio was 11:3, with an average age of 67.4 ± 7.8 years. The mean follow-up period was 29.7 ± 12.3 months. The initial lesion width before radiation therapy averaged 26.7 cm^2 and averaged 13.0 cm^2 after ESD. The curative *en bloc* resection rate was 93.3%, and no submucosal invasion was observed pathologically. Throughout the follow-up period, peri-gastric lymph node metastasis was detected in one patient. Importantly, none of the patients experienced esophageal stricture or disruption in the passage of food materials.

Conclusions The application of neo-adjuvant radiotherapy before ESD may help prevent post-ESD stricture.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP312 Is Octreotide a Salvage Therapy for Preventing Recurrent Bleeding From Gastrointestinal Angioectasias?

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DOI 10.1055/s-0046-1821639

Aims Gastrointestinal angioectasia is a significant etiology of recurrent gastrointestinal bleeding, often requiring hospital care. Octreotide has been proposed as a therapeutic option in patients in whom endoscopic treatment is insufficient, particularly in those with small bowel or diffuse angiectasia. This study evaluates the clinical efficacy of long-acting intramuscular octreotide in the recurrency of gastrointestinal bleeding from angioectasia [1].

Methods A sample of 21 patients receiving monthly octreotide, either 10 mg or 20 mg, were retrospectively analyzed. Clinical efficacy was assessed by comparing the frequency of hospitalizations, urgency department visits, red blood cell (RBC) transfusions and intravenous iron infusions during the 6-month and 12-month intervals that preceded and followed the start of treatment. Additional contributing factors, including anticoagulation therapy and underlying diseases, were also examined.

Results The sample studied has an mean age of 78 years, with 13 males and 8 hypocoagulated patients. The Charlson Comorbidity Index averaged 5.6 points, with 5 patients having cirrhosis and 5 patients Osler-Rendu-Weber Syndrome. Hospitalizations significantly decreased after octreotide initiation at both 6 and 12 months of treatment ($p < 0.001$; $p = 0.019$). Urgent care visits and RBC transfusions were significantly lower in the first 6 months of treatment ($p < 0.001$; $p = 0.007$), though this effect was not sustained at 12 months. Intravenous iron requirements did not differ statistically between pre- and post-treatment periods. Patients receiving 10 mg of octreotide had significantly fewer urgent care visits and iron infusions at 6 months of treatment compared to the 20 mg group ($p = 0.031$; $p = 0.026$).

Conclusions In recurrent bleeding from angioectasias, when endoscopic treatment is ineffective, a 12-month course of octreotide therapy significantly reduces hospitalizations. Additionally, treatment in the first 6 months proves to be effective in reducing the number of urgency department visits and red blood cell transfusions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sami S.S., Al-Araji S.A., Ragunath K. 2013; Review article: gastrointestinal angiodysplasia – pathogenesis, diagnosis and management. *Alimentary Pharmacology & Therapeutics* 39 (1): 15–34. doi:10.1111/apt.12527

eP313 Diagnostic yield of standard upper endoscopy in 196 patients with dysphagia: a real-world comparative analysis of esophageal vs oropharyngeal presentations

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DOI 10.1055/s-0046-1821640

Aims To compare the diagnostic yield of upper endoscopy between esophageal and oropharyngeal dysphagia, and to characterize the spectrum of structural, inflammatory, and motility-related findings in a real-world tertiary care setting (► Table 1).

► **Table 1** Endoscopic findings stratified by dysphagia type

Endoscopic finding	Total (n = 196)	Esophageal dysphagia (n = 123)	Oropharyngeal dysphagia (n = 73)
Hiatal hernia	48 (24.5 %)	44	4
Esophagitis	44 (22.4 %)	40	4
Peptic stricture	16 (8.2 %)	16	0
Malignant tumor	8 (4.1 %)	8	0
Schatzki ring	4 (2.0 %)	4	0
Eosinophilic esophagitis (EoE)	2 (1.0 %)	2	0
Achalasia (HRM-confirmed)	4 (2.0 %)	4	0
Ineffective esophageal motility (IEM)	7 (3.6 %)	7	0
Normal endoscopy	70 (35.7 %)	5	65

Methods We conducted a retrospective study of adults undergoing upper endoscopy for dysphagia between March and November 2025. Dysphagia was clinically categorized as esophageal or oropharyngeal. Endoscopic findings were classified as structural, inflammatory, motility-suggestive, or normal. Associations between dysphagia type and relevant endoscopic abnormalities were analyzed using chi-square tests and odds ratios (OR). High-resolution manometry was performed when motility disorders were suspected [1–7].

Results Among 196 patients, 123 (62.8 %) had esophageal dysphagia and 73 (37.2 %) oropharyngeal dysphagia. The overall diagnostic yield was 64.3 %. Frequent findings included hiatal hernia (24.5 %), esophagitis (22.4 %), peptic strictures (8.2 %), malignancy (4.1 %), Schatzki ring (2.0 %), eosinophilic esophagitis (1.0 %), and HRM-confirmed achalasia (2.0 %); ineffective esophageal motility was identified in 3.6 %.

Relevant abnormalities were significantly more common in esophageal than in oropharyngeal dysphagia (96.0 % vs 11.0 %, respectively), indicating a strong association (OR 32.1, 95 % CI 12.8–80.5, $p < 0.001$). In oropharyngeal dysphagia, endoscopy was predominantly normal.

Conclusions Standard upper endoscopy provides high diagnostic yield in esophageal dysphagia, identifying a broad spectrum of clinically actionable abnormalities. In contrast, oropharyngeal dysphagia demonstrates low yield, supporting selective endoscopic referral. These real-world findings reinforce the utility of conventional endoscopy—without enhanced imaging—as an essential diagnostic tool in dysphagia evaluation in resource-limited settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Peery AF, Hoppo T, Garman KS, Dellon ES. Esophageal strictures in adults. *Nat Rev Dis Primers* 2016; 2: 16002
- [2] Yadlapati R, Pandolfino JE. High-resolution manometry: Evolution and revolution in esophageal motility testing. *Clin Gastroenterol Hepatol* 2018; 16 (10): 1692–1700
- [3] Boeckstaens GE, Zaninotto G, Richter JE Achalasia. *Lancet* 2014; 383 (9911): 83–93
- [4] Katzka DA. Eosinophilic esophagitis: Clinical manifestations and diagnosis. *Gastroenterology* 2022; 162 (1): 23–34
- [5] Triadafilopoulos G. A practical algorithm for evaluation of dysphagia. *Clin Gastroenterol Hepatol* 2018; 16 (5): 640–646
- [6] ASGE Standards of Practice Committee The role of endoscopy in the evaluation of dysphagia. *Gastrointest Endosc* 2014; 79 (2): 191–201
- [7] Hirano I, Pandolfino J. Approach to dysphagia. *Gastroenterology* 2013; 145 (5): 1083–1099

eP314 A Retrospective Cohort Analysis of Optimal Lumen-Apposing Metal Stent (LAMS) Removal Timing in Necrotizing Pancreatitis

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DOI 10.1055/s-0046-1821641

Aims Lumen-apposing metal stents (LAMS) have transformed endoscopic management of walled-off necrosis (WON) and large pseudocysts by permitting wide, stable cyst-gastrostomy and direct necrosectomy. Current societies advise retrieval at 3–5 weeks, yet these statements are based on limited data and conflicting single-center series.

Methods All adults who underwent trans-gastric Hot AXIOS placement for WON or symptomatic pseudocyst between January 2017 and March 2025 were retrospectively reviewed. The composite 30-day adverse-event (AE) endpoint captured any post-removal bleeding, migration/burial, new or recurrent fluid collection > 4 cm, unplanned readmission or death. Clinical success required radiographic resolution without further intervention. Categorical outcomes were compared with Fisher's exact test; absolute risk differences (RD) carry 95 % CIs.

Results Forty-nine patients met inclusion (median age 57 yr, IQR 48–66; 65 % male). Twenty-seven had WON and 22 pseudocysts. Twelve stents were removed early, 17 in the standard window and 20 after > 28 d, yielding median dwell times of 11, 21 and 47 d, respectively. Composite 30-day AEs occurred in 2/12 (16.7 %) early, 9/17 (52.9 %) standard and 4/20 (20 %) delayed removals; RD standard–early = + 36.3 % (95 % 4.5–68.0) and RD standard–delayed = + 32.9 % (3.4–62.4), whereas early and delayed differed less (–3.3 %, –30.8–24.1). Bleeding was uncommon (8 %) and evenly distributed, but unplanned readmissions were highest with standard timing (35.3 % vs 8.3 % early, 15.0 % delayed). Clinical success was achieved in 10/11 early (90.9 %), 12/15 standard (80.0 %) and 17/17 delayed cases (100 %). Multivariable analysis in 44 patients retained a non-significant but directionally consistent effect for standard removal (adjusted OR 4.95 vs early, 95 % 0.67–36.3); no demographic or procedural covariate independently predicted AE. Subgroup analysis reinforced the pattern: in WON, AEs were 14.3 % early, 54.5 % standard and 33.3 % delayed, while pseudocyst rates remained ≤ 25 % irrespective of timing (► **Table 1**).

► **Table 1** Baseline Characteristics by Indwell-Time Group

Characteristic	Early(n = 12)	Standard(n = 17)	Delayed(n = 20)	p-value†
Age, yr (mean ± SD)	56.0 ± 13.1	59.0 ± 12.6	53.5 ± 12.8	0.44
Male sex, %	83.3 %	64.7 %	55.0 %	0.26
Charlson index (mean ± SD)	2.50 ± 1.62	2.71 ± 1.45	2.45 ± 1.67	0.88
Stent diameter, mm (mean ± SD)	18.2 ± 2.5	17.7 ± 2.6	15.8 ± 1.9	0.02
Plastic pigtail stent, %	83.3 %	88.2 %	90.0 %	0.85
Balloon dilation used, %	91.7 %	100 %	100 %	0.15
Necrosectomy sessions, median (IQR)	2 (1-3)	2 (1-3)	1.5 (1-3)	0.30‡
Collection size, cm (mean ± SD)	13.2 ± 5.6	12.6 ± 5.8	11.5 ± 5.4	0.71
Pseudocyst pathology, %	41.7 %	23.5 %	65.0 %	0.17

† χ^2 /ANOVA where appropriate; ‡Kruskal–Wallis for counts.

Conclusions In patients with large pseudocysts and WONs, removal of LAMS early (< 14 days) in showed lowest AE rates when compared to “standard” (14–28 days) and delayed (> 28 days) without compromising clinical success. Additionally, delayed removals also had lower AE rates when compared to standard window of removal. These findings question current LAMS removal timing and indicate that earlier removal may be safe in selected patients, warranting prospective validation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP315 Abstract: Peptic Ulcer Status and Associated Risk Factors Among Patients Undergoing Hemodialysis

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DOI 10.1055/s-0046-1821642

Aims To investigate the status of peptic ulcers and the associated risk factors among patients undergoing hemodialysis

Methods This hospital-based retrospective study was conducted from October 1, 2018, to March 24, 2024, among patients undergoing renal replacement therapy who received endoscopic services at the endoscopy unit of Shinonmed Hospital. We reviewed their upper gastrointestinal endoscopy findings and hemodialysis-related medical history. To calculate the malnutrition index, we used the calculator developed by Dr. Gordan P. Buzby from the University of Pennsylvania Health System, which is published on PubMed [1–8].

Results 1. General Characteristics of the Study Population

A total of 103 cases were included in the study. The mean age was 48.7 ± 12.8 years. By sex distribution, 47 % (n = 48) were female and 53 % (n = 55) were male, yielding a male-to-female ratio of 1:1.

Among the 103 patients, 35 % (n = 36) had peptic ulcer disease (PUD), while 65 % (n = 67) did not.

Assessment of the association between *H. pylori* infection and PUD showed that 84.7 % (n = 87) had no *H. pylori* infection. The association with PUD was not statistically significant (p = 0.15).

Malnutrition Index and Peptic Ulcer Disease

PUD was detected in 34.9 % (n = 36) of all cases. Based on the malnutrition index, 75 % (n = 27) of patients with peptic ulcers had moderate malnutrition. Therefore, protein–energy malnutrition was found to be significantly associated with the development of peptic ulcers (p = 0.000 *).

Age and Peptic Ulcer Disease

Among patients with PUD, 69.4 % (n = 25) were aged > 40 years, while 77.6 % (n = 52) of non-PUD patients were also over 40 years of age. There was no significant association between age and PUD (p = 0.23).

Comorbidities and Peptic Ulcer Disease

Among patients with PUD, 47.2 % (n = 17) had three or more chronic comorbidities, compared with 23.8 % (n = 16) among those without PUD. Thus, the presence of multiple comorbidities was significantly associated with the development of PUD (p = 0.038)

Risk Factors for PUD in Hemodialysis Patients

Comparison of risk factors among hemodialysis patients revealed that the malnutrition index was strongly associated with PUD (p = 0.000 *). Additionally, comorbid conditions increased the risk of PUD by **35.1 times**

Conclusions A total of 103 patients undergoing renal replacement therapy were evaluated by endoscopy, of whom 36 (34.95 %) had peptic ulcers and 98 (95.1 %) were diagnosed with chronic gastritis.

A total of 103 patients undergoing renal replacement therapy were evaluated by endoscopy, of whom 36 (34.95 %) had peptic ulcers and 98 (95.1 %) were diagnosed with chronic gastritis.

Peptic ulcer disease was present in 34.9 % (n = 36) of the cases. Based on the malnutrition index, 75 % (n = 27) of patients with peptic ulcers had moderate malnutrition. This indicates that protein–energy malnutrition contributes to the development of peptic ulcers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] <https://medicalguidelines.msf.org/en/viewport/CG/english/gastric-and-duodenal-ulcers-in-adults-16689611.html> Gastric and duodenal ulcers in adults 2022;
- [2] Abbasi-Kangevari M, Ahmadi N, Fattahi N, Rezaei N, Malekpour MR, Ghamari SH, Moghaddam SS, Azadnajafabad S, Esfahani Z, Kolahi AA, Roshani S, Rezazadeh-Khadem S, Gorgani F, Naleini SN, Naderimagham S, Larijani B, Farzadfar F. <https://journals.plos.org/> Quality of care of peptic ulcer disease worldwide: A systematic analysis for the global burden of disease study 1990–2019.
- [3] Kim M, Kim CS, Bae EH, Ma SK, Kim SW. <https://www.ncbi.nlm.nih.gov/> Risk factors for peptic ulcer disease in patients with end-stage renal disease receiving dialysis. 2019;
- [4] Salani M, Friedman LS, Golper TA. <https://www.uptodate.com/> Unique aspects of gastrointestinal disease in patients on dialysis. 2023;

- [5] T Cederholm 1, I Bosaeus 2, R Barazzoni 3, J Bauer 4, A Van Gossum 5, S Klek 6, M Muscaritoli 7, I Nyulasi 8, J Ockenga 9, S M Schneider 10, M A E de van der Schueren 11, P Singer 12 <https://www.espen.org/> Diagnostic criteria for malnutrition – An ESPEN Consensus Statement 2015 Jun
- [6] <https://www.mdcalc.com/calc/10202/nutritional-risk-index>
- [7] <https://moh.gov.mn/laws/> ЭМС-ын 2021.11.16 А/702 тоот тушаал Ходоод дээд гэдэсний шархлаа өвчний оношилгоо, эмчилгээний эмнэлзүйн заавар
- [8] <https://moh.gov.mn/laws/> ЭМС-ын 2022.03.18 А/147 тоот тушаал Гемодиализ эмчилгээний эмнэлзүйн заавар

eP316 Large polypectomy case report

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DOI 10.1055/s-0046-1821643

Background: With the increasing use of endoscopy, visually discernible abnormalities, such as polyps in the gastrointestinal tract, are encountered more often. Gastric polyps most frequently originate in the mucosa but encompass a broad spectrum of pathologic conditions that may even be submucosal or extrinsic. Found in 6% of upper endoscopies, gastric polyps are a heterogeneous group of epithelial and subepithelial lesions that can vary in histology, neoplastic potential, and management. Most have no risk of cancer, but there are certain subsets of polyps with malignant potential, necessitating further endoscopic treatment and/or periodic surveillance 1. Gastric adenomas, or gastric polypoid dysplasia, are true neoplasms and precursors to gastric cancer. Due to the increased risk of malignancy associated with these polyps, recommendations include complete removal of the adenoma, with further examination of the entire gastric mucosa for abnormalities, all of which should be biopsied [1–3].

Case report: Introduction: Patient description- Age: 65 Gender: male Race: Mongolian Height-168cm Weight- 80kg
Case history- Occasionally abdominal pain 2023.12.11 Gastric large polyp was diagnosed No chronic diseases Did not use alcohol or tobacco Gastrosocopy 2023.12.12 Pedunculated large polyp on the middle part of body Yamada type IV 2023.12.21 Pedunculated large polyp size 4.5x6,5 cm on the middle part of body Removed this polyp by hot snare and seven clips where done on the polyps base 2023.12.22 : Histology result Well differentiated adenocarcinoma arising in villous adenoma IC10-C16 2023.01.15 Abdominal contrast CT Result: SPO gastric polypectomy with surgical clips along the stomach body, no significant abnormal wall thickness or enhancement of the stomach.

Conclusions Around 10% of stomach polyps are adenomas, making them the most common precancerous type. They're typically sporadic and solitary. But they can sometimes occur in greater numbers in association with familial adenomatous polyposis. Polyps are common in gastrointestinal endoscopy and are usually asymptomatic and do not progress to cancer, but histological examination is required to determine the presence of dysplasia. In this case, tissue analysis revealed a hyperplastic polyp, but post-operative material revealed a adenocarcinoma arising in villous adenoma of the stomach 2. Endoscopic removal of a large adenoma crop has fewer complications and recurrences, but it cannot completely eliminate the risk of cancer, so it is necessary to regularly monitor H. pylori for treatment. As long as the size of gastric adenoma is 2 cm or larger, there is a 40–50% risk of turning into cancer, so it is necessary to regularly monitor with an endoscope .

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Paul J, Kelly Gregory Y Lauwers etc. Gastric polyps and dysplasia. Mini-Symposium: Upper Gastrointestinal Pathology. 2010;
- [2] Carmack SW, Genta RM, Graham DY, Lauwers GY. Management of gastric polyps: a pathology-based guide for gastroenterologists. *Nat Rev Gastroenterol Hepatol* 2009; 6 (6): 331–341
- [3] Islam RS, Patel NC, Lam-Himlin D, Nguyen CC. Gastric Polyps: A Review of Clinical, Endoscopic, and Histopathologic Features and Management Decisions. <https://www.ncbi.nlm.nih.gov/> *Gastroenterol Hepatol* (N Y). 2013;

eP317 Retrospective Analysis of EUS-Guided Elastography & Histopathological Results in Differentiating Solid Pancreatic Lesions at the Institute of Pancreatic Diseases, Semmelweis University

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DOI 10.1055/s-0046-1821644

Aims Pancreatic cancer stands 3rd in cancer-related death. Endoscopic ultrasound (EUS) plays a key role in characterizing and diagnosing solid pancreatic lesions. The literature suggests, with limited evidence, that ancillary EUS techniques like EUS-guided elastography, which assess tissue stiffness, potentially improve the differentiation of malignant lesions. In this single-center retrospective study, we analyzed the performance of EUS-guided elastography in characterizing solid pancreatic lesions compared with histopathological results.

Methods Our team conducted a retrospective analysis of 508 consecutive patients who underwent Endoscopic Ultrasound (EUS) at the Institute of Pancreatic Diseases, Semmelweis University, between January and October 2025. We included 108 patients with suspected solid pancreatic tumors and divided them into two groups. The first group (54 patients) had elastography and histopathological results. The second group (54 patients) had histopathological results but no elastography. Demographic parameters, endoscopic data (elastography, ROSE, MOSE) were collected for both groups. Statistical analysis was performed using Microsoft Office Excel and GraphPad (Prism10) software.

Results In the elastography group (EG), the median age was 70 years (95% CI: 66–74), compared to 68 years (95% CI: 61–71) in the non-elastography group (NEG), with similar mean ages between groups (69.09 vs. 65.07 years; 95% CI for the mean: 66.03–72.16 vs. 62.12–68.03). Regarding sex distribution, 38.89% of patients in the EG were male and 61.11% female, whereas in the NEG, males comprised 62.96% and females 37.04% (P=0.01; OR=0.37; 95% CI 0.17–0.80). Pancreatic adenocarcinoma was the most frequent diagnosis in both groups, 57.4% in the EG and 66.7% in NEG (P>0.05). Median tumor size was 675 mm² (median dimensions: 27x25mm) in the EG and 900 mm² (median dimensions: 30x29mm) in NEG (P=0.1417). Tumors most frequently involved the pancreatic head in both groups (EG: 54.74%; NEG: 50.00%) (P=0.1448). The use of MOSE and ROSE showed high prevalence in both groups. MOSE was applied in 96.36% of patients in the EG group and in 94.44% of patients in the NEG group. ROSE was utilized in 77.78% of cases in the EG group and in 72.22% of cases in the NEG group.

Among the 54 patients who underwent elastography (EG), 43 (79.62%) exhibited blue colour, while 11 (20.37%) demonstrated mixed colour. In blue-EG cohort, 34 (79.07%) had malignant lesions and 9 (20.93%) had benign lesions (P=0.69, OR=1.41, 95% CI 0.34–5.63). In mixed-EG cohort, 8 (72.73%) had malignant lesions and 3 (27.27%) had benign lesions (P=0.69, OR=1.41, 95% CI 0.34–5.63).

In EG, rebiopsy was required in 14 (25.93%) patients, 11 (78.57%) blue colour and 3 (21.42%) mixed colour (P>0.99, OR=0.91, 95% CI 0.19–3.65). Among the rebiopsy cases with blue colour, 5 (45.45%) were malignant and 6 (54.55%) were benign (P>0.99, OR=0.41, 95% CI 0.02–4.70), while among rebiopsy cases with mixed colour, 6 (75.00%) were malignant and 2 (25.00%) benign (P=0.25, OR=3.22, 95% CI 0.47–18.07).

In EG group, the sensitivity, specificity, positive predictive value, negative predictive value and likelihood ratio are 0.80 (0.66–0.90), 0.25 (0.08–0.53), 0.79 (0.64–0.88), 0.27 (0.09–0.56) and 1.07 respectively.

In the NEG, 46 (85.19%) had malignant lesions and 8 (14.81%) had benign lesions. Rebiopsy was necessary in 10 (18.52%) patients (95% CI 0.09–0.30). Among the rebiopsied patients, 7 (70.00%) cases were malignant and 3 (30.00%) cases were benign.

Rebiopsy data showed no statistically significant difference between EG (malignant lesions: 25.93 %) and NEG (malignant lesions: 18.52 %) groups.

Conclusions Our results suggest that elastography does not significantly improve overall sampling success or reduce the need for rebiopsy, which aligns with observations reported in the international literature regarding the use of elastography. However, because the study is a small, single-center retrospective analysis, a larger multicenter prospective randomized trials incorporating both quantitative and qualitative assessments are needed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP318V Pancreato-Cysto-Pleural Fistula in a case of Right sided Pancreatic Pleural effusion

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DOI 10.1055/s-0046-1821645

Abstract Text

A 43-year-old male patient who underwent laparoscopic cholecystectomy 3 weeks back, presented with massive right sided pleural effusion and gross ascites. Pleural fluid and ascitic fluid analysis was suggestive of pancreatic etiology. Conservative measures of treatment failed. Endosonography showed 3.6 cm communicating pseudocyst with immature wall. Leak from head region of pancreatic duct into pseudocyst was evident on pancreatogram. From the cyst cavity the dye was noted tracking up retroperitoneally on the right side, demonstrating the fistulous communication to right pleural cavity. Also, another leak from the cyst was noted inferiorly indicating the possible cause for ascites. Transpapillary drainage of the cyst was done by inserting a 7 French double pigtail stent. In the post-procedure period, patient improved symptomatically and on imaging.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0f453941-6e55-45e2-ae33-800c61fb93e0/Uploads/19978_Pancreato-cysto-pleural_fistula%202025.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP319 Flap & Win: western data on endoscopic resection of gastric subepithelial lesions

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DOI 10.1055/s-0046-1821646

Aims In Western countries, endoscopic resection (ER) of gastric subepithelial lesions (SELs) is emerging as an alternative to either surveillance for lesions <20 mm or surgical resection in cases with suspected malignant potential (such as GISTs >20 mm or type 1 neuroendocrine neoplasms >10 mm). Several endoscopic resection techniques have been proposed. This study reports a cohort of patients with gastric SELs who underwent endoscopic resection using a modified-STER (submucosal tunneling endoscopic resection) approach, defined as "FLAP technique"

Methods Data from consecutive patients with gastric SELs who underwent ER were collected. All patients underwent endoscopic ultrasonography (EUS) prior to the ER. Patients' characteristics, SELs features, and endoscopic procedure details were collected. The "FLAP technique" consists in creating a short submucosal access, less than 1 cm proximal to the lesion (closer than the originally tunnel described at 5 cm), followed by careful dissection of the lesion while preserving the capsule and the overlying mucosal flap. If the lesion is deeply adherent to muscularis propria (MP), a transmural resection is performed, resulting in a controlled and intentional perforation of the MP and serosa. After removal and retrieval of the specimen, hemostatic gel is applied and the defect is completely closed with clips using the mucosal flap. Technical success was considered as complete endoscopic resection and retrieval of the specimen; clinical success as an en-bloc and R0 resection. Intraprocedural, short term and long-term adverse events (AEs) and complication have been registered.

Results A total of 6 patients (50 % male, mean age 60 yr) with 6 SELs were included. Median SELs size was 16.5 mm (IQR), 50 % located in the antrum and 50 % located in gastric body. In 83 % cases MP involvement was described at EUS. Technical success was achieved in 5/6 patients. The technical unsuccessful procedure, a 30 mm SELs of the greater curvature of the gastric body with a predominant extraluminal extension, was suspended due to the impossibility to endoscopic retrieve the lesion, with a high risk of lesion migration into the peritoneum.; the patient underwent laparoscopic wedge resection. Clinical success (en bloc and R0) was achieved in 5/5 patients with preservation of the capsule in 100 % of the cases. To achieve complete tumor removal a transmural resection was required in 60 % of cases. Total closure of the defect using the mucosal flap and clips was achieved in 100 % of the patients. Histopathology showed a low-risk GIST and benign lesions in other cases. Median total procedure time was 100 minutes. No AEs occurred during or after the procedure.

Conclusions In selected cases, endoscopic resection of SELs is feasible, efficient and safe, also in a Western setting. In our experience preserving the mucosal flap is useful to allow easy and complete endoscopic closure. Creation of a shorter submucosal access did not compromise the integrity of mucosal flap. More data or comparative studies are needed to assess endoscopic resectability and retrieval criteria and optimal removal techniques for SELs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP320 Trends and variation in colonoscopy sedation: insights based on the Dutch Gastrointestinal Endoscopy Audit

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DOI 10.1055/s-0046-1821647

Aims Sedative medication is commonly used to improve patient comfort and tolerability during colonoscopy. Standards for colonoscopy sedation are known to vary across countries, while different types of sedation are also associated with differences in clinical outcomes, as well as different economic and environmental burdens. In the Netherlands, insights into sedation practices across endoscopy units were lacking. This study aimed to evaluate national trends in colonoscopy sedation, inter-unit variability in sedation practices, and associations between type of sedation and various colonoscopy performance measures in the Dutch population.

Methods All colonoscopies recorded in the Dutch Gastrointestinal Endoscopy Audit (DGEA) registry between January 1, 2020, and January 1, 2025, were eligible for inclusion. Sedation was classified as none, mild sedation (midazolam and/or opioids), or deep sedation (propofol). Trends and variability in colonoscopy sedation were analyzed across predefined indication categories: positive fecal immunochemical test for the colorectal cancer (CRC) screening program; post-polypectomy or CRC surveillance; familial CRC risk; inflammatory bowel disease (IBD); IBD surveillance; therapeutic procedures; and symptoms/other indications. The association between sedation type (none, mild, deep) and midazolam dosage (<2.5 mg, 2.6-5 mg, >5 mg) with the incidence of successful cecal intubation and polyp detection was assessed using generalized estimating equation Poisson regression.

► **Table 1** Percentual differences in incidence rate (95 % confidence interval) of successful cecal intubation and polyp detection for different types of sedation

	No sedation	Mild sedation, midazolam < 2.5 mg	Mild sedation, midazolam 2.6-5 mg	Mild sedation, midazolam > 5 mg	Deep sedation
Successful cecal intubation	-2.5 % (-3.5 to -1.5 %)	Reference	+ 0.6 % (+ 0.4 to + 0.8 %)	-0.2 % (-0.7 to + 0.3 %)	-0.9 % (-1.4 to 0.5 %)
Polyp detection	+ 1.1 % (-5.8 to + 8.4)	Reference	+ 1.7 % (+ 0.4 to + 3.0 %)	+ 2.2 % (-1.5 to + 6.0 %)	+ 4.9 % (+ 1.1 to 8.9 %)

Results A total of 260,316 colonoscopies were included. Mild sedation was used in the majority of colonoscopies (ranging from 88.9 % to 92.6 % over the years). Meanwhile, the use of deep sedation increased progressively from 5.8 % in 2020 to 10.0 % in 2024. The most notable increase in deep sedation was observed for IBD colonoscopies (11.6 % to 23.2 %; annual change 2.7 % [95 % CI 2.0-3.3]) and therapeutic colonoscopies (28.2 % to 51.7 %; annual change 5.3 % [95 % CI 4.3-6.3]). For procedures with mild sedation, the mean midazolam dosage varied by indication category, with the lowest dosage for colonoscopies for post-polypectomy or CRC surveillance (3.44 ± 1.29 mg) and the highest for IBD colonoscopies (4.26 ± 1.55 mg). Significant inter-unit variability in the overall mean midazolam dosage was observed (range: 2.13 ± 1.17 to 5.62 ± 1.70 mg), indicating considerable differences in midazolam dosing regimens across units. Compared to mild sedation with < 2.5 mg midazolam (reference), a dosage of 2.6-5 mg was associated with a slightly higher incidence of successful cecal intubation (+ 0.6 % [95 % CI 0.4-0.8 %]) and polyp detection (+ 1.7 % [95 % CI 0.4-3.0 %]). Midazolam dosages > 5 mg and propofol sedation did not improve cecal intubation, although they were associated with higher polyp detection rates (► **Table 1**).

Conclusions In the Netherlands, the use of deep sedation for colonoscopy is rising. Besides, sedation practices were illustrated to vary considerable across units, particularly in terms of midazolam dosing regimens. While a midazolam dosage of 2.6-5 mg was associated with slight improvements in cecal intubation and polyp detection compared to dosages < 2.5 mg, the gain for daily practice seems very small. Therefore, the benefits of routinely administering doses > 2.5 mg should be carefully weighed considering the associated greater risks, costs and environmental burdens of higher dosing. The findings of this study can be used to inform the development of guidelines for more standardized colonoscopy sedation.

Conflicts of Interest E. Dekker has received a research grant from Fujifilm, honoraria for consultancy from Olympus, Fujifilm, Ambu, InterVenn, Norgine, and Exact Sciences, and speaker fees from Olympus, GI Supply, Norgine, IPSEN/Mayoly, FujiFilm, and Steris. P. Fockens has received consulting fees from Olympus and Cook Endoscopy. The other authors declare that they have no conflict of interest.

eP321 “Predicting precancerous gastric lesions using *Helicobacter pylori* infection and serum pepsinogen levels

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DOI 10.1055/s-0046-1821648

Aims

To perform upper gastrointestinal endoscopy on the study participants and determine *Helicobacter pylori* infection and serum pepsinogen I and II levels.

To establish cutoff values for serum markers of precancerous gastric lesions.

To classify all cases into gastric cancer risk groups according to the serum marker-based ABCD classification.

Methods This study was conducted using a hospital-based cross-sectional study design. Among individuals aged 32 years and older, upper gastrointestinal endoscopy was performed, stool antigen testing was used to detect *H. pylori* infection, and serum pepsinogen I, pepsinogen II, and anti-*H. pylori* antibodies were measured

Results A total of 94 participants were included in the study, with a male-to-female ratio of 1:1. The cutoff value for pepsinogen I indicating precancerous gastric lesions was $PG\ I \leq 33$ ng/mL, with a sensitivity of 80 %, specificity of 64.1 %, and a p-value of 0.005. The cutoff value for detecting *H. pylori* infection was an *H. pylori* antibody level ≤ 7.85 U/mL, with a sensitivity of 75.4 %, specificity of 72 %, and a p-value < 0.005. Based on serological markers, 25.5 % (n = 23) of cases were classified as group A, 38.6 % (n = 36) as group B, 34 % (n = 32) as group C, and 3.2 % (n = 3) as group D [1–8].

Conclusions According to the ABCD classification, 25.5 % of the individuals in the study (Group A) require repeat endoscopy and gastric cancer screening after 5 years, 38.6 % (Group B) after 3 years, and 37.2 % (Groups C and D) after 1 year. Establishing the serological marker-based ABCD classification helps prioritize gastric cancer risk groups in endoscopic screening practice. By reducing unnecessary repeated endoscopies and ensuring that high-risk individuals undergo closer endoscopic surveillance, this approach contributes significantly to improving the early detection of gastric cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yoshida T, Kato J, Inoue I, Yoshimura N, Deguchi H, Mukoubayashi C et al. Cancer development based on chronic active gastritis and resulting gastric atrophy as assessed by serum levels of pepsinogen and *Helicobacter pylori* antibody titer. *International journal of cancer* 2014; 134 (6): 1445–57 PMID: 24009139
- [2] Kim YJ, Chung WC. Is serum pepsinogen testing necessary in population-based screening for gastric cancer? *The Korean journal of internal medicine* 2020; 35 (3): 544–6. Epub 2020/05/12 PMID: 32392661 PubMed Central PMID: PMC7214357
- [3] Kim YJ, Chung WC. Is serum pepsinogen testing necessary in population-based screening for gastric cancer? *The Korean journal of internal medicine* 2020; 35 (3): 544–6. Epub 2020/05/12 PMID: 32392661 PubMed Central PMID: PMC7214357
- [4] Chapelle N, Petryszyn P, Blin J, Leroy M, Le Berre-Scoul C, Jirka I et al. A panel of stomach-specific biomarkers (GastroPanel(R)) for the diagnosis of atrophic gastritis: A prospective, multicenter study in a low gastric cancer incidence area. *Helicobacter*. 2020; 25 (5): e12727 PMID: 32700438
- [5] Mattar R, Marques SB, Ribeiro IB, Visconti TAC, Funari M, DE Moura EGH. Diagnostic Accuracy of Gastropanel(R) for Atrophic Gastritis in Brazilian Subjects and the Effect of Proton Pump Inhibitors. *Arquivos de gastroenterologia* 2020; 57 (2): 154–60 PMID: 32609157
- [6] Tu H, Sun L, Dong X, Gong Y, Xu Q, Jing J et al. A Serological Biopsy Using Five Stomach-Specific Circulating Biomarkers for Gastric Cancer Risk Assess-

ment: A Multi-Phase Study. The American journal of gastroenterology 2017; 112 (5): 704–15 PMID: 28323271
[7] Correa P, Piazuelo MB. The gastric precancerous cascade. Journal of digestive diseases. 2012; 13 (1): 2–9 PMID: 22188910 PubMed Central PMID: PMC3404600
[8] Correa P, Piazuelo MB. The gastric precancerous cascade. Journal of digestive diseases. 2012; 13 (1): 2–9 PMID: 22188910 PubMed Central PMID: PMC3404600

eP322 Impact of non-anesthesiologist administration of propofol on colonoscopy performance measures: a systematic review and pooled results analysis

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DOI 10.1055/s-0046-1821649

Aims The impact of non-anesthesiologist-administered propofol (NAAP) sedation on colonoscopy performance remains elusive. We aimed to assess the impact of NAAP on colonoscopy quality metrics published in recent literature.

Methods A systematic review across MEDLINE and Cochrane Central Register for all types of trials was performed, evaluating the impact of NAAP compared to AP sedation on colonoscopy quality measures. The primary endpoint was Adenoma Detection Rate (ADR), while cecal intubation rate (CIR) and procedure length comprised the secondary endpoints. The effect size on study outcomes is presented either as the event rate or as the Risk Ratio (RR) with 95 % confidence interval (CI). We assessed the quality of evidence using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Two RCTs and nine cohort studies with 3769 patients (NAAP 1959, AP 1810), published between 2019 and 2024, were included. NAAP resulted in similar ADR compared to AP [RR 1.06, 95 % CI (0.94-1.19); I² = 0 %]. Similarly, no difference in terms of CIR [RR 1.01, 95 % CI (0.98-1.04), I² = 10 %] as well as procedure length [MD -0.94, 95 % CI (-2.79-0.91), I² = 74 %] was evident. Overall, the certainty of evidence was very low.

Conclusions The ADR and CIR colonoscopy quality indicators are comparable between NAAP and AP sedation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP323 Five-day waste audit in a tertiary endoscopy department: quantifying waste streams and carbon footprint

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DOI 10.1055/s-0046-1821650

Aims Endoscopy units are the third largest emitters of carbon dioxide (CO₂) within hospitals. A substantial part of these emissions results from waste. Improving waste segregation and reducing waste in endoscopy units requires detailed insights into current waste streams. We aimed to quantify waste generation in an academic endoscopy department and to estimate the associated carbon footprint (► Table 1).

Methods We performed a five-day waste audit of the pre-, post- and procedure phases of an eight-room gastrointestinal endoscopy department. Waste from the reprocessing area was excluded. All waste streams were collected twice daily and subsequently weighed and categorized into preidentified waste streams. The total mass (kg) per waste stream and per procedure was calculated. Procedure numbers during the study period were recorded, and waste-related carbon emissions (carbon dioxide equivalents (CO₂e)) were estimated using national carbon emissions factors.

Results Over the five-day period, 243 endoscopic procedures were performed: 64 colonoscopies, 107 esophagogastroduodenoscopies, 13 endoscopic retrograde cholangiopancreatographies, 31 endosonographies, and one video capsule endoscopy. In addition, 27 procedures were pulmonary endoscopies. Given that gastrointestinal endoscopy constituted nearly 90 % of activity during the audit, these findings mainly reflect waste patterns in gastrointestinal endoscopy workflows. On average, 49 procedures were performed per day (range 44-54). A total of 317.6 kg of waste was generated. Most waste consisted of general waste (184.9 kg, 58 %), followed by hazardous waste including sharps (78.6 kg, 27 %), and recycled materials (47.5 kg, 15 %). Each procedure generated approximately 1.3 kg of waste. Waste-related carbon emissions amounted to 1,465 kg CO₂e over the 5-day period, corresponding to 6 kg CO₂e per procedure and an estimated 58,820 kg CO₂e annually of endoscopy waste in this center, which is equivalent to driving a conventional car for 266,000 km, or six times around the earth.

Conclusions This is the first 5-day comprehensive waste audit of pre-, post- and procedure phases in an endoscopy department in a Dutch academic hospital, providing a baseline for targeted sustainability interventions. It highlights substantial opportunities for waste reduction and segregation, improved recycling, and can guide environmental improvement efforts in endoscopy units.

► Table 1

Waste stream	Total waste in kg (%)	Waste per day, kg	Waste per procedure, kg	Total CO ₂ e, kg
General hospital waste	184.90 (58)	36.98	0.75	893.8
Hazardous waste	78.59 (25)	15.72	0.31	442.9
Sharps	6.64 (2)	1.33	0.03	28.9
Recycled paper	24.83 (8)	4.97	0.10	23.2
Recycled plastic	22.63 (7)	5.86	0.12	76.1
Total	317.59 (100)	63.52	1.31	1464.9

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP324 Outcomes of Endoscopic Balloon Dilatation in Benign Luminal Obstruction

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DOI 10.1055/s-0046-1821651

Aims Benign luminal obstruction of the gastrointestinal tract and airway arises from multiple causes, including peptic ulcer disease, caustic injury, postoperative strictures, inflammatory disorders, and tuberculosis-related airway stenosis [1–3]. Endoscopic balloon dilatation (EBD) is a minimally invasive, organ-preserving treatment with reported success rates of 81–100% for benign gastrointestinal strictures [12] and 65–89% for benign airway stenosis, avoiding surgery in ~65% of pediatric cases [13]. However, long-term EBD outcomes have not been reported in Mongolia, where gastric cancer (~20.3/100,000) [8], esophageal cancer (~18.5/100,000) [10], and *Helicobacter pylori* prevalence (~80%) [9] remain high. This study evaluates EBD technical and clinical success, refractory stricture rates, balloon-diameter progression, and safety (► Table 1).

► Table 1 Balloon Dilation Parameters and Outcomes

Parameter	Value
Median initial diameter	20 mm (IQR 18–20)
Median final diameter	20 mm (IQR 19.5–20)
Increase across sessions	Median 2 mm; mean 1.35 mm
Incremental dilation	2–3 mm steps [4,6,12]
Procedural success	100% (51/51)
Clinical success	100% (51/51)

Methods A retrospective review was conducted on patients who underwent EBD for benign gastrointestinal or airway/anastomotic strictures from January 2022 to December 2025. Data collected included demographics, etiology, stricture location, balloon diameters (first and last), number of sessions, interval between dilations, and adjunctive therapy use [4]. Procedural success was defined as successful passage of the endoscope after dilation [5]. Clinical success was defined as symptom resolution lasting > 1 month with easy passage of a standard gastroscope [1]. Refractory strictures were defined as failure to achieve procedural success after five sessions [3].

Results Fifty-one patients were included (mean age 55.6 years; 51% male). Etiologies were peptic/ulcer-related disease (n = 13), postoperative strictures (n = 12), iatrogenic injury (n = 10), radiation injury (n = 3), and other benign causes such as TB-related airway/anastomotic stenosis (n = 13). Stricture locations included the esophagus (n = 15), gastric outlet (n = 8), duodenum (n = 2), and anastomotic or airway-related sites (n = 26). Procedural and clinical success were achieved in all patients (100%) [6, 7, 11].

Seven patients (13.7%) had refractory strictures, but all responded after adjunctive therapy. One perforation occurred (1.96%). The median initial and final balloon diameters were 20 mm (IQR 18–20) and 20 mm (IQR 19.5–20), respectively. Median diameter gain was 2 mm (mean 1.35 mm), with most patients undergoing conservative 2–3 mm incremental dilations consistent with safety-based protocols [4, 12, 13].

Conclusions EBD is a safe and highly effective treatment for benign luminal obstruction of both gastrointestinal and airway structures, achieving excellent technical and clinical success. Gradual balloon expansion using 1–3 mm increments was well tolerated and aligned with internationally recognized safety protocols. Although refractory strictures occurred in a minority of cases, most responded to adjunctive modalities such as repeated dilation, steroid injection, incisional therapy, or temporary stenting. Further investigation is needed to determine optimal management strategies and to compare the effectiveness of each adjunctive modality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kochhar R, Kochhar S. Endoscopic balloon dilatation in benign gastrointestinal strictures. *Gastrointest Endosc*.
- [2] Reddy DN et al. Caustic injuries of the upper gastrointestinal tract: management and long-term outcomes. *Clin Gastroenterol Hepatol*.
- [3] Ramage JJ et al. Refractory benign gastrointestinal strictures: definitions, management, and outcomes. *Am J Gastroenterol*.
- [4] Kochhar R et al. Endoscopic balloon dilation for benign GI strictures.
- [5] Spaander MCW et al. ESGE Guideline: benign GI strictures—diagnosis and management. *Endoscopy*.
- [6] Kochman ML, McClave SA, Boyce HW. The refractory and recurrent esophageal stricture: a comprehensive review. *Am J Gastroenterol*.
- [7] Kochhar R et al. Benign esophageal strictures: response to dilation therapy. *J Clin Gastroenterol*.
- [8] Lonjid T et al. Incidence of stomach and esophageal cancers in Mongolia. *PMC*. 2020;
- [9] Khasag O et al. Prevalence of *Helicobacter pylori* infection in Mongolia. *PMC*. 2018;
- [10] GCO / IARC. Mongolia Fact Sheet 2020 – Stomach & Esophageal Cancer ASR
- [11] Sharma P, Kozarek R. Role of endoscopy in benign GI strictures. *Gastrointest Endosc Clin N Am*.
- [12] Boregowda U, Umapathy C, Halim N et al. Endoscopic management of benign recalcitrant esophageal strictures. *Ann Gastroenterol*. 2021;
- [13] Kochman ML, McClave SA, Boyce HW. The refractory esophageal stricture: pathogenesis and treatment. *Am J Gastroenterol*. 2005;

eP325 Endoscopic characteristics of Metastatic Colorectal Lesions: A 38-case institutional Analysis

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DOI 10.1055/s-0046-1821652

Aims Primary colorectal cancer has been extensively studied due to the large number of cases, allowing for substantial insights into its clinical characteristics and treatment strategies. In contrast, metastatic colorectal cancer remains poorly understood because of its rarity and limited number of reports. With recent advancements in chemotherapy, accurately diagnosing metastatic lesions has become increasingly important and has significant implications for treatment planning. Here, we report the characteristics of 38 cases of metastatic colorectal lesions encountered at our institution.

Methods We reviewed 38 patients who underwent colonoscopy at our institution between January 1, 2015, and October 31, 2025, and were diagnosed by biopsy pathology as having colorectal cancer originating from other organs. We analyzed the mode of invasion or metastasis, age and sex at diagnosis, indications for colonoscopy, cecal intubation status, lesion location, number of lesions, and endoscopic findings. Cases involving direct invasion from adjacent advanced tumors were classified as direct invasion, while those involving non-adjacent tumors were defined as distant metastasis.

Results The cohort consisted of 17 men and 21 women, with a mean age of 69.2 years. Indications for colonoscopy included screening in 15 cases, abnormal CT findings in 12 cases, bowel obstruction in 6 cases, and other reasons in 4 cases. Of the 38 cases, 17 were classified as direct invasion and 21 as distant metastasis. The cecal intubation rate was lower in the direct invasion group (9/17, 53%) than in the distant metastasis group (16/21, 76%). The most common primary tumor was of gynecological origin (15 cases), followed by gastric cancer (9 cases). Among gynecological cancers, 9 of 15 cases (60%) were direct invasion, whereas gastric cancer more commonly presented as distant metastasis (7 of 9 cases, 78%). Endoscopic findings in the direct invasion group mainly consisted of non-epithelial strictures or submucosal tumor-like protrusions. In contrast, the distant metastasis group displayed a wide variety of findings, including strictures, elevated lesions, flat lesions, and ulcers.

Conclusions In cases of direct invasion, endoscopic findings predominantly consisted of strictures or SMT-like protrusions, and the cecal intubation rate was low. In contrast, distant metastasis demonstrated more diverse endoscopic appearances, ranging from protruding lesions to flat elevated lesions, and some cases were difficult to detect even on CT. When atypical endoscopic findings are observed in the colon of patients with another primary malignancy, we should consider the possibility of metastatic colorectal lesions.

Conflicts of Interest The authors declare no conflicts of interest.

eP326 Bipolar Fragmentation Forceps as a Last Resort Tool: An Innovative Strategy for Dismantling Entrapped Metal Instruments in the Distal CBD

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DOI 10.1055/s-0046-1821653

Problem to solve A young patient was scheduled for the removal of a covered metallic stent (cSEMS) from the Common Bile Duct (CBD), which had been placed nine months earlier. The first removal attempt failed due to significant stent ingrowth. During the second attempt, a critical error occurred: the special grasping forceps got stuck, and its internal wire core broke off, leaving the

closed forceps tip trapped inside the stent mesh. When we tried to free the trapped forceps with a Dormia basket, the basket also got stuck. This created a complex, multi-layered metal blockage deep in the CBD, a situation that usually means immediate surgery is necessary.

Innovation To solve this unusual and severe problem without surgery, we used a non-standard method. We decided to use bipolar fragmentation forceps, which are usually designed to cut other large metal structures. The technique involved using the bipolar current to cut the metal parts of the stuck instruments (the forceps shaft and the basket wires). The goal was to dismantle these instruments in the distal CBD, showing an innovative and highly unusual way to use this specialized tool for a major mechanical failure.

Results The bipolar cutting technique worked technically: we successfully cut the metallic parts. The core of the broken forceps and all the stuck Dormia basket wires were cut near the main bile duct opening (papilla of Vater). However, the smaller, cut metal fragments of both instruments remained firmly trapped inside the deeply ingrown stent mesh. Following these complications and the partial endoscopic result, we decided to stop the procedure and plan for a definite surgical repair later.

Conclusions Our case shows that specialized bipolar fragmentation forceps have high potential for dealing with very unusual and difficult complications, like having metal instruments stuck in a critical area. This highlights that successful advanced endoscopy sometimes requires creative, "out-of-the-box" thinking and using existing tools in new ways. The remaining metal fragments show the limit of this technique, especially when the main problem is a deeply ingrown stent. We believe that adding a scope for direct viewing inside the bile duct (cholangioscopy) could significantly help manage such deeply ingrown stents in the future.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP327V LAMS dislodgement during EDGE: not all about anchoring

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DOI 10.1055/s-0046-1821654

Abstract Text

We present a case of a 36-year-old woman post gastric bypass who underwent EDGE for suspected CBD stones. After LAMS placement, the tract was left to mature for four weeks. During the subsequent ERCP, a perpendicular axis of the endoscope to the axis of a distally placed LAMS was encountered. Further attempts at scope advancement, despite severe friction, resulted in LAMS dislodgement. The absence of wire introduction made endoscopic salvage impossible. Intraoperative ERCP during emergency surgery ultimately revealed no stones. This case highlights the importance of factors other than LAMS anchoring in preventing stent dislodgement.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/79c1c016-ecc2-4adc-90e7-6aa01e6583a9/Uploads/19978_Edge_video-%20esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP328 Optimal recording time to avoid incomplete wireless video capsule endoscopy of the small bowel

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DOI 10.1055/s-0046-1821655

Aims Assessment of optimal recording time to reduce incomplete wireless capsule endoscopy (WCE) due to functional gastrointestinal (GI) motility disorders.

Methods Single-centre retrospective study of consecutive WCE examinations using different types of capsules: EndoCapsule S10, Pillcam SB3, OMOM and

ANKON. Daytime (between 9h00 and 16h00) and overnight recordings were performed. All WCE were read in the conventional modus with a reading speed between 5 and 10 images/sec without the use of artificial intelligence.

Results A total of 210 consecutive WCE examinations were analysed in 117 male ($69 \pm 1y$) and 93 female ($65 \pm 2y$) patients (age range 14-92y). Suspected small bowel bleeding was the leading indication (97%), except for $n = 7$ patients. Bleeding presented as iron deficiency anaemia (66%), melena (26%) or unexplained rectal bleeding (8%) after normal upper and lower GI endoscopy. In 17% of all WCE active GI bleeding was diagnosed and in 41% potentially bleeding lesions like arteriovenous malformations, blue rubber bleb naevi, erosions or polypoid and tumoral lesions. In 29% the (potentially) bleeding lesions were located in the upper GI tract and in 6% in the lower GI tract within the reach of conventional endoscopy. In 34% WCE turned out to be normal. 37% of patients were referred for device-assisted enteroscopy based on the WCE findings. A total of 28 WCE (13%) were incomplete with the capsule not reaching the colon, with 7 because of technical failure ($n = 2$) or mechanical stricture ($n = 5$). The remaining 21 incomplete WCE were due to short recording time relative to the transit time (23% incomplete WCE when $< 10h$ recording time vs 3% incomplete WCE when $< 15h$ vs 1% incomplete WCE when $> 15h$; $p = 0.0012$ Chi-square).

Conclusions WCE is an important first-line examination for suspected small bowel bleeding, with 17% of active bleeding recorded and an additional 41% of potentially bleeding lesions. However, those lesions are often found in the upper (29%) and in the lower (6%) GI tract despite prior normal upper and lower GI endoscopy. To avoid incomplete WCE due to slow GI transit a recording time of at least 15h seems mandatory.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP329 Clinicopathological Features, Endoscopic diagnosis and Treatment strategies for gastric epithelial neoplasm of fundic-gland mucosa lineage: A multicenter, retrospective, observational study in China

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DOI 10.1055/s-0046-1821656

Aims Gastric epithelial neoplasm of fundic-gland mucosa lineage (GEN-FGML) is a rare pathological type of gastric cancer, first reported by Tsukamoto et al. in 2007 [1]. Based on cellular differentiation and submucosal invasion, GEN-FGML can be classified into oxyntic gland adenoma (OGA), gastric adenocarcinoma of fundic-gland type (GA-FG), and gastric adenocarcinoma of fundic-gland mucosa type (GA-FGM) [2]. Prior research primarily consists of small-scale case reports from Japan [3, 4]. Data on the incidence, detection rate, treatment strategies, and clinical prognosis of GEN-FGML in other countries remain scarce, so we conducted the first comprehensive, large-scale study on GEN-FGML in China. This study retrospectively collected data on GEN-FGML from multiple Chinese hospitals, aiming to compare the clinicopathological features, endoscopic characteristics, treatment strategies, and prognoses of different GEN-FGML subtypes.

Methods This retrospective study collected data from nine medical centers in China between 2018 and 2025. A total of 351 patients with GEN-FGML were enrolled. The clinicopathological features, endoscopic characteristics, treatment modalities, and prognoses of different GEN-FGML types were analyzed and compared (► **Table 1**).

Results A total of 351 GEN-FGML patients were included, including 225 OGA, 116 GA-FG, and 6 GA-FGM. These three types of lesions showed some similar characteristics: most lesions were located in the gastric fundus/cardia, with II-a as the predominant macroscopic type and most patients had no *H. pylori* infection. Endoscopic Submucosal Dissection (ESD) was the primary treatment. All patients were followed up for an average of 17.3 months, during which no tumor recurrence or metastasis was observed, and all patients survived. Some patients underwent indigo carmine chromoendoscopy, which revealed a granular appearance of the surface mucosa in 3 OGA patients (11.5%), 7 GA-FG patients (30.4%), and 2 GA-FGM patients (100%), showing a statistically significant difference between groups ($p = 0.010$). Among the GA-FG and GA-FGM groups, some patients underwent Magnifying Narrow-Band Imaging (M-NBI) endoscopy. Irregular microvascular pattern (IMVP) was positive in 18 GA-FG patients (20.2%) and 3 GA-FGM patients (50.0%) ($p = 0.097$), suggesting a potential trend towards difference.

Conclusions This is the largest clinical investigation of GEN-FGML conducted globally to date. The combination of indigo carmine chromoendoscopy and magnifying narrow-band imaging endoscopy may be effective in differentiating

► **Table 1** Clinical and endoscopic features of different GEN-FGML types

	OGA(n=225)	GA-FG(n=116)	GA-FGM(n=6)	p value
Mean Age (years)	58.3	61.1	59.8	
Treatment (Biopsy Forceps Resection : Snare Polypectomy : ESD : EMR : Surgery)	67:0:96:24:0	4:2:85:10:4	0:0:6:0:0	
Mean Follow-up Time (months)	20.6	13.5	7.7	
Chromoendoscopy				
Mucosal granular change	3(11.5%)	7(30.4%)	2(100%)	0.010
ME-NBI/BLI				
IMVP(+)	39(27.7%)	18(20.2%)	3(50.0%)	0.171
IMSP(+)	61(43.3%)	40(44.9%)	3(50.0%)	0.927
Enlargement of CO	118(83.7%)	82(92.1%)	4(66.7%)	0.067
Prognosis	All survived			

between the three types of GEN-FGML. ESD is an appropriate treatment for patients with GEN-FGML.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Matsumoto K, Ueyama H, Yao T, Iwano T, Yamamoto M, Utsunomiya H, Uchida R, Abe D, Oki S, Suzuki N, Ikeda A, Yatagai N, Akazawa Y, Takeda T, Ueda K, Asaoka D, Hojo M, Nagahara A. Endoscopic Features of Gastric Epithelial Neoplasm of Fundic Gland Mucosa Lineage. *Diagnostics* (Basel) 2022; 12 (11): 2666

[2] Ueyama H, Yao T, Akazawa Y et al. Gastric epithelial neoplasm of fundic-gland mucosa lineage: proposal for a new classification in association with gastric adenocarcinoma of fundic-gland type. *J Gastroenterol* 2021; 56 (9): 814–828

[3] Tsukamoto T, Yokoi T, Maruta S et al. Gastric adenocarcinoma with chief cell differentiation. *Pathol Int* 2007; 57: 517–522

[4] Imamura K, Yao K, Nimura S, Tanabe H et al. Characteristic endoscopic findings of gastric adenocarcinoma of fundic-gland mucosa type. *Gastric Cancer* 2021; 24 (6): 1307–1319

ePosters 05

eP330 Peroral Endoscopic Myotomy for Achalasia: Evidence of Efficacy and Safety Based on a Retrospective Analysis in a Private Clinical Setting

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Aims Achalasia cardia is an idiopathic neurodegenerative disorder of the esophagus characterized by impaired relaxation of the lower esophageal sphincter and loss of normal peristalsis. Although rare (2.92 per 100,000 adults and 0.11 per 100,000 children), achalasia has a significant clinical and social burden. Progressive dysphagia, regurgitation, chest pain, and weight loss substantially reduce patients' quality of life and lead to nutritional deficiencies, while the risk of esophageal carcinoma remains elevated. Conservative therapy provides only limited and short-term relief. Peroral endoscopic myotomy (POEM) has emerged as a modern, minimally invasive treatment demonstrating high efficacy and safety. In Kazakhstan, POEM is primarily performed in national research centers; however, experience from private hospitals remains underreported, highlighting the relevance of this study.

Methods Diagnosis of achalasia was established buy barium x-ray esophagography, EGD and symptom assessment Eckardt score. The study included 19 patients (7 men and 12 women) with stages I–III achalasia. The mean age was 43.5 years (range: 23–59), and the mean body mass index (BMI) was 24.6 kg/m² (16.9–26.4). Hospitalization lasted 4–7 days. The mean procedure time was 50 minutes (range: 45–120), with an average myotomy length of 6 cm (5–9 cm).

Results In a private clinic setting without government funding, POEM was successfully performed in all 19 patients. The preoperative mean Eckardt score was 7.85, reflecting marked dysphagia, regurgitation, chest pain, and weight loss. The average body weight before surgery was 58 kg (48–85 kg), with weight loss ranging from 2 to 30 kg. Following POEM, the mean Eckardt score decreased to 1.26. All patients reported significant symptom resolution, including improved swallowing, chest comfort, and normalization of sleep. No serious complications occurred. A complete regression of dysphagia, regurgitation, and chest pain was achieved in all cases, with only one patient experiencing recurrence within one year postoperatively.

Conclusions Our findings confirm that POEM can be safely and effectively performed not only in national or academic centers but also in private clinical settings, provided adequate endoscopic expertise and equipment are available.

The outcomes in this study are comparable to international data, underscoring that procedural success depends primarily on adherence to technical standards rather than institutional status. This experience demonstrates that private hospitals can play a pivotal role in expanding access to innovative, minimally invasive treatments for achalasia, ultimately improving healthcare quality and reducing disparities in care availability.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP331 Inpatient vs Outpatient Endoscopic Retrograde Cholangiopancreatography: Patient Characteristics and Outcomes in a Cohort Study

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Aims Endoscopic Retrograde Cholangiopancreatography (ERCP) is a key therapeutic procedure in gallstone disease. Outpatient ERCP may reduce inpatient pressures and costs, but patient selection is challenging due to post-procedure complications. No validated criteria currently guide suitability for outpatient ERCP. This study aimed to identify factors associated with inpatient versus outpatient ERCP and to determine patient characteristics predictive of post-ERCP complications [1–7].

Methods A retrospective cohort study included demographic variables, comorbidities, Clinical Frailty Scale (CFS), ASA classification, presenting diagnosis, and biochemical markers, including initial and peak bilirubin. Logistic regression assessed factors associated with inpatient ERCP; variables with $p < 0.10$ on univariate analysis were included in multivariate models. ERCP-related complications were recorded, and univariate and multivariate regression analyses identified predictors of complications. Predictive performance was evaluated using Receiver Operating Characteristic (ROC) curves and reported as area under the curve (AUC) (► **Table 1**).

► **Table 1** Logistic Regression Analysis for Factors Predicting Complications after ERCP. Variables with $p < 0.1$ in the initial univariate model were included in the multivariate regression analysis.

Multivariate regression analysis	P value	Estimate (95 % CI)
Age	<0.001	-0.143 to -0.034
CFS	<0.001	0.391 to 1.693
ASA	0.010	-2.755 to -0.329
Initial Bilirubin	<0.001	-0.100 to -0.0278
Gallstone Pancreatitis	0.125	-3.871 to 0.388
Inpatient ERCP	0.109	-3.297 to 0.2777

Results Over a one-year period, 112 patients met inclusion criteria, with 67% undergoing outpatient ERCP. On univariate analysis, elevated initial and peak bilirubin levels, ASA grade, and a diagnosis of ascending cholangitis were significantly associated with inpatient ERCP ($p < 0.05$). Following multivariate adjustment, none of these factors remained statistically significant (all $p > 0.05$), indicating the absence of independent predictors for the choice of inpatient versus outpatient ERCP. Post-ERCP complications were observed more frequently in the outpatient cohort. Multivariate analysis identified age, Clinical Frailty Scale, ASA grade, and initial bilirubin as independent predictors of complications. ROC analysis demonstrated limited discriminative performance,

with AUC ≤ 0.65 ; age and initial bilirubin had the highest predictive accuracy, though discrimination remained poor to fair (► **Table 2**).

► **Table 2** Area Under the Curve (AUC) for variables outlined from the results of multivariate regression analysis, with their confidence intervals (CI) and p value.

Predictor	AUC	95 % CI	P value
Age	0.64	0.509-0.779	0.048
ASA	0.63	0.488-0.765	0.083
CFS	0.56	0.419-0.705	0.396
Initial Bilirubin	0.65	0.519-0.782	0.039

Conclusions In conclusion, there were no specific patient characteristics which correlated with the setting of ERCPs (inpatient vs outpatient). Initial bilirubin level, age, ASA and frailty were predictors of post-ERCP complications. Complications occurred more frequently in our outpatient setting, suggesting that a guideline for patient selection could be useful in deciding who is safe for an outpatient ERCP. Further work on a larger scale is required to establish a set criteria for patients who are best suited to outpatient ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Freeman ML, Nelson DB, Sherman S, Haber GB, Herman ME, Dorsher PJ, Moore JP, Fennerty MB, Ryan ME, Shaw MJ, Lande JD, Pheley AM 2001; Risk factors for post-ERCP pancreatitis. *Gastrointest Endosc* 54: 425–434
- [2] Iqbal U, Khara HS, Hu Y, Khan Z, Ovalle A, Siddique O, Khanna S, Confer B, Krill T, Guttur P 2020; Timing of Performing Endoscopic Retrograde Cholangiopancreatography and Inpatient Mortality in Acute Cholangitis: A Systematic Review and Meta-Analysis. *Am J Gastroenterol* 115: 608–616
- [3] Freeman ML, Nelson DB, Sherman S, Haber GB, Herman ME, Dorsher PJ, Moore JP, Fennerty MB, Ryan ME, Shaw MJ, Lande JD, Pheley AM 2001; Risk factors for post-ERCP pancreatitis. *Gastrointest Endosc* 54: 425–434
- [4] Manes G, Paspatis G, Aabakken L, Anderloni A, Arvanitakis M, Ah-Soune P, Barthet M, Domagk D, Dumonceau JM, Gigot JF, Hritz I, Karamanolis G, Laghi A, Mariani A, Paraskeva K, Pohl J, Ponchon T, Swahn F, Ter Steege RWF, Tringali A, Vezakis A, Williams EJ, van Hooft JE 2019; Endoscopic management of common bile duct stones: European Society of Gastrointestinal. Endoscopy (ESGE) guideline. *Endoscopy* 51: 472–491
- [5] NHS England. Interventional procedures: ERCP statistics (annual hospital episode statistics)
- [6] NCEPOD Report (2004) Scoping our practice: The 2004 Report of the National Confidential Enquiry into Patient Outcome and Death. NCEPOD, London
- [7] Williams EJ, Green J, Beckingham I, Parks R, Martin D, Lombard M 2008; Guidelines on the management of common bile duct stones (CBDs). *Gut* 57: 1004–1021

eP332V Cholangioscope-assisted balloon dilation of sequential esophageal strictures in Crohn's disease: A minimally invasive innovative technique

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DOI 10.1055/s-0046-1821659

Problem to solve Upper gastrointestinal (GI) tract involvement in Crohn's disease is increasingly recognized due to improved endoscopic techniques [1]. However, data on managing esophageal strictures endoscopically is limited due to their rarity and the complexity of the disease, which often requires surgery [2]. Endoscopic balloon dilation (EBD) is the cornerstone for short fibrotic strictures management [3]. Nevertheless, many strictures cannot be

traversed with a conventional gastroscope, making interventions challenging. In these cases, ultra-slim endoscopes may offer a feasible, minimally invasive alternative [4].

Innovation We describe a case where a digital cholangioscope was used, enabling successful dilation of two non-passable (with conventional gastroscopes) esophageal strictures. A 32-year-old woman with Crohn's disease (Montreal A2/L3 + L4/B2), on 4-week intensified intravenous infliximab therapy, presented with progressive dysphagia. Upper GI Endoscopy revealed two short esophageal strictures at 21 cm and 30 cm from the incisors, both non-traversable with a standard gastroscope. A digital cholangioscope with adaptation for air insufflation was used to assess both strictures that looked fibrostenotic without inflammatory component. The cholangioscope easily traversed the proximal stricture, allowing guidewire placement through the distal, tighter stricture (estimated diameter: 3–4 mm). With gentle manipulation, the cholangioscope reached the stomach and guidewire was left in place. The cholangioscope was then withdrawn and reinserted alongside the guidewire. Finally, over-the-wire balloon dilation of the distal stricture was performed under direct endoscopic visualization, with biliary balloons at 4mm and 6mm, with superficial therapeutic mucosal tear at 5 o'clock.

Results Following that, the patient underwent two more EBD sessions, in steps, at 6–7–8mm and 8–9–10mm respectively, finally allowing the standard gastroscope to pass through. She experienced significant improvement of her symptoms, was able to resume oral intake, and did not encounter any post-procedural complications.

Conclusions This case illustrates an innovative and minimally invasive technique for managing tight and complex esophageal strictures in patients with Crohn's disease. The off-label use of a digital cholangioscope allowed for access and real-time visualization of previously non-passable strictures, enabling safe and delicate EBD without the need for obsolete and rough fluoroscopic guidance.

Video http://data.process.y-congress.com/ScientificProcess/Data/1106/660/1670/3824ed62-e4b7-4602-912b-625152f73487/Uploads/19990_cholangioscope-assisted_EBD_Neonaki.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Baron TH. Top tips for dilation of benign esophageal strictures. *Gastrointest Endosc* 2022; 95 (3): 562–564. doi:10.1016/j.gie.2021.11.012
- [2] Coppola G, Principessa C, Di Vincenzo F et al. Endoscopic Management of Strictures in Crohn's Disease: An Unsolved Case. *J Clin Med*. 2024; 13 (16): 4842. Published 2024 Aug 16. doi:10.3390/jcm13164842
- [3] Shen B, Kochhar G, Navaneethan U et al. Practical guidelines on endoscopic treatment for Crohn's disease strictures: a consensus statement from the Global Interventional Inflammatory Bowel Disease Group. *Lancet Gastroenterol Hepatol* 2020; 5 (4): 393–405. doi:10.1016/S2468-1253(19)30366-8
- [4] Kővári B, Pai RK. Upper Gastrointestinal Tract Involvement in Inflammatory Bowel Diseases: Histologic Clues and Pitfalls. *Adv Anat Pathol* 2022; 29 (1): 2–14. doi:10.1097/PAP.0000000000000311

eP333 Therapeutic Pancreatic Duct Stenting in Severe Post-ERCP Pancreatitis: Clinical Effectiveness and Institutional Experience

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DOI 10.1055/s-0046-1821660

Aims To evaluate the feasibility and clinical outcomes of early therapeutic PD stenting in patients with severe PEP.

Methods From 2020 to 2024, 879 retrograde interventions on the major papilla were performed. Severe PEP occurred in 14 patients, divided into:

- **Group 1 (n = 7):** conservative management;

▪ **Group 2 (n = 7):** attempted therapeutic PD stenting within 24 hours. Therapeutic stenting was successful in 5/7 patients. Straight plastic stents 5 Fr × 5 cm without flaps were used.

Results All successfully stented patients demonstrated:

- significant pain reduction within **48 hours**,
- normalization of laboratory parameters within **48–72 hours**,
- no development of peripancreatic fluid collections.

In the conservative group, fluid collections developed in 3/7 patients, requiring drainage. No mortality was observed in either group [1–7].

Conclusions Early therapeutic PD stenting appears feasible and clinically beneficial in selected patients with severe PEP, resulting in faster symptom resolution and fewer complications. These findings support the need for prospective controlled studies to clarify indications, timing, and the potential role of therapeutic PD stenting in the management of severe PEP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jin Z, Lee JK, Choi JH. Therapeutic pancreatic stenting in established PEP: a review. *Pancreatol*. 2022; 22: 230–238
- [2] Coté GA, Slivka A, Tarnasky P et al. Complications and migration rates of pancreatic duct stents. *Clin Gastroenterol Hepatol* 2021; 19: 1096–1103
- [3] Kondo S, Isayama H, Akahane M et al. Randomized trial comparing 3-Fr and 5-Fr pancreatic stents. *Dig Endosc* 2020; 32: 761–768
- [4] Choudhary A, Bechtold ML, Arif M et al. Pancreatic stenting for PEP prevention: systematic review and meta-analysis. *Endosc Int Open* 2022; 10: E125–E134
- [5] Chandrasekhara V, Khashab MA, Muthusamy VR et al. Adverse events associated with ERCP. *Gastrointest Endosc* 2017; 85 (1): 32–47
- [6] Elmunzer BJ, Scheiman JM, Lehman GA et al. A randomized trial of rectal indomethacin to prevent post-ERCP pancreatitis. *N Engl J Med* 2012; 366: 1414–1422
- [7] Dumonceau JM, Andriulli A, Elmunzer BJ et al. Prophylaxis of post-ERCP pancreatitis: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2020;

eP334 Efficacy of endoscopic full-thickness resection (eFTR) in colorectal lesions therapy: outcomes from a single tertiary center

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DOI 10.1055/s-0046-1821661

Aims This analysis aimed to evaluate the technical success, histological results, and safety profile of all eFTRs in the treatment of colorectal lesions in a tertiary referral center.

Methods We retrospectively analyzed all consecutive colorectal eFTR procedures conducted between 2018 and 2025 at a single tertiary endoscopy center (Military University Hospital Prague, Czech Republic), using the full-thickness resection device (FTRD; Ovesco Endoscopy, Tübingen, Germany). Patient demographics, lesion characteristics, procedural data, histopathology, and adverse events (AEs) were extracted from a prospectively maintained database. Technical success was defined as en-bloc removal of the target lesion using the FTRD system. R0 resection required histologically tumor-free lateral and deep margins. Curative resection of invasive cancer followed ESGE low-risk criteria (R0, absence of lymphovascular invasion, and limited submucosal infiltration). AEs were defined as complications requiring endoscopic or surgical treatment. Proportions are reported with 95% confidence intervals (CI) using the Wilson or Clopper–Pearson method.

Results A total of 88 eFTR procedures were performed in 86 patients, 41 men (48%), and 45 women (52%); age range 26–86 years. The median lesion size was 20 mm (range, 10–30 mm). Lesion location was right colon 37 (42%), left

colon 28 (32%), and rectum 23 (26%). Main indications were lesions suspicious for invasive cancer (36; 41%), non-lifting adenomas (21; 23.8%), recurrent adenomas (14; 16%), subepithelial tumors (5; 5.6%), scar after non-curative resection of T1sm1 cancer (9; 10.2%), and appendiceal lesions (3; 3.4%). En-bloc resection was achieved in 74/88 (84.1%; 95% CI, 75.0–90.3) and histological R0 in 71/88 (80.7%; 95% CI, 71.2–87.6). Invasive cancer was present in 34/88 (38.6%; 95% CI, 29.1–49.1). Among these cancers, R0 resection was achieved in 23/34 (67.6%; 95% CI, 50.8–80.9), with curative resection in 7/23 (30.4%; 95% CI, 15.6–50.9). AEs occurred in 11/88 (12.5%; 95% CI, 7.1–21.0): perforation (n = 4), acute appendicitis (n = 2), and bleeding (n = 5). Three patients (3.4%) with delayed perforation required surgery.

Conclusions In this single-center cohort, eFTR achieved high en-bloc and R0 resection rates with acceptable morbidity; most AEs were managed non-operatively. eFTR represents a valuable minimally invasive option for selected colorectal lesions, including non-lifting or recurrent adenomas and early cancer.

Funding: Supported by the Ministry of Health of the Czech Republic (NU22-08-00424) and Scientific projects MO1012 and Cooperatio

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP335 Comparative evaluation of AI systems for endoscopic detection of gastric precancerous conditions

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DOI 10.1055/s-0046-1821662

Aims Intestinal metaplasia (IM) is a gastric precancerous condition. Patients with advanced stages of IM are considered at higher risk for developing gastric cancer (GC), and endoscopic surveillance in this population has proven beneficial. The diagnosis of IM is histological; however, electronic chromoendoscopy enables targeted biopsies through real-time detection. Artificial intelligence (AI) can support IM detection, particularly in cases with patchy distribution, and for endoscopists who are not specialized in upper gastrointestinal (GI) endoscopy. Our previous pilot study demonstrated that a machine learning (ML) system based on EfficientNet-B0 achieved approximately 90% accuracy in recognizing IM using blue light imaging (BLI) in the gastric corpus [1]. The present study aimed to compare different ML systems for the identification of IM using BLI endoscopic images of the antrum and corpus.

Methods We retrospectively analyzed a dataset of prospectively collected endoscopic images from gastroscopies performed at Sant'Andrea Hospital, Sapienza University of Rome, between January 2020 and March 2024. Several ML approaches were tested and compared to develop an automated multi-task model: binary image classification into healthy vs. non-healthy categories (EfficientNet-B0), detection of IM-affected areas (YOLOv5 and HistologyYOLO), and interpretability assessment (Gradient-weighted Class Activation Mapping, GradCAM).

Results The dataset comprised 2017 images from 279 patients. EfficientNet-B0 achieved a test accuracy of 0.90, precision of 0.92, and recall of 0.91. The HistologyYOLO model showed an accuracy of 0.52, precision of 0.47, and perfect recall (1.00), while YOLOv5 achieved a precision of 0.32 and recall of 0.29. GradCAM provided satisfactory qualitative interpretability by highlighting the regions influencing the network's decisions, complementing the classifier despite the absence of quantitative validation.

Conclusions EfficientNet-B0 showed optimal performance, which can be further enhanced by the application of GradCAM to identify the most influential image regions guiding the model's decision-making process.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ligato I., De Magistris G., Dilaghi E., Cozza G., Ciardiello A., Panzuto F., Giagu S., Annibale B., Napoli C., Esposito G. 2024; Convolutional Neural Network Model for Intestinal Metaplasia Recognition in Gastric Corpus Using Endoscopic Image Patches. *Diagnostics* (Basel, Switzerland) 14 (13): 1376

eP336 Intestinal Behçet's Disease as a Distinct Phenotype of Behçet's Disease

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DOI 10.1055/s-0046-1821663

Aims Behçet's disease (BD) is a multisystem inflammatory vasculitis presenting with recurrent mucocutaneous ulcers, ocular inflammation, and skin lesions. Although gastrointestinal symptoms may appear in a substantial number of patients, true intestinal BD is relatively uncommon. This study assessed the clinical characteristics and treatment patterns of intestinal BD at a tertiary center in Korea [1–5].

Methods Medical records of 327 patients who fulfilled the ISG or ICBD criteria for BD and were followed between November 2008 and September 2023 were reviewed. Among them, 261 had BD without gastrointestinal involvement, while 66 patients (20.2%) were diagnosed with intestinal BD. Demographic data, clinical symptoms, laboratory markers, imaging results, and treatment modalities were compared between the two groups (► **Table 1**).

Results Intestinal BD accounted for 20.2% of all BD patients. Abdominal pain (74.2% vs. 10.0%, $p < 0.001$) and gastrointestinal bleeding (19.7% vs. 0.8%, $p < 0.001$) were significantly more frequent in intestinal BD, whereas uveitis, skin lesions, and arthritis were more common in non-intestinal BD. CRP levels were higher in intestinal BD (2.35 vs. 1.23 mg/dL, $p < 0.001$), while HLA-B51 positivity was markedly lower (13.0% vs. 50.4%, $p = 0.001$). Treatments such as 5-ASA, azathioprine, and adalimumab were used more often in intestinal BD. Hospitalization (54.5% vs. 8.4%) and surgery rates (16.7% vs. 0.8%) were also significantly higher. Multivariate analysis identified abdominal pain (adjusted OR 54.1) and HLA-B51 negativity (adjusted OR 0.20) as independent predictors of intestinal involvement (► **Table 2**).

Conclusions Intestinal BD shows a distinct phenotype characterized by predominant gastrointestinal symptoms, higher inflammatory activity, and reduced HLA-B51 positivity. Abdominal pain and HLA-B51 negativity may help early diagnostic suspicion. More intensive therapy and higher complication rates highlight the need for timely recognition and individualized management.

► **Table 1** Independent variables associated with the likelihood of intestinal BD in univariate logistic regression analysis

Covariates	OR	OR 95% CI.	P-value
Age, yr	1.022	1.000-1.044	0.05
Sex, M/F	0.632	0.365-1.092	0.100
Clinical manifestation			
Oral ulcers	0.800	0.383-1.671	0.553
Genital ulcers	0.738	0.429-1.269	0.273
Eye(Uveitis)	0.207	0.072-0.592	0.003
Skin lesion	0.389	0.217-0.699	0.002
Arthritis	0.397	0.172-0.916	0.030
Abdominal pain	26.052	13.140-51.652	0.000
GI Bleeding	31.764	6.963-144.905	0.000
Perforation	8.125	0.725-91.007	0.089
Laboratory findings			

► **Table 1** Independent variables associated with the likelihood of intestinal BD in univariate logistic regression analysis

Covariates	OR	OR 95% CI.	P-value
WBC, /mm ³	1.000	1.000-1.000	0.889
Hemoglobin, g/dL	0.845	0.712-1.001	0.052
Albumin, g/dL	0.552	0.289-1.056	0.073
Total protein, g/dL	1.244	0.806-1.918	0.324
CRP, mg/dL	1.065	1.000-1.134	0.052
B ₅₁	0.147	0.041-0.524	0.003

► **Table 2** Independent variables associated with the likelihood of intestinal BD in multivariate logistic regression analysis

Covariates	Adjusted OR(Exp(B))	95% CI.	P-value
Abdominal pain	54.1	13.4 – 219.4	<0.001
HLA-B51	0.20	0.04 – 0.94	0.041

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] International Team for the Revision of the International Criteria for Behçet's, D. The International Criteria for Behçet's Disease (ICBD): a collaborative study of 27 countries on the sensitivity and specificity of the new criteria. *J Eur Acad Dermatol Venereol* 2014; 28 (3): p 338–47
- [2] Chen J., Yao X. A Contemporary Review of Behçet's Syndrome. *Clin Rev Allergy Immunol* 2021; 61 (3): p 363–376
- [3] Hisamatsu T. et al. Diagnosis and management of intestinal Behçet's disease. *Clin J Gastroenterol* 2014; 7 (3): p 205–12
- [4] Yazici H., Seyahi E., Yazici Y. Behçet syndrome. *Nat Rev Rheumatol* 2021; 17: p 137–152
- [5] International Study Group for Behçet's, D. Criteria for diagnosis of Behçet's disease. *Lancet* 1990; 335: p 1078–1080

eP338 When AI Meets Expertise: Adoption and Reinvention of Computer-Aided Polyp Detection (CAdE) in Endoscopy

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DOI 10.1055/s-0046-1821665

Aims While clinical trials show that computer-aided detection (CAdE) has the potential for increasing adenoma detection rates, real-world practice has produced inconsistent improvements. Many endoscopists report frustration with false positive notifications and workflow disruptions yet remain optimistic about its future use. This paradox challenges established information systems theories of post-adoption use. This study explores: (1) The role of expertise in endoscopists' adoption of CAdE technologies, and (2) How expertise influences the reinvention of CAdE in practice.

Methods We adopt a qualitative research design based on 13 semi-structured interviews with Canadian endoscopists having used a CAdE platform. Participants represent a spectrum of experience levels from early-career to senior clinicians. Interviews explored motivations for adoption, experiences with CAdE integration, perceptions of reliability, and workflow adaptations. Data were transcribed and coded using NVivo, with analysis guided by abductive reason-

ing. Themes include cognitive learning, and information systems (IS) use. The analysis draws on absorptive capacity, exploratory vs. exploitative technology use, and technology reinvention theories to examine how expertise influences post-adoption adaptation.

Results 1) The influence of clinical expertise on CAdE adoption and application: More experienced endoscopists tend to be more resistant to using CAdE with only 1/5 with >20 years practice continuing to use the system versus 7/8 with <15 years. Moreover, the 3 novice endoscopists (<3 years practice) are more likely to follow AI-generated prompts rigidly (including unnecessary resections of diminutive rectosigmoid hyperplastic polyps). In contrast, the 5 more experienced endoscopists (>10 years) adapt the system to fit their own needs and workflows, demonstrating a process of "reinvention" in practice. Overall, those with less experience use CAdE as prescribed in their practice, while more experienced endoscopists envisioned different roles for the technology than its principal intended use. Clinicians also actively modulate the influence of CAdE, negotiating a balance between trust in AI and professional judgment.

Conclusions These findings will refine technology reinvention theory by foregrounding expertise as a key determinant of user-driven adaptation, contributing to post-adoption information systems research, technology reinvention theory, and provides actionable insights in attempting to optimize CAdE integration into practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP339 Conditional inference decision trees to support colonoscopy scheduling after positive FIT in the Emilia-Romagna colorectal cancer screening program

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DOI 10.1055/s-0046-1821666

Aims The effectiveness of faecal immunochemical test (FIT)-based colorectal cancer (CRC) screening programs relies heavily on the timely completion of colonoscopy following a positive FIT result, enabling the detection and removal of early-stage cancers and precancerous lesions. However, due to limited endoscopic capacity and organizational constraints, many programs struggle to meet the recommended target of performing colonoscopy within 31 days of a positive FIT. This study aimed to evaluate the potential of a Conditional Inference Decision Tree (CIDT) model as a supportive tool to classify the risk of CRC among FIT-positive participants in the Emilia-Romagna regional screening program.

Methods Study data were obtained from the Information System for the Surveillance of Colorectal Screening of the Regional Department of Health. The analysis included all individuals aged 50–69 years with a positive FIT result recorded between 2005 and 2024. Candidate predictors included age, sex, haemoglobin concentration at FIT, cumulative haemoglobin concentration for repeat participants, and screening round (first vs subsequent).

A Conditional Inference Decision Tree was applied to identify the most relevant predictors of CRC. Internal validation was performed using cross-validation, and model performance was assessed through the area under the ROC curve (AUC). Weighted analyses were applied to account for the low prevalence of CRC (4%).

Results Among 201,065 FIT-positive participants, 4% were diagnosed with colorectal cancer at colonoscopy. Although CRC was a relatively rare outcome,

the Conditional Inference Decision Tree (CIDT) identified clear patterns of risk within the screened population. Haemoglobin concentration at FIT was the dominant predictor and constituted the first splitting variable in the tree, effectively distinguishing participants with very low probabilities of CRC from those at substantially higher risk. Increasing haemoglobin values showed a strong and progressive association with the likelihood of detecting colorectal cancer at colonoscopy.

Age and screening round provided additional discriminatory information, refining risk estimates within haemoglobin-based strata. Individuals undergoing their first screening round and those in older age groups had higher probabilities of CRC, whereas cumulative haemoglobin across previous FIT rounds contributed to differentiating risk among repeat participants. Sex did not substantially influence the structure of the tree.

Participants with lower haemoglobin values showed markedly lower risk across all branches of the tree, with final estimated probabilities of CRC ranging from 1.4% to 4.6%, depending on age and screening round. Within this group, the lowest observed risks were found among participants with low haemoglobin values who were younger (≤ 59 years) and in subsequent screening rounds, with estimated probabilities as low as 1.4%. In contrast, participants with higher FIT haemoglobin concentrations exhibited substantially greater probabilities of CRC. Within this group, age and screening round further stratified risk: older individuals (>57 years) undergoing their first screening round formed the highest-risk terminal nodes, with estimated CRC probabilities reaching 19.9%. The CIDT had an AUC of 0.71.

Conclusions The moderate discriminative performance of the tool, which is consistent with the low-prevalence nature of the endpoint and the real-world heterogeneity of FIT-positive populations, suggests that it needs to be improved with additional patient information. Our findings indicate that the CIDT has a potential to become a simple, interpretable, and data-driven approach to assist clinicians in the management of colonoscopy workload by identifying higher-risk subgroups of FIT-positive patients, particularly in settings with constrained resources or waiting list pressures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP340 Results of Endoscopic-Ultrasound Tissue Acquisition (EUS-TA) for Solid Pancreatic Lesions: 13 years' real-world experience of academic oncological center

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DOI 10.1055/s-0046-1821667

Aims Aims: to provide a comprehensive description of the diagnoses and the results of EUS-TA (adequacy, sensitivity, specificity, and accuracy) for solid pancreatic lesions that have been referred due to clinical and radiological findings in a tertiary oncological referral center.

Methods Methods: a retrospective analysis was conducted on consecutive patients who underwent EUS-FNA or EUS-FNB procedures. These procedures were performed by advanced fellows under direct supervision of expert endoscopists. The material obtained was subsequently analysed by a pathologist specializing in the gastrointestinal tract. However, the pathologist was not in the endoscopy room during the procedure, i.e., without rapid-on-site-evalua-

tion (ROSE). Final diagnosis was based on histology or clinical/radiological follow-up [1–3].

Results Results: From April 2013 to February 2025, a total of 491 EUS pancreatic punctures were conducted on 433 patients, of whom 50.3 % were female. The mean age of the patients was 62 years, with a range of 25 to 86 years. The mean size of the lesions was 36 mm, with a range of 2 to 120 mm. The majority of lesions were found to be localized in the pancreatic head region (72.7 %). The final diagnoses revealed that 70.8 % of cases were confirmed to be ductal adenocarcinoma, 9.6 % were neuroendocrine tumours, 8.6 % were benign lesions, and 4.8 % exhibited pancreatic metastases from other organs. Lymphoma was diagnosed in 4 patients (0.8 %), while 29 patients had other diagnoses. A total of 85.7 % (95 % CI 82.3–88.6 %) of the samples were deemed adequate. The sensitivity was 84.7 % (95 % CI 81.0–87.9 %), the specificity was 94.3 % (95 % CI 84.3–98.8 %), and the accuracy was 85.7 % (95 % CI 82.3–88.6 %).

Conclusions Notwithstanding its designation as an oncological referral center, a significant proportion of cases, amounting to nearly 10 %, were found to be benign lesions. Despite the predominance of adenocarcinoma, accounting for over 70 % of cases, other rare neoplasms, including neuroendocrine tumors, metastases, and lymphomas, can also be diagnosed through EUS-TA. Given the significant management disparities among neoplasms, histological confirmation is imperative. Current guidelines stipulate that a diagnostic rate of at least 85–87 % is a pivotal quality marker for eligible samples in all solid lesions undergoing EUS-TA. The ASGE suggests that a diagnostic rate of 70 % should be maintained and a sensitivity of 85 % or higher for malignancy on EUS-TA of pancreatic lesions. Our results demonstrated the achievement of these quality indicators even when the procedures were done by fellows and without ROSE. However, the all EUS-TA were supervised by experienced endoscopists and analyzed by expert GI pathologists. Continuous monitoring of quality indicators related to the diagnostic performance of ultrasound-guided biopsy should be carried out by all centers that perform this procedure, aiming to identify potential failures and further improve results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Facciorusso A, Arvanitakis M, Crinò SF, Fabbri C, Fornelli A, Leeds J, Archibugi L, Carrara S, Dhar J, Gkolfakis P, Haugk B, Iglesias Garcia J, Napoleon B, Papanikolaou IS, Seicean A, Stassen PMC, Vilman P, Tham TC, Fuccio L. Endoscopic ultrasound-guided tissue sampling: European Society of Gastrointestinal Endoscopy (ESGE) Technical and Technology Review. *Endoscopy*. 2025; 57 (4): 390–418. doi:10.1055/a-2524-2596 Epub 2025 Feb 27 PMID: 40015316
- [2] Mishra G, Lennon AM, Pausawasdi N, Shami VM, Sharaiha RZ, Elmunzer BJ. Quality indicators for EUS. *Gastrointest Endosc*. 2025; 101 (5): 928–949. e1. doi:10.1016/j.gie.2025.02.025 Epub 2025 Apr 23 PMID: 40266165
- [3] Han SY, Chon HK, Kim SH, Lee SH. Quality indicators of endoscopic ultrasound in the pancreatobiliary system: a brief review of current guidelines. *Clin Endosc*. 2024; 57 (2): 158–163. doi:10.5946/ce.2023.064 Epub 2023 Jun 9 PMID: 37430396 PMID: PMC10984746

eP341 A Rare Case of Rectal Gastric Heterotopia Presenting With Significant Rectal Bleeding

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DOI 10.1055/s-0046-1821668

Abstract Text

We present the case of a 28-year-old female referred via the 2-week-wait colorectal cancer pathway for urgent colonoscopy following episodes of significant rectal bleeding with passage of large blood clots. She described fluctuating bowel habits with a baseline tendency toward constipation, intermittent watery stools, and tenesmus associated with bleeding episodes. Additional symptoms included bloating, fatigue, and nausea. She denied urgency, mucus discharge, weight loss, or systemic symptoms. Her past medical history was

unremarkable; she was a non-smoker, took no medications, and had a WHO performance status of 0. Routine blood tests, including haemoglobin and iron studies, were normal, and no FIT test had been performed.

Colonoscopy demonstrated a solitary 15 mm Paris IIa flat-elevated lesion in the rectum, exhibiting a JNET type 1 and Kudo type I pit pattern. En bloc resection was performed using submucosal lift and hot snare polypectomy. The remainder of the colonoscopy was unremarkable. Histopathological analysis of the resected specimen demonstrated gastric heterotopia composed of fully differentiated gastric mucosa without dysplasia or features of neoplasia [1–3].

Gastric heterotopia is defined as the presence of mature gastric mucosa outside its normal anatomical location. It is most commonly found in the upper gastrointestinal tract, and its occurrence in the colon, particularly in the rectum, is exceedingly rare¹. Although often asymptomatic, gastric heterotopia can be clinically significant due to local acid secretion, which may lead to ulceration, bleeding, mucosal irritation, and, in rare cases, stricture formation².

Rare complications reported in the literature include chronic inflammation, polyp formation, and although extremely uncommon, dysplastic change. Although rare, dysplasia has been identified in around 4–5 % of rectal gastric heterotopia cases in the literature, highlighting the importance of thorough evaluation and definitive resection³. Endoscopic resection is considered the treatment of choice, offering both definitive diagnosis and resolution of symptoms. In this case, complete resection was achieved, thereby eliminating the risk of further bleeding and avoiding the need for additional therapy.

This case emphasizes the importance of maintaining a broad differential diagnosis in young patients presenting with alarming lower gastrointestinal symptoms, as uncommon benign conditions such as gastric heterotopia may mimic more serious pathology. Accurate endoscopic assessment combined with histological confirmation remains central to appropriate management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Iacopini F, Membrini M, Schiavoni G, Petruzzello L, Consolazio A, Iacopini G. Heterotopic gastric mucosa in the rectum and anus: first case report of endoscopic submucosal dissection and systematic review. *World J Gastroenterol* 2016; 22 (27): 6237–6244 PMID: PMC4976682
- [2] Ranade A, García-Buitrago MT, Gisbertz I, Ruiz CG. Gastric heterotopia in rectum: a diagnostic pitfall. *Ann Diagn Pathol* 2017; 28: 38–41 PMID: 28321304
- [3] Byard RW, Bourne AJ. Gastric heterotopia in the rectum: a rare entity with potential pitfalls. *Pathology*. 2023; 55 (3): 271–274 PMID: 37170532

eP342 Challenges to Discontinuation of Long-Term Palliative Chemotherapy in Advanced Cholangiocarcinoma: Insights from Two Cases

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DOI 10.1055/s-0046-1821669

Background Cholangiocarcinoma is a rare but aggressive malignancy, often diagnosed at an advanced stage where curative resection is not feasible. First-line palliative chemotherapy with gemcitabine and cisplatin remains the standard of care. However, the optimal timing for treatment discontinuation following response remains uncertain. We report two cases of advanced cholangiocarcinoma in which chemotherapy was discontinued after achieving a metabolic complete response (CR) confirmed by PET-CT [1–3].

Method We retrospectively reviewed two patients with advanced cholangiocarcinoma who underwent prolonged first-line palliative chemotherapy with gemcitabine and cisplatin. Chemotherapy was discontinued upon confirmation of metabolic CR via PET-CT, and the patients were subsequently monitored for disease progression and overall clinical course.

Result

Case 1: A 70-year-old man was diagnosed with cholangiocarcinoma with liver metastases. He received gemcitabine-cisplatin chemotherapy for 66 cycles over six years. PET-CT showed metabolic CR, and chemotherapy was discon-

tinued. However, progressive disease developed. Despite multiple subsequent lines of systemic treatment, the patient transitioned to best supportive care two years later.

Case 2: A 71-year-old man presented with epigastric discomfort and was diagnosed with intrahepatic cholangiocarcinoma. He underwent 41 cycles of gemcitabine-cisplatin over four years. PET-CT confirmed metabolic CR, leading to treatment discontinuation. Recurrence was observed one year later. Several lines of systemic therapy were administered thereafter, but the patient ultimately transitioned to supportive care.

Conclusion These cases highlight the risk of early recurrence following chemotherapy discontinuation, even after achieving metabolic CR in advanced cholangiocarcinoma. Careful consideration is needed in determining the timing of treatment cessation and the role of maintenance strategies. Further research is warranted to define the optimal treatment duration and to identify patients who may benefit from discontinuation or continuation of therapy.

References

- [1] Doherty MK, Duckworth AM, Maughan TS et al. Long-term responders to palliative chemotherapy for biliary tract cancer. *J Gastrointest Oncol* 2017; 8 (6): 1002–1009
- [2] Hyung J, Kim HR, Kim JH et al. Clinical benefit of maintenance therapy for advanced biliary tract cancer. *Cancer Res Treat* 2018; 50 (4): 1324–1335
- [3] Valle J, Wasan H, Palmer DH et al. Cisplatin plus gemcitabine versus gemcitabine for biliary tract cancer. *N Engl J Med* 2010; 362 (14): 1273–1281

eP343 Case Report: Peripancreatic Low-Grade Nerve Sheath Tumor (Neurofibroma) Mimicking Pancreatic Malignancy in a 32-Year-Old Male

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DOI 10.1055/s-0046-1821670

Abstract Text

Neurofibromas are benign peripheral nerve sheath tumors commonly associated with Neurofibromatosis Type 1 (NF1). Sporadic, solitary neurofibromas arising in the peripancreatic region are exceedingly rare and may present diagnostic challenges due to their resemblance to pancreatic malignancies on imaging. Accurate diagnosis is essential to guide management, as treatment strategies differ significantly between benign neurogenic tumors and aggressive pancreatic neoplasms. A 32-year-old male with no known comorbidities and no family history of malignancy underwent a routine annual wellness examination, during which an abdominal ultrasound was performed. The study incidentally revealed a few lobulated, heterogeneous, predominantly hypo-echoic masses in the peripancreatic region, measuring 1.9 × 1.4 cm and 7.5 × 6.6 × 3.5 cm, with internal calcifications. The masses appeared to encase vascular structures, including the celiac trunk and portal confluence, raising concern for a malignant pancreatic process. Further evaluation with MRCP demonstrated an exophytic, peripherally enhancing lobulated mass arising from the pancreatic head and uncinate process. The lesion appeared T1 hypointense and T2 iso- to hyperintense and measured 5.4 × 6.5 × 7.1 cm (AP × T × CC). It encased the celiac trunk and superior mesenteric artery, compressed the portal confluence and superior mesenteric vein, and was intimately related to the inferior vena cava and the inferior margin of hepatic segment 4B and the caudate lobe. Due to these suspicious features, endoscopic ultrasound with fine needle biopsy was performed. Histopathologic evaluation revealed a spindle cell lesion, and immunohistochemical staining demonstrated negativity for CD117, DOG1, SMA, and desmin, with CD34 positivity highlighting perineural cells and diffuse S100 positivity. These findings were diagnostic of a low-grade, benign nerve sheath tumor, favoring neurofibroma. Peripancreatic neurofibromas are rare tumors, particularly in patients without neurofibromatosis type 1 (NF1), and they present a significant diagnostic challenge due to their ability to mimic pancreatic malignancy on imaging. In this case, the large size of the mass, its heterogeneous appearance, presence of calcifications, and particularly the encasement of major vascular structures created a strong radiologic

impression of an aggressive pancreatic neoplasm such as pancreatic ductal adenocarcinoma or a malignant neuroendocrine tumor. These imaging features often prompt consideration of unresectable disease, and without tissue confirmation, patients may be subjected to unnecessary radical surgery or deemed inoperable. This case illustrates a rare presentation of a sporadic peripancreatic neurofibroma masquerading as a malignant pancreatic tumor due to its size and extensive vascular involvement. Comprehensive evaluation—including advanced imaging and EUS-guided biopsy with immunohistochemistry—is essential to avoid misdiagnosis and unnecessary radical surgery [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nishi T., Kawabata Y., Hari Y. et al. 2012; A case of pancreatic neuroendocrine tumor in a patient with Neurofibromatosis-1. *World Journal of Surgical Oncology* 10: 153. doi:10.1186/1477-7819-10-153
- [2] Mesenchymal tumors of the pancreas: Clinical, radiologic, and pathological insights *Frontiers in Gastroenterology*, (case report). Note: This article discusses pancreatic schwannoma and its imaging appearances, including cystic changes and calcifications. . doi:10.3389/fgstr.2024.1425831.
- [3] Pradeep Balineni P., Arcot R., Devygounder K., Rahaman K., Narayansamy B., Prabhu M., Vaitheeswaran S. 2019; Malignant peripheral nerve sheath tumor of the pancreas—A case report. *International Journal of Surgery Case Reports* 55: 239–242. doi:10.1016/j.ijscr.2019.02.011.

eP344 Pancolonic Intestinal Schistosomiasis Masquerading as Ulcerative Colitis: A Case Report

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DOI 10.1055/s-0046-1821671

Aims To report a rare case of diffuse intestinal schistosomiasis involving the entire colon, mimicking ulcerative colitis, and to emphasize the importance of considering parasitic infections in the differential diagnosis of pancolitis in endemic regions.

Methods A 31-year-old male from Consolacion, Cebu, presented with painless hematochezia and was initially admitted for planned hemorrhoidectomy. Due to persistent bleeding, colonoscopy was performed, which revealed continuous mucosal ulceration and inflammation from the rectum to the cecum. An initial endoscopic impression of ulcerative colitis was made. Systematic biopsies were obtained from all colonic segments, and stool microscopy for ova and parasites was performed [1, 2].

Results Stool microscopy was negative for parasitic ova. However, histopathological examination of colonic biopsies demonstrated numerous *Schistosoma* ova embedded within the lamina propria throughout all sampled segments, confirming extensive intestinal schistosomiasis. The patient was treated with praziquantel and subsequently underwent hemorrhoidectomy. Complete resolution of hematochezia was observed, with no recurrence on follow-up. This case illustrates the significant diagnostic challenge posed by diffuse egg deposition producing a pancolitis pattern that closely mimics inflammatory bowel disease.

Conclusions Pan-colonic involvement in intestinal schistosomiasis is exceedingly rare, as the disease typically localizes to the rectum and sigmoid colon. In endemic regions, schistosomiasis should be strongly considered in cases of diffuse colitis, even when stool examinations are negative. Mucosal biopsy remains the diagnostic gold standard. Early recognition allows effective treatment with praziquantel and prevents misdiagnosis and unnecessary long-term immunosuppressive therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ak Ç., Sayar S, Kılıç ET. A *Schistosoma colitis* case misdiagnosed as ulcerative colitis in a non-endemic area: a case report. *Iran J Parasitol* 2022; 17 (3): 431–435. doi:10.18502/ijpa.v17i3.10637
- [2] WHO Regional Office for the Western Pacific Schistosomiasis in the Philippines: Epidemiology and Control Strategies. Manila: WHO WPRO; 2019

eP345 Endoscopic Resection of Previously Incomplete Resected Colorectal Lesions: A Retrospective Observational Cohort Study

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DOI 10.1055/s-0046-1821672

Aims Incomplete resection of colorectal polyps predisposes to local recurrence and technical difficulty in subsequent interventions. Prior resection attempts create fibrosis in the submucosal space, limiting lifting and snare capture, and may necessitate advanced techniques. Real-world data comparing outcomes for incompletely resected versus naive lesions are limited, particularly within an "all-comers" unselected referral population. Our aim was to compare procedural success, safety, and recurrence between previously incompletely resected and naive complex colorectal lesions, and to describe the efficacy of advanced resection and adjunctive techniques for previously resected lesions [1].

Methods All consecutive patients who underwent resection of complex colorectal polyps at St. Michael's Hospital, Toronto, Canada, between 2019 and 2025 were included. Prior resection was defined as any lesion with a prior incomplete resection (not including biopsy or tattoo) attempt identified endoscopically and/or through referral chart review (► **Table 1**).

► **Table 1**

	No Prior Resection (n = 1359)	Prior Incomplete Resection (n = 187)	p-value
EMR technique	1175 (86.5 %)	130 (69.5 %)	<0.0001
<i>En Bloc</i>	137 (10.1 %)	6 (3.2 %)	
Hot Piecemeal	888 (65.3 %)	108 (57.8 %)	
Cold Piecemeal	150 (11.0 %)	16 (8.6 %)	
Hybrid technique	37 (2.7 %)	22 (11.8 %)	<0.0001
ESD technique	147 (10.8 %)	35 (18.7 %)	<0.0001
Adjunctive methods			
CAST	421 (31.0 %)	82 (43.9 %)	0.0004
Hot avulsion	79 (5.8 %)	38 (20.3 %)	<0.0001
Snare-tip Submucosal release	108 (8.0 %)	75 (40.1 %)	<0.0001
Technical success	1302 (95.8 %)	183 (97.9 %)	0.18
Curative Resection	1243 (91.5 %)	176 (94.1 %)	0.22
Recurrence at first surveillance	61 (9.2 %)	11 (13.1 %)	0.25

Results Among 1,546 lesions, 1,359 had no prior resection and 187 had prior incomplete resection. In the no prior resection group, 86.5 % were treated with EMR, 2.7 % with hybrid EMR and 10.8 % with ESD, whereas in the prior incomplete resection group 69.5 % underwent EMR, 11.8 % hybrid EMR and 18.7 % with ESD. When EMR was performed in the no prior resection group, en-bloc EMR was performed 10.1 % of the time, hot-snare piecemeal EMR in 65.3 %, cold-snare piecemeal EMR in 11.0 %, compared with 3.2 %, 57.8 %, and 8.6 % respectively in the prior incomplete resection group ($p < 0.0001$). Adjunctive methods were required more in the prior incomplete resection group. CAST was used in 31.0 % vs 43.9 % ($p = 0.0004$), hot avulsion in 5.8 % vs 20.3 % ($p < 0.0001$), and submucosal release in 8.0 % vs 40.1 % ($p < 0.0001$). Technical success was achieved in 95.8 % vs 97.9 % ($p = 0.18$) in the no prior resection

versus prior incomplete resection groups. For adverse events, intra-procedural perforation occurred in 0.8 % vs 1.1 % ($p = 0.38$), delayed bleeding in 2.2 % vs 1.6 % ($p = 0.59$), and delayed perforation in 0.4 % vs 0 % ($p = 0.36$) in the no prior resection versus prior incomplete resection groups. Recurrence at first surveillance was 9.2 % vs 13.1 % in the no prior resection versus prior incomplete resection groups ($p = 0.25$).

Conclusions Lesions with prior incomplete resection were associated with markedly greater technical complexity, reflected by increased use of advanced and adjunctive techniques. Despite this, technical success, curative resection, adverse events, and early recurrence were similar between groups. In contrast to prior literature [1], when adjunctive therapy consisted almost exclusively of CAST/hot avulsion and outcomes for previously attempted lesions were inferior, a more nuanced and deliberately aggressive adjunctive strategy can largely overcome the historical disadvantage of previously manipulated, fibrotic colorectal lesions.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

References

[1] Li SM Jeffrey; May, Gary; Kandel, Gabor; Kortan, Paul; Marcon, Norman; Teshima, Christopher Need for adjunctive removal techniques for endoscopic mucosal resection of large non-pedunculated colonic polyps is predictive of recurrence. *Endosc Int Open*. 2023; 11: E82–E89

eP346 Role of bedside glucometry in differentiating mucinous vs non mucinous cystic lesions of pancreas

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DOI 10.1055/s-0046-1821673

Aims To study the sensitivity, specificity and accuracy of bedside glucometry in diagnosing nature of cystic lesions of pancreas.

Methods Study was conducted in Medanta, The Medicity hospital Gurgaon, India and total number of patients were 56 and all patients with age more than 18 years and with pancreatic cystic lesions were included [1, 2].

EUS was done in each patient and FNA was performed and pancreatic cystic fluid was collected immediately and glucose was checked using commercial glucometer ie Accu Check.

Results Glucose level less than 60 mg/dl correctly differentiated mucinous from non mucinous pancreatic cystic lesions among 42.9 % patients with sensitivity and specificity of 82.8 % and 81.5 % respectively. The area under curve was high (0.88, $p = 0.001$). The positive predictive value, negative predictive value and accuracy was 82.8 %, 81.5 % and 82.1 % respectively. The mean CEA level was significantly ($p = 0.0001$) higher among patients with mucinous (4844.5 ± 90.24) compared to non mucinous (262.9 ± 366.9).

CEA level more than 100 correctly differentiate mucinous from non mucinous cysts with sensitivity and specificity of 82.8 % and 70.4 % respectively. The positive predictive values, negative predictive value and accuracy was 75 %, 79.2 % and 76.8 % respectively.

Conclusions Glucose level less than 60 mg/dl correctly differentiated mucinous from non mucinous pancreatic cystic lesions among 42.9 % patients with sensitivity and specificity of 82.8 % and 81.5 % respectively. The area under curve was high (0.88, $p = 0.001$). The positive predictive value, negative predictive value and accuracy was 82.8 %, 81.5 % and 82.1 % respectively. The mean CEA level was significantly ($p = 0.0001$) higher among patients with mucinous (4844.5 ± 90.24) compared to non mucinous (262.9 ± 366.9).

CEA level more than 100 correctly differentiate mucinous from non mucinous cysts with sensitivity and specificity of 82.8 % and 70.4 % respectively. The pos-

itive predictive values, negative predictive value and accuracy was 75%, 79.2% and 76.8% respectively.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Faías S, Pereira L, Roque R, Chaves P, Torres J, Cravo M, Pereira AD. Excellent Accuracy of Glucose Level in Cystic Fluid for Diagnosis of Pancreatic Mucinous Cysts. *Digestive Diseases and Sciences* 2020; 65: 2071–2078
- [2] Rana SS, Dawra S, Sharma R, Kang M, Gupta R. Clinical manifestation, imaging features, and endoscopic management of renal pseudocysts: A case series. *Ann. Gastroenterol* 2020; 33: 313–317

eP347 AXIOS as a bridge to ERCP; A Novel Use of LAMS: A case report and literature review

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DOI 10.1055/s-0046-1821674

Abstract Text

Duodenal stenosis is commonly caused by peptic ulcer disease, Crohn's disease, neoplasms, extrinsic compression, or, rarely, infections. Standard management of benign stenosis includes endoscopic balloon dilation; however, success may be limited in refractory or anatomically complex strictures. Lumen-apposing metal stents (LAMS), such as the AXIOS stent, have emerged as a novel therapeutic option in these challenging cases.

We report the case of a 20-year-old male with a history of para-aortic paraganglioma requiring extensive resection and subsequent radiotherapy, who later developed recurrent disease and retroperitoneal fibrosis. He presented with elevated liver enzymes and was found on MRCP to have intrahepatic biliary dilation and intrabiliary cast formation. Attempts at ERCP were unsuccessful due to a severe intrinsic duodenal bulb stenosis that limited passage of a standard endoscope despite multiple sessions of stepwise balloon dilation up to 15 mm. Given persistent failure to traverse the stricture, a multidisciplinary decision was made to deploy a 20 mm × 10 mm AXIOS (Boston Scientific) LAMS across the stenosis under combined endoscopic and fluoroscopic guidance. The stent remained in place for 10 days without adverse events, allowing successful duodenoscopy passage and ERCP, with partial extraction of biliary stones and sludge and subsequent cholangioscopic evaluation.

This case highlights the effective use of LAMS as a bridge to ERCP in benign, refractory duodenal stenosis. The stent dwell time was 10 days with no stent migration or adverse event reported with no recurrence of biliary stenosis up to 3 months follow up.

Current literature demonstrates high technical and clinical success rates for LAMS in benign gastrointestinal strictures, with acceptable adverse event rates. Our case adds to growing evidence supporting LAMS as a safe and effective option when standard dilation fails.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP348 Safety and efficacy of 10 mm self-expandable metallic stent placement for malignant esophageal stricture after radiotherapy

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DOI 10.1055/s-0046-1821675

Aims Self-expanding metal stents (SEMS) are effective in relieving dysphagia caused by malignant tumors and are considered an important palliative option for patients with unresectable esophageal cancer. However, SEMS placement after radiotherapy has been associated with an increased risk of serious adverse events (AEs), including bleeding, perforation, and mediastinal infection. Small-

er-diameter SEMS may reduce the risk of AEs, but their clinical utility in patients after radiotherapy has not been fully elucidated. The aim of this study was to evaluate the safety and efficacy of esophageal SEMS with a 10 mm shaft diameter (10 mm SEMS) in patients with malignant esophageal stricture after radiotherapy.

Methods This was a prospective observational trial conducted at Shizuoka Cancer Center. We included patients with malignant esophageal stricture after radiotherapy for esophageal squamous cell carcinoma, in whom a standard endoscope could not pass the stricture, and who underwent placement of a 10 mm SEMS. The primary endpoint was the incidence of esophageal bleeding, perforation, and mediastinal infection of grade ≥ 3, according to the Common Terminology Criteria for Adverse Events (CTCAE). Secondary endpoints included best dysphagia score (DS), duration of DS ≤ 2, all AEs, and overall survival (OS) after 10 mm SEMS placement.

Results A total of 20 patients (17 men, 3 women; median age 71.5 years, range 46–87 years) were enrolled from March 2018 to March 2024. According to the Eastern Cooperative Oncology Group Performance Status, 7 patients had PS 0–1 and 13 had PS ≥ 2. Stricture locations were upper, middle, and lower esophagus in 8, 9, and 3 patients, respectively. The median radiation dose was 60 Gy (range: 30–60 days), and the median interval from completion of radiotherapy to 10 mm SEMS placement was 149 days (range: 7–965 days). No CTCAE grade ≥ 3 bleeding, perforation, or mediastinal infection was observed after 10 mm SEMS placement. Dysphagia improved in 95% (19/20) of patients, with DS improving from 3.45 ± 0.76 to 1.20 ± 0.83 ($P < 0.001$). Best DS values of 3, 2, 1, and 0 were observed in 2, 3, 12, and 3 patients, respectively. The median duration of DS ≤ 2 after 10 mm SEMS placement among 18 patients was 44 days (range: 3–126 days). Stent migration occurred in 7 patients (35%) and occlusion in 1 patient (5%). Among those with migration, 5 underwent additional placement of a 16–18 mm SEMS, and 1 required gastrostomy. The median OS after 10 mm SEMS placement was 103 days (range: 47–607 days).

Conclusions Placement of a 10 mm SEMS was safe and effective for malignant esophageal stricture after radiotherapy. Although no severe adverse events were observed, stent migration remains a significant limitation and further studies are needed to develop methods to prevent migration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP349 Pre-Endoscopic Anxiety: Determinants and Impact on the Patient Experience

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DOI 10.1055/s-0046-1821676

Aims To identify the key determinants of pre-endoscopic anxiety and to examine how this anxiety influences procedural tolerance, symptom burden, and overall patient satisfaction.

Methods We conducted a cross-sectional observational study including 51 patients scheduled for digestive endoscopy. Anxiety levels were assessed using the Spielberger Anxiety Inventory. Sociodemographic features, medical and psychiatric history, personality traits, previous experiences with endoscopy, knowledge about the procedure, and willingness to undergo unsedated endoscopy were recorded. Per-procedural variables included pain intensity, bloating, nausea/vomiting, incontinence, and procedure duration. Statistical analysis used comparison tests and multivariate linear regression ($p < 0.05$).

Results Patients had a mean age of 59.7 years (29–82), with a male-to-female ratio of 1.32. The mean anxiety score was 44.3 (25–70).

Higher anxiety levels were more frequent among patients with an anxious personality (36% vs. 7.7%, $p < 0.01$), those who had previously had a negative endoscopic experience (45.5% vs. 7.1%, $p < 0.05$), those with limited knowledge of the procedure (40% vs. 15.4%, $p < 0.05$), and those who felt uncom-

fortable with the idea of undergoing the exam without sedation (24 % vs. 3.8 %, $p < 0.05$). Age, sex, and medical history showed no significant relationship with anxiety.

Patients with higher anxiety reported more abdominal pain during the procedure ($p = 0.005$), along with more bloating and more nausea/vomiting. Anxiety did not correlate with the duration of colonoscopy ($p = 0.22$).

Pain had a clear impact on patient satisfaction: 83 % of patients with no pain rated their experience as "very satisfactory", compared with 44 % among those who experienced pain. The same pattern was observed for willingness to repeat the procedure (83 % vs. 44 %). Nearly half of patients who felt pain wished for sedation during future exams.

Conclusions Pre-endoscopic anxiety mainly stems from psychological factors and lack of information. It increases discomfort during the procedure and reduces satisfaction. Recognizing and addressing anxiety beforehand could improve patient comfort and enhance their overall experience with endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP350 Cholangioscopy-guided management of intrahepatic stones and strictures in PSC-associated ulcerative colitis: beyond conventional ERCP

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DOI 10.1055/s-0046-1821677

Abstract Text

Primary sclerosing cholangitis (PSC) is a rare but clinically significant hepatobiliary complication of ulcerative colitis (UC), associated with complex biliary strictures and recurrent obstruction that can require advanced endoscopic assessment. In PSC–UC phenotype, multifocal strictures impair bile drainage and promote secondary intrahepatic stone formation, which may complicate ductal clearance with conventional ERCP. We present a long-term PSC–UC case illustrating the role of cholangioscopy in achieving effective management of recurrent intrahepatic obstruction that had persisted despite multiple ERCP interventions. A young woman with history of UC diagnosed, in overall sustained clinical and endoscopic remission aside from a single postpartum flare, presented with symptoms of acute cholangitis. MRCP revealed multifocal intrahepatic strictures with a beaded configuration, along with multiple stones predominantly involving the left ducts, consistent with PSC. Initial endoscopic management achieved extraction of common bile duct stones using standard techniques, although a markedly dilated left intrahepatic duct with residual lithiasis and inflammatory stricturing persisted, limiting adequate drainage and prompting interval cross-sectional reassessment. Later that year, the patient experienced a second clinically significant episode of cholangitis, again requiring ERCP with only partial clearance of intrahepatic lithiasis. One year later, MRCP demonstrated progressive disease evolution, with marked dilation of the left intrahepatic ducts and an infiltrative-appearing dominant stenosis at the hepatic confluence, warranting further evaluation to exclude malignancy. These findings supported the use of SpyGlass cholangioscopy to enable comprehensive intraductal inspection, lithotripsy-assisted stone retrieval and targeted biopsy of the stenotic segment. The stricture appeared inflammatory on direct inspection and was subsequently confirmed as non-malignant by histopathological report. Cholangioscopy allowed complete clearance of impacted left intrahepatic stones, direct evaluation of multifocal inflammatory strictures, and targeted biopsies confirming non-malignant disease, thereby restoring effective segmental ductal decompression. The intervention was completed without procedure-related complications. Follow-up imaging confirmed sustained improvement in left-sided biliary drainage, with complete clinical resolution and no recurrence of cholangitic symptoms. Cholangioscopy provided decisive diagnostic and therapeutic benefit in PSC–UC with complex intrahe-

patic obstruction, achieving complete ductal clearance and accurate intraductal tissue evaluation. This procedure demonstrates particular value when conventional ERCP alone fails to achieve adequate ductal evaluation or complete therapeutic management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP351 Closure of polypectomy scar with the XTACK endoscopic suture system

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DOI 10.1055/s-0046-1821678

Introduction Endoscopic suturing is a complementary technique to the resection of lesions of the gastrointestinal tract mucosa, specifically applied in large gastric and colonic lesions resected by mucosal resection or submucosal dissection techniques. The objective of the technique is to perform suturing of the eschar after the procedure in order to reduce associated complications, mainly perforation and bleeding.

Clinical Case A 65-year-old male with a history of multiple cardiac and nephrological conditions underwent gastroscopy due to anemia. A large 6 cm polypoid formation was observed on the posterior wall of the gastric antrum, with a wide base of implantation that spared the pylorus, suggesting an inflammatory polyp as the first option (photo 1). Fragmentary resection of the lesion was performed after elevation with indigo-gelafundin-adrenaline dilution, with good endoscopic results (photo 2) and recovering fragments for pathological anatomy, which resulted in tubular adenocarcinoma on a hyperplastic polyp invading at least the muscularis mucosa without lymphovascular invasion, with margins that could not be assessed due to fragmented resection. Subsequently, it was decided to close the eschar with the X-Tack suture system without immediate or short-term complications (photos 3 and 4). This was discussed in a multidisciplinary session, and conservative treatment was decided upon due to the patient's history.

Conclusion The endoscopic suture system has established itself as an effective method for closing large mucosal defects. It guarantees closure in areas that cannot be covered by conventional clips, which has represented a breakthrough in advanced endoscopic management. The use of the endoscopic suture system has been widely accepted in the treatment of large mucosal defects, as it allows for the closure of defects that would otherwise be impossible to close with conventional clips.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP352 Atypical case of Proctitis in High-Risk Cohorts

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DOI 10.1055/s-0046-1821679

Abstract Text

A 44-year-old male with a history of recent high-risk sexual exposure presented to the Gastroenterology clinic reporting constipation of four months' duration and distal rectorrhagia. A diagnostic colonoscopy was performed, which revealed multiple nonspecific, circular, non-elevated, whitish lesions (2–3 mm in diameter) in the last two centimeters of the rectum, suggestive of infectious proctitis (Images 1–3). Histopathological analysis identified interstitial spiro-

chetosis, and *Mycobacterium avium* was concurrently isolated in the microbiological specimen.

The patient was also assessed by Dermatology due to a generalized cutaneous rash, oral ulcers and the aforementioned symptomatology. PCR testing on the rectal ulcer sample confirmed Lymphogranuloma Venereum (LGV) due to *Chlamydia trachomatis* serovars L1-L3. Furthermore, PCR analysis of an oral ulcer sample yielded positive results for *Treponema pallidum*. Based on the strong suspicion of both oral and rectal luetic secondary disease, the patient received treatment consisting of Benzathine Penicillin G 2.4 million units IM and a 3-week course of Doxycycline for the management of lymphogranuloma venereum. This regimen resulted in an adequate serological response and favorable clinical evolution. A follow-up rectoscopy is scheduled to definitively exclude the persistence of the associated *Mycobacterium avium* infection and its indication to be treated [1–6].

Syphilitic proctitis—an uncommon manifestation of secondary syphilis—along with LGV proctitis (secondary to *C. trachomatis* L1-L3 serovars) both constitute infrequent causes of proctitis. Nevertheless, their incidence has demonstrably risen over the past decades, particularly within high-risk sexual cohorts (accounting for up to 23 % and 47 % of proctitis cases in men who have sex with men (MSM), a subgroup where LGV is the most prevalent cause of proctitis) and in patients co-infected with HIV. Clinical presentation is often asymptomatic or may mimic Inflammatory Bowel Disease (IBD) or colorectal carcinoma, frequently featuring nonspecific endoscopic findings. This mandates a high index of clinical suspicion, a rigorous differential diagnosis, serological assays, and the meticulous collection of biopsies and microbiological samples for definitive detection. Complete clinical and endoscopic resolution is typically achieved following appropriate antimicrobial therapy. Failure to treat can lead to severe complications, including progression to proctocolitis, strictures, fibrosis, fistula or abscess formation, or even colonic perforation.

It is paramount to systematically include syphilis and lymphogranuloma venereum in the differential diagnosis of proctitis, particularly within high-risk patient populations, in order to prevent misdiagnosis and mitigate the risk of subsequent morbidities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hall R, Patel K, Poullis A, Pollok R, Honap S. Separating Infectious Proctitis from Inflammatory Bowel Disease-A Common Clinical Conundrum. *Microorganisms*. 2024;
- [2] Bathobakae L, Russo J, Bashir R, Vidreiro A, Phuu P, Wilkinson T, Sharma N, Yuridullah R, Amer K, Siau K. Novelty in the gut: a review of the gastrointestinal manifestations of syphilis. *Scand J Gastroenterol*. 2024;
- [3] Williamson DA, Chen MY. Emerging and Reemerging Sexually Transmitted Infections. *N Engl J Med*. 2020;
- [4] Stoner BP, Cohen SE. Lymphogranuloma Venereum 2015: Clinical Presentation, Diagnosis, and Treatment. *Clin Infect Dis*. 2015;
- [5] Soni S, Srirajakanthan R, Lucas SB, Alexander S, Wong T, White JA. Lymphogranuloma venereum proctitis masquerading as inflammatory bowel disease in 12 homosexual men. *Aliment Pharmacol Ther*. 2010;
- [6] Workowski KA, Bachmann LH, Chan PA, Johnston CM, Muzny CA, Park I, Reno H, Zenilman JM, Bolan GA. Sexually Transmitted Infections Treatment Guidelines, 2021. *MMWR Recomm Rep*. 2021;

eP353 Full thickness resection device (FTRD) in pT1 colorectal cancer

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DOI 10.1055/s-0046-1821680

Aims Endoscopic resection of pT1 tumors is effective if certain histological criteria for a good prognosis are met, including a resection margin > 1 mm. The FTRD (Full Thickness Resection Device) system allows resection of the entire wall thickness, making it possible to assess the presence of residual tumor [1–5].

The aim is to evaluate the role of FTRD and its safety as a complementary treatment in pT1 with borderline histological margins.

Methods Observational, descriptive, retrospective study of patients with endoscopic scar resection using FTRD between March 2023 and June 2025.

Results A total of 8 FTRD resections were performed on scars from previously resected lesions with pT1 adenocarcinoma histology with a resection margin < 1 mm and no evidence of macroscopic residual lesion. The mean age was 67 years, with 88 % being male. In all cases except one, polypectomy (mean size 17 mm) was performed on a fragment. The histology was adenocarcinoma, and the risk factors for lymphatic metastasis (not assessable in fragmented resection) were: well or moderately differentiated, no vasculolymphatic involvement, and low tumor budding. For pedunculated polyps, the Haggitt score was ≤ 3, and for sessile polyps, the Kikuchi score was ≤ SM2. In the anatomy after FTRD, no foci of adenocarcinoma were observed except in the scar of the fragmented polyp. There were no complications or recurrences during follow-up.

Conclusions Scar resection using FTRD is an effective and safe technique that allows the treatment of pT1 tumors with positive resection margins and without high histological risk, avoiding the comorbidity and costs associated with oncological surgery. Our study shows that in the resection of the polyp in a single fragment, residual disease is 0 % despite a borderline resection margin.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mão de-Ferro S, Castela J, Pereira D, Chaves P, Dias Pereira A. Endoscopic Full-Thickness Resection of Colorectal Lesions with the New FTRD System: Single-Center Experience. *GE Port J Gastroenterol*. 2019; 26 (4): 235–241. doi:10.1159/000493808 Epub 2018 Dec 17 PMID: 31328137 PMID: PMC6624659
- [2] Mueller J, Kuellmer A, Schiemer M, Thimme R, Schmidt A. Current status of endoscopic full-thickness resection with the full-thickness resection device. *Dig Endosc*. 2023; 35 (2): 232–242. doi:10.1111/den.14425 Epub 2022 Sep 29 PMID: 35997598
- [3] Wedi E, Orlandini B, Gromski M, Jung CFM, Tchoumak I, Boucher S, Ellenrieder V, Hochberger J. Full-Resort Endoscopic Treatment: Initial Clinical Experience and Review of the Current Literature. *Clin Endosc*. 2018; 51 (1): 103–108. doi:10.5946/ce.2017.093 Epub 2018 Jan 31 PMID: 29397654 PMID: PMC5806922 Thickness Resection Device for Complex Colorectal Lesions in High-Risk Patients as a Last-
- [4] Dutch eFTR Group Zwager LW, Bastiaansen BAJ, van der Spek BW, Heine DN, Schreuder RM, Perk LE, Weusten BLAM, Boonstra JJ, van der Sluis H, Wolters HJ, Bekkering FC, Rietdijk ST, Schwartz MP, Nagengast WB, Ten Hove WR, Terhaar Sive Droste JS, Rando Munoz FJ, Vlug MS, Beaumont H, Houben MHMG, Seerden TCJ, de Wijkerslooth TR, Gielisse EAR, Hazewinkel Y, de Ridder R, Straathof JA, van der Vlugt M, Koens L, Fockens P, Dekker E Endoscopic full-thickness resection of T1 colorectal cancers: a retrospective analysis from a multicenter Dutch eFTR registry. *Endoscopy*. 2022; 54 (5): 475–485. doi:10.1055/a-1637-9051 Epub 2022 Jan 12 PMID: 34488228
- [5] Johnstone MS, McSorley ST, McMahon AJ. Management of malignant T1 colorectal cancer polyps: results from a 10-year prospective observational study. *Colorectal Dis*. 2023; 25 (10): 1960–1972. doi:10.1111/codi.16716 Epub 2023 Aug 23 PMID: 37612791

eP354 WHEN ERCP ALONE ISN'T ENOUGH: A Single-centre Experience with Cholangioscopy-guided Lithotripsy for Complex Biliary Stones

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DOI 10.1055/s-0046-1821681

Aims Endoscopic Retrograde Cholangiopancreatography (ERCP) is the recommended procedure for the management of choledocholithiasis. Different modalities of cholangioscopy-assisted intraductal therapy, including laser lithotripsy and electrohydraulic lithotripsy (EHL), have been developed for managing difficult biliary stones 1. However, these have been associated with a higher risk of adverse events (6%-15%), mainly cholangitis 2. Difficult biliary stones are defined by their diameter (> 1.5 cm), number, unusual shape, and anatomical factors that can prevent their removal 3.

We aimed to evaluate the effectiveness of cholangioscopy-guided EHL using data collected prospectively at a single high-volume tertiary referral centre (450 – 500 ERCP procedures annually).

Methods We included all patients who underwent acholangioscopy-assisted EHL for choledocholithiasis from October 2018 to September 2025.

All procedures were performed by two expert endoscopists (> 50 procedures/year) with a single-operator cholangioscopic system. Technical success was defined as complete stone clearance. The primary endpoint was the number of cholangioscopy-assisted EHL sessions needed to achieve full stone clearance. Patient-related factors (e.g. stone burden) and procedure-related variables were analysed [1–4].

The complications recorded were post-ERCP pancreatitis (PEP), cholangitis, upper gastrointestinal haemorrhage (UGIH), and perforation (which were graded as mild, moderate, or severe⁴) occurring during or within 30 days post-procedure.

Results A total of 81 EHL procedures were performed in 75 patients (49 females, 65.3%). The median age was 73 years (range 29-95). Complete stone clearance was achieved in a single session in 68 patients (90.7%); one additional procedure was required in 6 patients (8%), and two procedures were required in a single patient. Overall, the technical success rate was 100%. EHL was used as the first-line therapy in 11 patients (14.7%). Conversely, 44 (58.8%) had undergone one prior ERCP, 14 (18.6%) had undergone two, and 6 (8.0%) had undergone three or more ERCP procedures before the EHL session. All procedures were done with anaesthetist-supported deep sedation or general anaesthesia.

Regarding the choledocholithiasis profile, the median size was 17mm (range 8-40mm). The number of stones varied, with one stone present in 45 interventions (55.6%), and ≥ 2 stones in 36 (44.4%). After EHL, the stone fragments were removed with a balloon catheter in all the procedures. In 42 procedures (51.9%), sphincteroplasty was necessary to achieve complete clearance. Case-by-case analysis showed that EHL use was influenced not only by stone size/number but the shape (e.g. faceted), the location (e.g. cystic duct), the presence of a stricture, or Mirizzi syndrome.

Prophylactic intravenous antibiotics were given peri-procedure, followed by a 3- to 5-day oral course (except cases with active treatment due to infection). Rectal Diclofenac (100mg) was administered to all patients unless contraindicated.

There were complications in 8 procedures (9.9%): One case of PEP (1.2%), two cases of UGIH (2.5%), four cholangitis (4.9%), and one perforation (1.2%). Five were mild, three were moderate. None of them had a native papilla.

Conclusions Overall, our data showed that EHL is an effective and safe technique for managing complex choledocholithiasis when conventional ERCP has failed. Our complication rate was comparable to that reported in the literature. Cholangitis was more frequent, as expected with intraductal therapy, but remained within reported ranges.

Given high success rates in achieving complete stone clearance with EHL, we would recommend performing cholangioscopy/EHL following an incomplete stone clearance attempt at index ERCP, particularly if failure is due to difficult stones.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Trikudanathan G, Navaneethan U, Parsi MA. Endoscopic management of difficult common bile duct stones. *World J Gastroenterol* 2013; 19 (2): 165–73
- [2] Dumonceau J-MD, Kapral CK, Aabakken L, Papanikolaou IS, Tringali A, Vanbiervliet G et al. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy*. 2020; 52 (2): 127–49
- [3] Buxbaum J, Abbas Fehmi A, Sultan S, Fishman D, Qumseya B. ASGE guideline on the role of endoscopy in the evaluation and management of choledocholithiasis. *Gastrointest Endosc* 2019; 89 (6): 1075–105
- [4] Manes G, Paspatis G, Aabakken L, Anderloni A, Arvanitakis M. Endoscopic management of common bile duct stones: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy*. 2018; 51 (5): 472–91

eP355V Radiologically-guided combined antegrade and retrograde dilatation (CARD) for complete oesophageal obstruction

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DOI 10.1055/s-0046-1821682

Abstract Text

Oesophageal strictures are a recognised complication of radiotherapy treatment for head, neck and oesophageal cancers. Dilatation of the completely obstructed oesophagus may require combined antegrade and retrograde dilatation (CARD). Retrograde endoscopic access may be achieved by dilatation of an existing gastrostomy site. Whilst effective, complications have been reported from gastrostomy dilatation, and from passage of the endoscope.

This is the first video report of a radiologic retrograde approach for management of occlusive oesophageal stricture. We describe a case of a completely occluded oesophagus, post-radical chemoradiotherapy for mid-oesophageal squamous cell carcinoma, which was successfully recanalized by CARD using a novel, exclusively radiologic retrograde approach.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/7fadd647-8953-4291-a1a5-4057d3f5877c/Uploads/19978_CARD_abstract%20ESGE%20no%20logos.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP356 An unusual case of dyspepsia: a case report

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DOI 10.1055/s-0046-1821683

Background: Although breast cancer (BC) is the most common malignancy in women, metastatic involvement of upper gastrointestinal (UGI) tract is uncommon. UGI metastases may affect quality of life and overall survival, but presenting with nonspecific symptoms, diagnosis may be delayed.

Case Presentation: We describe the case of a 70-year-old woman with a history of invasive lobular breast carcinoma diagnosed and treated with left mastectomy and axillary dissection. Despite adjuvant chemotherapy, bones metastasis were diagnosed 7 years later. Chemotherapeutic agents were administered during the years with stability of the bones metastasis and no other organ involvement at the follow-up CT scans. 5 years after, she underwent

EGD for progressive dyspepsia, vomiting, and weight loss. Endoscopy revealed a gastric mucosa with granular-aspect, congestion, edema, redness and multiple confluent fibrotic ulcers of 1 to 2 cm. Moreover, multiple duodenal polypoid lesions, ranging from 3 to 10 mm, with central depression and non-adenomatous pattern at digital chromoendoscopy were identified. Biopsies were performed on gastric ulcers and polypoid lesions. Histopathology demonstrated localization of lobular breast carcinoma, with immunohistochemical expression of GATA3 and lack of E-cadherin, CDX2 and the receptors for estrogen, progesterone, and HER2 proteins. According to the metastatic involvement of UGI tract, supportive palliative care was proposed. The patient was still alive 3 month after endoscopy [1–3].

Conclusion: UGI metastasis from breast carcinoma are rare, but they should be considered in patients with history of BC presenting with persistent UGI symptoms. Early recognition is crucial for the appropriate oncological management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yoo K.C., Kim D.H., Park S., Yun H.Y., Ryu D.H., Lee J., Son S.M. 2024; Gastric Metastasis Mimicking Early Gastric Cancer from Invasive Ductal Carcinoma.
- [2] Geada L., Kantor M., Mohan K., Weingrad D., Nasiff L.S. 2020 An Uncommon Presentation of a Common Disease: A Review of Gastric Metastasis From Breast Carcinoma. *Cureus*. doi:10.7759/cureus.11920
- [3] Cheng M., Jia Z., Zhang G., Wang Y., Li S., Yang S., Li C., Geng C. 2024; Gastric metastasis from breast cancer: five cases and a single-institutional review. *Journal of International Medical Research* 52 (3):. doi:10.1177/03000605241233988

eP357 Traditional and modified endoscopic mucosal resection techniques for colorectal polyps over 15mm: a systematic review and network meta-analysis

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DOI 10.1055/s-0046-1821684

Aims Traditional endoscopic mucosal resection (T-EMR) is the primary endoscopic technique for resecting large size sessile colorectal lesions. However, the potential for residual adenomatous tissue to be found at the EMR site at surveillance colonoscopy remains problematic. Therefore, more recently, several modified EMR techniques have been developed including underwater EMR (U-EMR), cold EMR (C-EMR), tip-in EMR (TI-EMR), cap-assisted EMR (CA-EMR), and the addition of thermal ablation of resection margins following T-EMR using snare tip soft coagulation (STSC) or argon plasma coagulation (APC). However, few randomized controlled trials (RCTs) directly compare these modified techniques with T-EMR, thus limiting clinical decision making. Therefore, to compare the effectiveness and safety of different EMR techniques, we conducted a systematic review and network meta-analysis [1–17].

Methods We searched PubMed, Embase, and the Cochrane Library from inception to April 2025 for RCTs comparing EMR techniques for the treatment of colorectal polyps ≥ 15 mm. We estimated relative risks (RRs) with 95% credible interval (CrI) for dichotomous outcomes using Bayesian network meta-analysis. To assess the credibility of each comparison, we used Confidence in Network Meta-Analysis (CINeMA).

Results We included 17 RCTs with 2,832 polyps resected, using seven different EMR techniques: T-EMR (16 studies, 1,263 polyps); U-EMR (6 studies, 303 polyps); C-EMR (4 studies, 437 polyps); CA-EMR (1 study, 143 polyps); TI-EMR (2 studies, 92 polyps); and thermal ablation of resection margins (STSC: 3 studies, 440 polyps and APC: 3 studies, 154 polyps). As compared to T-EMR, U-EMR,

CA-EMR, and T-EMR plus thermal ablation were all associated with significantly lower residual adenomatous tissue rates at surveillance colonoscopy, while C-EMR showed higher residual adenomatous tissue rates. SUCRA values for risk of residual adenomatous tissue with each technique were (higher SUCRA values = lower risk of residual adenomatous tissue): CA-EMR: 0.836; T-EMR plus STSC: 0.826; TI-EMR: 0.687; T-EMR with APC: 0.544; U-EMR: 0.413; T-EMR: 0.189; C-EMR: 0.007. There was no statistically significant difference between T-EMR and TI-EMR for residual adenoma rates, but TI-EMR was associated with higher rates of R0 resection than T-EMR. As compared to T-EMR, en-bloc resection rates were superior using U-EMR, yet lower with C-EMR. Intraprocedural bleeding was lower with C-EMR, CA-EMR and T-EMR. C-EMR and T-EMR also had lower rates of delayed bleeding, and perforation rates were lower with C-EMR.

Conclusions As compared with T-EMR, all modified EMR techniques appear to be effective, except C-EMR, which consistently demonstrated higher residual adenomatous tissue rates at surveillance colonoscopy. However, these outcomes should be viewed with caution given the imprecision of TI-EMR outcomes and limited data for CA-EMR. Therefore, the choice of colorectal EMR technique should be individualized based on patient and lesion characteristics as well as endoscopist EMR technical experience.

Conflicts of Interest Dr Ian Gralnek: Olympus, Medtronic, Motus GI, ERGO GI, Viatrix.

References

- [1] Underwater versus conventional endoscopic resection of nondiminutive nonpedunculated colorectal lesions: a prospective randomized controlled trial (with video) Vol. 91: United States 2020;
- [2] Steinbrück I, Ebigo A, Kuellmer A, Schmidt A, Kouladouros K, Brand M et al. Cold Versus Hot Snare Endoscopic Resection of Large Nonpedunculated Colorectal Polyps: Randomized Controlled German CHRONICLE Trial. *Gastroenterology*. 2024; 167 (4): 764–77
- [3] Rodríguez Sánchez J, Alvarez-Gonzalez MA, Pellisé M, Coto-Ugarte D, Uchima H, Aranda-Hernández J et al. Underwater versus conventional EMR of large nonpedunculated colorectal lesions: a multicenter randomized controlled trial. *Gastrointest Endosc* 2023; 97 (5): 941–951.e2
- [4] Rex D, Anderson J, Pohl H, Lahr R, Judd S, Antaki F et al. Cold versus hot snare resection with or without submucosal injection of 6- to 15-mm colorectal polyps: a randomized controlled trial. *Gastrointest Endosc* 2022; 96 (2): 330–338
- [5] Oh CK, Cho YS, Lee SH, Lee BI. Anchoring endoscopic mucosal resection versus conventional endoscopic mucosal resection for large nonpedunculated colorectal polyps: a randomized controlled trial. *Endoscopy*. 2023; 55 (2): 158–64
- [6] O’Sullivan T, Cronin O, van Hattem WA, Mandarino FV, Gauci JL, Kerrison C et al. Cold versus hot snare endoscopic mucosal resection for large (≥ 15 mm) flat non-pedunculated colorectal polyps: a randomised controlled trial. *Gut*. 2024; 73 (11): 1823–30
- [7] Nogales O, Carbonell Blanco C, Montori Pina S, Pellisé M, Martínez Semper JF, Riu Pons F et al. Cold snare endoscopic mucosal resection versus standard hot technique for large flat nonpedunculated colonic lesions: a randomized controlled trial. *Endoscopy*. 2025; 57 (8): 851–61
- [8] Lenz L, Martins B, Andrade de Paulo G, Kawaguti FS, Baba ER, Uemura RS et al. Underwater versus conventional EMR for nonpedunculated colorectal lesions: a randomized clinical trial. *Gastrointest Endosc* 2023; 97 (3): 549–58
- [9] Li D, Wang W, Xie J, Liu G, Wang R, Jiang C et al. Efficacy and safety of three different endoscopic methods in treatment of 6-20 mm colorectal polyps. *Scand J Gastroenterol* 2020; 55 (3): 362–70
- [10] Le QD, Le NQ, Quach DT. Underwater Versus Conventional Endoscopic Mucosal Resection for Colorectal Laterally Spreading Tumors: A Post Hoc Analysis of Efficacy. *JGH Open Open Access. J Gastroenterol Hepatol* 2024; 8 (12): e70075
- [11] Imai K, Hotta K, Ito S, Yamaguchi Y, Kishida Y, Yabuuchi Y et al. Tip-in Endoscopic Mucosal Resection for 15- to 25-mm Colorectal Adenomas: A Single-Center, Randomized Controlled Trial (STAR Trial). *Am J Gastroenterol* 2021; 116 (7): 1398–405
- [12] Deng Q, Wu Z, Li J, Liang G, Yang C. Underwater endoscopic mucosal resection is superior to conventional endoscopic mucosal resection for medi-

um-sized colorectal sessile polyps: a randomized controlled trial. *Sci Rep* 2024; 14 (1): 30172

[13] Brooker JC, Saunders BP, Shah SG, Thapar CJ, Suzuki N, Williams CB. Treatment with argon plasma coagulation reduces recurrence after piecemeal resection of large sessile colonic polyps: a randomized trial and recommendations. *Gastrointest Endosc* 2002; 55 (3): 371–5

[14] Albuquerque W, Arantes VN, Coelho LGV, Dias CAF, Savassi-Rocha PR. Complementation by argon plasma coagulation after endoscopic piecemeal resection of large colorectal adenomas. *Rev Col Bras Cir* 2013; 40 (5): 404–8

[15] Klein A, Tate DJ, Jayasekaran V, Hourigan L, Singh R, Brown G et al. Thermal Ablation of Mucosal Defect Margins Reduces Adenoma Recurrence After Colonic Endoscopic Mucosal Resection. *Gastroenterology*. 2019; 156 (3): 604–613.e3

[16] Conio M, Manta R, Filiberti RA, Baron TH, Pasquale L, Marini M et al. Cap-assisted EMR versus standard inject and cut EMR for treatment of large colonic laterally spreading tumors: a randomized multicenter study (with videos). *Gastrointest Endosc* 2022; 96 (5): 829–839.e1

[17] Nagl S, Ebigo A, Goelder SK, Roemmele C, Neuhaus L, Weber T et al. Underwater vs Conventional Endoscopic Mucosal Resection of Large Sessile or Flat Colorectal Polyps: A Prospective Randomized Controlled Trial. *Gastroenterology*. 2021; 161 (5): 1460–1474.e1

eP358 Correlation between sMARIA Score and Simple Endoscopic Score (SES-CD) in Crohn's Disease

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DOI 10.1055/s-0046-1821685

Aims Thanks to recent technological advances enabling rapid acquisition and the acquisition of high-resolution images, and given the absence of radiation, entero-MRI plays an essential role in the evaluation and monitoring of patients with Crohn's disease. The aim of our study was to compare the performance of entero-MRI to endoscopy in assessing disease severity in Crohn's disease.

Methods This is a retrospective descriptive study including patients followed for Crohn's disease. Disease activity was assessed using the sMARIA score on entero-MRI and the simple endoscopic score (SES) on endoscopy.

Results 37 patients were included, with an average age of 39,1 ± 11,77 years. The sex ratio M/F was equal to 2. The disease location was ileal (L1) in 3 patients (14.3%), colonic (L2) in 1 patient (4.7%), and ileo-colic (L3) in 17 patients (81%). An inflammatory phenotype (B1) was observed in 7 patients (33.3%), a stenosing phenotype (B2) in 13 patients (61.9%) and a fistulizing/penetrating phenotype in 7 patients (33.3%). A significant correlation was observed between the sMARIA radiological score and endoscopic activity of Crohn's disease with a statistically significant difference ($p = 0.020$). Significant performance of the sMARIA score was observed in predicting endoscopic disease activity (AUC = 0.675; CI = 0.463–0.886, $p = 0.119$). An sMARIA score greater than 1 was correlated with severe endoscopic activity, with a sensitivity and specificity of 66% and 54%, respectively.

Conclusions In our study, there was a positive correlation between the sMARIA and the SES in assessing Crohn's disease activity. This radiological score should be used in practice to optimize patient management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP359 Ileocolonoscopy versus Entero-MRI for detecting complications in Crohn's disease: a comparative study

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DOI 10.1055/s-0046-1821686

Aims Ileocolonoscopy is usually used in Crohn's disease to check flare-up of the disease. Yet, entero-MRI shows more – like the bowel wall and nearby areas – which might spot inflammation missed during scopes. Our aim is to study the performance of entero-MRI compared to ileocolonoscopy in assessing disease complications.

Methods We conducted a retrospective descriptive study including 37 patients having confirmed Crohn's disease. Patients done both an entero-MRI and a colonoscopy. The time between the two explorations did not exceed one month. For every test, we noted if strictures, ulcers, or fistulas showed up. After that, we checked how accurate each method was – also how closely their results matched.

Results 37 patients were included, with an average age of 39,1 ± 11,77 years. The sex ratio M/F was equal to 2. The disease location was ileal (L1) in 3 patients (14.3%), colonic (L2) in 1 patient (4.7%), and ileo-colic (L3) in 17 patients (81%). An inflammatory phenotype (B1) was observed in 7 patients (33.3%), a stenosing phenotype (B2) in 13 patients (61.9%) and a fistulizing/penetrating phenotype in 7 patients (33.3%). Comparison of endoscopic and MRI data revealed that these two techniques were nearly equivalent in detecting deep gastrointestinal ulcers ($p = 0.100$). Endoscopy has allowed the detection of more superficial ulcerations than enterography (MRI) (0.04). However, entero-MRI was more efficient than endoscopy in detecting strictures, with a statistically significant difference ($p = 0.001$). Also, MRI appears to be superior to endoscopy in detecting deep fistulas ($p = 0.013$).

Conclusions In our study, entero MRI was superior to endoscopy in detecting stricture and abdominal fistulas. Ileocolonoscopy was more effective for detecting superficial ulcerations. These two investigations are complementary in order to obtain a complete assessment of the lesions, allowing for optimal management of patients with Crohn's disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP360 Transesophageal EUS-Guided FNB for Diagnosis of Right Lower Lobe Lung Adenocarcinoma: A Case Report

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DOI 10.1055/s-0046-1821687

Introduction: Lung mass biopsy is sometimes not feasible using EBUS, making a multidisciplinary approach essential; therefore, we present this case as a representative example.

Case report: A 74-year-old woman presented with a 27 × 16 mm pulmonary nodule in the right lower lobe on chest CT, adjacent to the esophagus [Image 1], suspicious for malignancy. As the lesion was not accessible by EBUS, she was referred to our Unit to evaluate the feasibility of a transesophageal lung biopsy using endoscopic ultrasound (EUS). EUS examination identified—at 30 cm from the dental arcade, near nodal station 8—a hypoechoic pulmonary lesion measuring 29 × 7 × 11 mm, in contact with the esophagus but without invasion of its wall, showing smooth borders on the esophageal side and irregular borders on the pulmonary side [Images 2 and 3].

Fine-needle biopsy (FNB) was performed using a 25G needle, with three passes employing fanning technique and 12–15 to-and-fro movements per pass [Image 4]. Prophylactic antibiotics (ciprofloxacin 400 mg IV) were administered beforehand. The procedure was completed without complications.

Histology demonstrated large cells with abundant cytoplasm, anisokaryosis, irregular nuclear contours, and heterogeneous chromatin, arranged in glandular structures, positive for TTF1 and negative for p53 and synaptophysin, consistent with pulmonary adenocarcinoma [Image 5 and 6].

Discussion Diagnosing central lung masses adjacent to the esophagus can be challenging, as they may not be accessible for biopsy via bronchoscopy or EBUS. In such cases, EUS has emerged as a complementary tool for tissue acquisition, allowing transesophageal sampling of central pulmonary lesions, with a diagnostic accuracy of 87.5–93.4% and an adverse event rate of 0.7–5.36%, mostly self-limited mild bleeding. These data support the role of EUS as a safe and effective alternative when conventional strategies cannot reach the lesion [1–4].

In our case, the pulmonary lesion was located near nodal station 8, which is not accessible via EBUS. EUS enabled direct, stable, and safe access, yielding sufficient material to confirm the diagnosis. We opted for a 25G needle to theoretically reduce bleeding risk, although no statistically significant differences in adverse event rates have been reported compared with 22G needles. In conclusion, EUS-guided transesophageal biopsy is a valid alternative for central pulmonary lesions that are not accessible by EBUS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Giri S, Angadi S, Afzalpurkar S, Nanjegowda SK, Bhargumalla S, Sundaram S. Transesophageal endoscopic ultrasound-guided tissue acquisition of lung masses: a case series with systematic review and meta-analysis. *Annals of Gastroenterology* 2023; 36 (2): 185–194
- [2] Mangiavillano B, Spatola F, Facciorusso A, De Nucci G, Ligresti D, Eusebi LH, Lisotti A, Auriemma F, Lamonaca L, Paduano D, Crinò S, Scarlata S, Troncone E, Del Vecchio Blanco G, Manes G, Traina M, Bertani A, Ofosu A, Binda C, Fabbri C, Muscatiello N, Fusaroli P, Repici A, Carrara S. Transesophageal endoscopic ultrasound in the diagnosis of the lung masses: a multicenter experience with fine-needle aspiration and fine-needle biopsy needles. *Eur J Gastroenterol Hepatol* 2022; 34 (7): 757–62
- [3] Vilmann P, Frost Clementsen P, Colella S, Siemsen M, De Leyn P, Dumonceau J-M, Herth FJ, Larghi A, Vazquez-Sequeiros E, Hassan C, Crombag L, Koveaer DA, Konge L, Annema JT. Combined endobronchial and esophageal endosonography for the diagnosis and staging of lung cancer: European Society of Gastrointestinal Endoscopy (ESGE) Guideline, in cooperation with the European Respiratory Society (ERS) and the European Society of Thoracic Surgeons (ESTS). *Endoscopy*. 2015; 47 (6): 545–59
- [4] Rizzo GEM, Traina M, Ligresti D, Carrozza L, Rancatore G, Liotta R, Bertani A, Tarantino I. EUS-guided transesophageal fine-needle biopsy sampling of lung masses: diagnostic performance and safety. *Gastrointest Endosc* 2025; 101 (2): 436–440.e3

eP361 Comparative characteristics of changes in reflux disease in patients with morbid obesity after surgical treatment

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DOI 10.1055/s-0046-1821688

Aims Comparison of the dynamics of metabolic effects of performing different methods of bariatric interventions on the course of reflux disease in patients with morbid obesity in the early and late postoperative period.

Methods 71 patients with morbid obesity, aged 21 to 65 years, were examined. Among the patients, there were 36 (50.7%) women and 35 (49.3%) men. The stratification of patients was carried out depending on the method of bariatric intervention: Group I – 30 (42.3%) patients: biliopancreatic bypass in the Hess-Marceau modification; Group II – 41 (57.7%) patients – sleeve gastrectomy. According to the body mass index, the patients were distributed almost evenly: Group 1 – 10 (33% – obesity grade 2) and 20 (67% – obesity grade 3), Group 2 – 14 (34.1% – obesity grade 2) and 27 (65.9% – obesity grade 3). Upper endoscopy was performed on all patients in the preoperative period: in group I, 12 (40%) patients were diagnosed with reflux esophagitis (A, B and C according to the LA classification); in group II, 19 (46%) patients (also mild and moderate GERD). Patients were treated for 2 weeks, endoscopic control was not performed before surgery [1–3].

Results In the postoperative period, not only the dynamics of changes in body weight of patients, but also the course of reflux disease were analyzed. Analysis of the dynamics of indicators within 3 years after bariatric interventions, both in general and in terms of different techniques and gender of patients, proved the fact of intensive reduction of body weight and, accordingly, BMI, within 12 months after BPS and in the period of 3–6 months in patients after sleeve gastrectomy. Achievement of statistical comparability of BMI indicators in both groups ($p > 0.05$) occurred already after 3–6 months in women, and after 1.5 years after surgery in men. Postoperatively, upper endoscopy was performed 3 years later: reflux disease was detected in 9 (30%) patients in group I and in 8 (19.5%) patients in group II (► Table 1).

► **Table 1** Distribution of patients with reflux disease after bariatric surgery

Severity of reflux esophagitis	Group 1: biliopancreatic bypass in the Hess-Marceau, number of studies (n = 30)	Group 2: sleeve gastrectomy, number of studies
(n = 41)		
A	3 (10%)	4 (9,8%)
B	5 (16,6%)	4 (9,8%)
C	1 (3,3)	-
D	-	
Total	9 (30%)	8 (19,5%)

Conclusions Bariatric surgical methods of treating obesity can be considered as a treatment for GERD: in patients who underwent biliopancreatic bypass in the Hess-Marceau, a decrease in the number of GERD episodes was observed in the postoperative period from 12 (40%) to 9 (30%) cases; after sleeve gastrectomy from 19 (46%) to 8 (19.5%). Better results are observed after sleeve gastrectomy, which also correlates with a decrease in BMI at an earlier stage after this intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Iossa A, Martini L, De Angelis F, Micalizzi A, Watkins BM, Silecchia G, Cavallaro G. Leaks after laparoscopic sleeve gastrectomy: 2024 update on risk factors. *Langenbecks Arch Surg* 2024; 409 (1): 249. doi:10.1007/s00423-024-03424-7 PMID: 39136791
- [2] Dobrowolski P, Prejbisz A, Kuryłowicz A, Baska A, Burchardt P, Chlebus K, Dzida G, Jankowski P, Jaroszewicz J, Jaworski P, Kamiński K, Kapłon-Cieślicka A, Kłoczek M, Kukla M, Mamcarz A, Mastalerz-Migas A, Narkiewicz K, Ostrowska L, Śliż D, Tarnowski W, Wolf J, Wyleżół M, Zdrojewski T, Banach M, Januszewicz A, Bogdański P. Metabolic syndrome – a new definition and management guidelines: A joint position paper by the Polish Society of Hypertension, Polish Society for the Treatment of Obesity, Polish Lipid Association, Polish Association for Study of Liver, Polish Society of Family Medicine, Polish Society of Lifestyle Medicine, Division of Prevention and Epidemiology Polish Cardiac Society, "Club 30" Polish Cardiac Society, and Division of Metabolic and Bariatric Surgery Society of Polish Surgeons. *Arch Med Sci*. 2022; 18 (5): 1133–1156. doi:10.5114/aoms/152921 PMID: 36160355 PMID: PMC9479724
- [3] Bannuru RR ADA Professional Practice Committee (PPC). Introduction and methodology: Standards of Care in Overweight and Obesity-2025. *BMJ Open Diabetes Res Care*. 2025; 13: (Suppl 1):e004928. doi:10.1136/bmjdr-2025-004928 PMID: 40379435

eP362 Intestinal intussusception as a capsule endoscopy finding in a patient with Crohn's disease: a case report

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DOI 10.1055/s-0046-1821689

Abstract Text

Intussusception is defined as the invagination of one segment of the bowel into an immediately adjacent segment. In adults, it is uncommon and typically secondary to structural lesions such as tumors, polyps, Meckel's diverticulum, postsurgical changes, or inflammatory conditions affecting the small bowel [1, 2].

We present the case of a 19-year-old male followed in the Gastroenterology clinic for Crohn's disease with upper gastrointestinal involvement (A1L4B1), treated with intravenous infliximab 5 mg/kg every 8 weeks. He had a prior admission for acute pancreatitis the previous year, attributed to active duodenal disease causing biliary obstruction.

Since the pancreatitis episode, the patient had experienced at least three episodes of severe abdominal pain, although laboratory markers—including C-reactive protein and fecal calprotectin—remained within normal range. He reported no diarrhea or extraintestinal manifestations. Given the possibility of subclinical disease activity, follow-up endoscopic studies (colonoscopy and upper endoscopy) were performed, both without significant findings.

Capsule endoscopy was subsequently conducted, demonstrating prolonged capsule retention for over 90 minutes in the mid-jejunum, with an image suggestive of intestinal intussusception. The mucosa proximal and distal to the intussusception appeared normal, and no lesions compatible with active Crohn's disease were identified on the examination.

This case illustrates an exceptionally uncommon presentation of jejunal intussusception in a young adult with Crohn's disease, occurring in the absence of biochemical, clinical, or endoscopic evidence of active inflammation, underscoring its diagnostic relevance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Chetcuti Zammit S, Yadav A, McNamara D, Bojorquez A, Carretero-Ribón C, Keuchel M, Baltes P, Margalit-Yehuda R, Kopylov U, Sidhu R, Marmo C, Riccioni ME, Dray X, Leenhardt R, Rondonotti E, Giulia S, Micallef K, Ellul P ICARE. Where does capsule endoscopy fit in the diagnostic algorithm of small bowel intussusception? *Dig Liver Dis* 2023; 55 (12): 1719–1724

[2] Hetcuti Zammit S, Yadav A, McNamara D, Bojorquez A, Carretero-Ribón C, Keuchel M, Baltes P, Margalit-Yehuda R, Kopylov U, Sidhu R, Marmo C, Riccioni ME, Dray X, Leenhardt R, Rondonotti E, Giulia S, Micallef K, Ellul P ICARE. Where does capsule endoscopy fit in the diagnostic algorithm of small bowel intussusception? *Dig Liver Dis* 2023; 55 (12): 1719–1724

eP363 EUS-guided radiofrequency ablation for adrenal gland metastases: A rare therapeutic indication

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DOI 10.1055/s-0046-1821690

Introduction Surgical resection remains the main therapeutic option for abdominal metastases. However, a considerable number of patients are not suitable candidates for surgery due to high operative risk, advanced age, comorbidities, or unresectable disease. In recent years, minimally invasive alternatives have been introduced, with endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) emerging as a valuable option for local tumor control. This technique enables targeted ablation of adrenal lesions while reducing morbidity, shortening hospital stay, and improving tolerance compared with conventional surgery. Although its use has been more extensively evaluated in pancreatic or peripancreatic lesions, evidence regarding adrenal gland metastases is still limited. Therefore, EUS-RFA may represent a particularly relevant approach in selected patients when curative or consolidative intent is pursued [1, 2].

Case Report A 77-year-old man was diagnosed with oropharyngeal squamous cell carcinoma and initially managed with chemoradiotherapy. Due to cervical oligoprogression during follow-up, salvage surgery was performed, and treatment continued with immunotherapy (nivolumab). 5 years later, surveillance PET-CT revealed a hypermetabolic lesion in the left adrenal gland (Figure 1), raising suspicion of metastatic disease. Endoscopic ultrasound revealed a solid adrenal mass, and fine-needle biopsy confirmed metastatic squamous cell carcinoma. Considering the patient's characteristics and underlying comorbidities, EUS-RFA was selected as a local therapeutic alternative. The procedure was performed one half year later without intra- or post-procedural complications. Subsequent imaging demonstrated complete resolution of the adrenal lesion. Immunotherapy was discontinued thereafter, and the patient has remained clinically stable without radiological evidence of recurrence to date.

Conclusion EUS-RFA represents a promising therapeutic alternative for patients with adrenal metastases who are not suitable for surgery. It offers a safe, effective, and well-tolerated option that allows satisfactory short- and mid-term oncologic control with low complication rates. However, existing evidence remains limited, and further prospective studies with larger sample sizes are required to better define standardized indications and confirm long-term outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Cho S.H. "Expanded indication for EUS-guided radiofrequency ablation." *Gastrointestinal Endoscopy* 2023; 2023: 02639–9

[2] Figueiredo Ferreira M., Garces-Duran R., Eisendrath P. et al. "Endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) of pancreatic/peripancreatic tumors and oligometastatic disease: a prospective multicenter study." *Endoscopy International Open* vol. 10: 2022; pp E1380–E1385

eP364V Endoscopic Findings of Ischemic Gastropathy in Cirrhotic Patients: Beyond Portal Hypertension

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DOI 10.1055/s-0046-1821691

Abstract Text

A 66-year-old man with alcoholic cirrhosis on anticoagulation for atrial fibrillation was admitted with anemia, melena, hypotension, dehydration, and acute renal failure. Labs showed coagulopathy and hypoperfusion. Urgent gastroscopy revealed superficial longitudinal gastric ulcers from the upper body to prepyloric region, without active bleeding or portal hypertension. Biopsies excluded infection and other causes. Findings were consistent with ischemic gastropathy, likely due to systemic hypoperfusion and cirrhosis. Endoscopic features include erythematous, congested mucosa with superficial ulceration. Early endoscopic recognition is essential for accurate diagnosis and management, preventing misdiagnosis in cirrhotic patients presenting with upper gastrointestinal bleeding [1].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/9db69990-5d9b-447f-b0e5-5ab9f8af65db/Uploads/19978_Ischemic_Gastropathy.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Clinical Gastroenterology and Hepatology: The Official Clinical Practice Journal of the American Gastroenterological Association. 2014; 12 (2): 246–52.e1

eP365V Diagnosing Hepatocellular Carcinoma Through the Bile Duct: A Rare Presentation with Quincke's Triad

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DOI 10.1055/s-0046-1821692

Abstract Text

Quincke's triad is a rare presentation of hepatocellular carcinoma (HCC). This case describes the use of endoscopic retrograde cholangiopancreatography (ERCP) and cholangioscopy in the diagnosis of HCC. An 83-year-old man presented with hypotension, right upper quadrant tenderness, and melena. Laboratory tests showed haemoglobin 8.7 g/dL and obstructive jaundice. Oesophagogastroduodenoscopy revealed haemobilia. ERCP demonstrated no obvious structure or mass on cholangiogram. Cholangioscopy revealed bleeding from friable, ulcerated mucosa with frond-like projections in the third order of the right intrahepatic ducts. Targeted biopsies obtained and haemostasis achieved by catheter-directed infusion of diluted adrenaline and cold saline. Imaging showed two segment eight lesions with arterial phase enhancement and wash-out. Histology from the ERCP biopsy confirmed diagnosis of HCC [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/75d30c1a-4169-4174-93ac-7650ced34396/Uploads/19978_HCC_quinckes%20XYLoo%20720.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Qin LX, Tang ZY. Hepatocellular carcinoma with obstructive jaundice: diagnosis, treatment and prognosis. *World J Gastroenterol* 2003; 9 (3): 385–91. doi:10.3748/wjg.v9.i3.385

[2] Huang JF, Wang LY, Lin ZY, Chen SC, Hsieh MY, Chuang WL, Yu MY, Lu SN, Wang JH, Yeung KW, Chang WY. Incidence and clinical outcome of icteric type hepatocellular carcinoma. *J Gastroenterol Hepatol* 2002; 17 (2): 190–5. doi:10.1046/j.1440-1746.2002.02677.x

eP366 Integrating contrast-enhanced CT/MR and contrast-harmonic EUS into real-life management of solid pancreatic lesions in an emergency hospital

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DOI 10.1055/s-0046-1821693

Aims ESGE and EFSUMB guidelines recommend multimodal imaging, including contrast-enhanced CT/MR (CE-CT/MR) and contrast-harmonic EUS (CH-EUS), for evaluation of solid pancreatic lesions. However, integration of these modalities into the workflow of a mixed emergency–endoscopy unit remains challenging. This study evaluated the diagnostic performance of CE-CT/MR, CH-EUS, and EUS-FNA/FNB against the final reference diagnosis, and assessed adherence to ESGE performance indicators for EUS tissue acquisition (EUS-TA).

Methods We retrospectively analyzed 124 consecutive patients with solid pancreatic lesions evaluated over 36 months. Final diagnosis was determined by histopathology and/or 6-month follow-up, yielding 104 cases with definitive malignant or benign outcomes (malignant 91.3 %). CH-EUS, CE-CT/MR, and EUS-FNA/FNB results were compared with the reference standard using standard diagnostic metrics. ESGE quality indicators (EUS-TA rate, diagnostic adequacy, and adverse events) were calculated from procedural data. Clinical and technical determinants of sampling performance were explored [1].

Results For ADK-only diagnosis, CH-EUS achieved a sensitivity of 97.5 % and a specificity of 72.5 %. CE-CT/MR yielded a sensitivity of 81.0 % and a specificity of 50.0 %. EUS-FNA/FNB demonstrated a sensitivity of 89.9 % and a specificity of 75.0 %. ESGE performance benchmarks were fulfilled, with EUS-TA performed in 95.2 % of lesions, a diagnostic adequacy rate of 90.3 %, and no recorded adverse events. Correct EUS-FNA/FNB diagnosis correlated with elevated CA19-9 and the presence of cholestasis, whereas needle type and number of passes did not significantly influence adequacy.

Conclusions These data are very consistent with the concept that CH-EUS is the best “rule-out” tool (do not miss malignancy), while EUS-FNA/FNB is the best “rule-in” tool (confirm malignancy and the specific type of malignancy when cytology/histology is positive). CT/MR remains important for staging and initial triage, but not for fine discrimination of benign vs malignant solid lesions.

In an emergency hospital environment, CH-EUS provides high diagnostic accuracy for solid pancreatic lesions compared with CT/MR, while EUS-FNA/FNB maintain full compliance with ESGE quality benchmarks for EUS-TA. Integrating CH-EUS early in the diagnostic pathway enhances real-world performance and supports the feasibility of guideline-concordant care even in busy emergency hospitals.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bunganič B, Laclav M, Dvořáková T, Bradáč O, Traboulsi E, Suchánek Š, Frič P, Zavoral M. Accuracy of EUS and CEH EUS for the diagnosis of pancreatic tumours. *Scand J Gastroenterol*. 2018; 53 (10/11): 1411–1417. doi:10.1080/00365521.2018.1524023 Epub 2018 Nov 5 PMID: 30394143

eP367 Efficacy and Safety of Diclofenac versus Placebo in Preventing Post-ERCP Pancreatitis: systematic review and meta-analysis

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DOI 10.1055/s-0046-1821694

Aims To evaluate the efficacy and safety of diclofenac compared with placebo for the prevention of post-ERCP (endoscopic retrograde cholangiopancreatography) pancreatitis.

Methods We conducted a comprehensive search of PubMed, Scopus, Web of Science, Embase, and Cochrane from their inception to November 2025, focusing on randomized controlled trials (RCTs) evaluating diclofenac versus placebo in the prevention of post-ERCP pancreatitis. Meta-analyses were performed using a random-effects model. Odds ratios (ORs), hazard ratios (HRs), and mean differences (MDs) were calculated with 95 % confidence intervals (CIs) to assess the efficacy and safety of diclofenac versus placebo.

Results Four randomized trials assessing low-dose diclofenac for prevention of post-ERCP pancreatitis (PEP) were included (n = 708; diclofenac n = 353, control n = 355). Overall, diclofenac **did not significantly reduce** the incidence of PEP compared with control (pooled RR = 0.55; 95 % CI, 0.20–1.50; p = 0.24). However, there was **marked variability across studies (I² = 70.7 %, p = 0.02)**. Trials evaluating rectal diclofenac demonstrated substantial benefit, particularly Khoshbaten 2008 (RR = 0.15; 95 % CI, 0.04–0.65) and Otsuka 2012 (RR = 0.21; 95 % CI, 0.05–0.90). In contrast, studies using low-dose rectal diclofenac (Katoh 2020) or oral administration (Cheon 2007) showed no protective effect. These findings suggest that **clinical efficacy depends on dose and route of administration**, with higher-dose rectal diclofenac showing the greatest preventive effect.

Conclusions Rectal diclofenac is a safe and effective prophylaxis for post-ERCP pancreatitis, showing greater benefit than placebo, especially at higher doses. Its efficacy is route-dependent, as oral and low-dose formulations do not provide meaningful protection. Overall, rectal administration offers the most reliable preventive effect without increasing adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP368 A rare case of overlap between autoimmune enteropathy and ARBI enteropathy

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DOI 10.1055/s-0046-1821695

Abstract Text

A 75-year-old woman was admitted to our department for weight loss (25 kg in 10 months) and chronic diarrhea (> 6 months). In history: hypertension in Olmesartan 20 mg/day, multinodular goiter. The patient was already tested for anti-transglutaminase antibodies (negative, IgA in normal range) but EGDS showed severe duodenal villous atrophy. On suspicion of ARBIs-associated enteropathy, olmesartan was suspended with partial but not complete benefit on clinical. During hospitalization, the patient presented asthenic, occasionally soporific, severely malnourished (Table 1) and with a picture of pan-cytopenia (Table 1). We excluded neurological (brain CT scan), infectious (blood cultures and co-cultures) and hematologic (bone marrow biopsy) causes. Ultrasound of the intestinal loops and ileo-colonoscopy were normal. Video capsule endoscopy showed marked scalloping of DII and jejunum with extensive ulcers (Figure 1). Later, she performed at referral center antegrade double-balloon enteroscopy (DBE). DBE confirmed marked atrophy and map ulcers primarily suggestive of refractory celiac disease type II/EATL with ulcerative jejuno-ileitis. Histologic examination described findings referable to chronic exacerbated, erosive enteritis, not diagnostic for celiac disease. HLA search for celiac disease was negative therefore celiac disease was excluded. Hemotransfusions and nutritional supplementation were administered in consideration of anemia and nutritional deficiency. Empiric/ex juvantibus therapy with steroid was also set up with marked improvement in symptomatology. Following hospitalization, she was re-evaluated on an outpatient basis at enteropathy referral center. Here she was first imposed high-dose steroid therapy with marked improvement and weight gain, then Azathioprine in maintenance. She was therefore discharged with a diagnosis of autoimmune enteropathy with likely previous overlap with sartane enteropathy [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] van Wanrooij RJ et al. Adult-Onset Autoimmune Enteropathy in an European Tertiary Referral Center. *Clin Transl Gastroenterol* 2021; 12 (8): e00387. doi:10.14309/ctg.0000000000000387 PMID: 34333499 PMID: PMC8323799
- [2] Schieppati A et al. Nomenclature and diagnosis of seronegative coeliac disease and chronic non-coeliac enteropathies in adults: the Paris consensus. *Gut*. 2022; 71 (11): 2218–2225. doi:10.1136/gutjnl-2021-326645 Epub 2022 Jun 8 PMID: 35676085 PMID: PMC9554081

eP369V Emergency colonoscopy for rectal ulcer bleeding: Argon Plasma Coagulation failure rescued by underwater snare-tip coagulation and self-assembling peptide hydrogel

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DOI 10.1055/s-0046-1821696

Abstract Text

Lower gastrointestinal bleeding poses a significant challenge, especially in patients receiving combined antithrombotic therapy. We report a 72-year-old patient who, following major surgery, developed a myocardial infarction and was started on dual antiplatelet therapy plus low molecular weight heparin. Then, he experienced severe rectal bleeding requiring transfusion. Colonoscopy revealed a circumferential rectal ulcer with a large adherent clot; after clot removal, active oozing from a visible vessel was noted. Argon plasma coagulation failed due to deeply located bleeding. Underwater snare-tip coagulation allowed stable vessel contact and precise energy delivery, achieving complete hemostasis. Self-assembling peptide hydrogel was applied to promote mucosal healing and reduce rebleeding risk. This case highlights the need for adaptable endoscopic strategies in heightened bleeding risk patients [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7c81a151-f77f-43e2-9626-0dd7fe7cba84/Uploads/19978_Ulcera_retto%20-%20ESGEDays.mp4

Conflicts of Interest Antonio Capogreco is a consultant of ERBEAlessandro Repici is a consultant of ERBE, Medtronic, Fujifilm and OlympusCesare Hassan is a consultant of Alphasigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax Roberta Maselli is a consultant of ERBE, Fujifilm, 3DMatrix and Boston Scientific

References

- [1] Elshaer A, Abraham NS. Management of Anticoagulant and Antiplatelet Agents in Acute Gastrointestinal Bleeding and Prevention of Gastrointestinal Bleeding. *Gastrointest Endosc Clin N Am*. 2024;
- [2] Oakland K, Chadwick G, East JE, Guy R, Humphries A, Jairath V, McPherson S, Metzner M, Morris AJ, Murphy MF, Tham T, Uberoi R, Veitch AM, Wheeler J, Regan C, Hoare J. Diagnosis and management of acute lower gastrointestinal bleeding: guidelines from the British Society of Gastroenterology. *Gut*. 2019;
- [3] Triantafyllou K, Gkolfakis P, Gralnek IM, Oakland K, Manes G, Radaelli F, Awadie H, Camus Duboc M, Christodoulou D, Fedorov E, Guy RJ, Hollenbach M, Ibrahim M, Neeman Z, Regge D, Rodriguez de Santiago E, Tham TC, Theil-Schmidt P, van Hooft JE. Diagnosis and management of acute lower gastrointestinal bleeding: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2021;

eP370 From suspicious cystic mass to liver abscess: diagnosis and treatment by EUS

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DOI 10.1055/s-0046-1821697

Abstract Text

Hepatic and perihepatic cystic lesions may present with heterogeneous radiologic characteristics that overlap with neoplastic, infectious, and biliary etiologies, posing a diagnostic challenge in the context of biliary obstruction¹. We present the case of a 68-year-old woman who initially developed biliary colic and was diagnosed with chronic calculous cholecystitis and high-risk choledocholithiasis. CT scan demonstrated a choledochal stone at the intrapancreatic portion of the common bile duct, along with additional cholelithiasis [1–4].

ERCP was performed, revealing three filling defects measuring approximately 12 mm each. Complete ductal clearance was not achieved despite appropriate maneuvers and biliary stent was placed. Given the persistence of biliary obstruction, a magnetic resonance cholangiopancreatography study was obtained three days after ERCP. This demonstrated a large capsular lesion located in hepatic segment VIII, measuring 147 × 95 × 63 mm. Additionally, CA 19-9 was reported at 1366 U/mL, a finding that raised concern for a biliary or cystic neoplasm.²

Two weeks later, the patient was referred to our center for further evaluation. Endoscopic ultrasound revealed a well-defined, homogeneous hypochoic mass exerting significant extrinsic compression on the gastric wall, measuring

121 × 77 mm. Because imaging alone could not provide a definitive diagnosis, a decision was made to perform fine-needle puncture using a 19-gauge needle.³ Puncture of the lesion resulted in immediate drainage of purulent material, establishing the diagnosis of a hepatic abscess. Given the volume of purulent content and the mass effect on adjacent structures, an endoscopic drainage strategy was selected. A 20 × 10-mm lumen-apposing metal stent (LAMS) was deployed under EUS guidance, achieving rapid and effective internal drainage. Microbiologic evaluation confirmed infection with *Escherichia coli*. The patient completed targeted antibiotic therapy. Her clinical evolution was favorable, and a follow-up CT scan obtained one month after the procedure demonstrated near-complete resolution of the hepatic lesion. Subsequent ERCP and surgical gallbladder removal were performed.

This case illustrates the essential role of EUS in clarifying equivocal hepatobiliary lesions initially suspected to be neoplastic, and demonstrates the clinical effectiveness of LAMS-guided drainage as a minimally invasive therapy for large hepatic abscesses. The multidisciplinary evaluation and stepwise therapeutic decision-making allowed full patient recovery and resolution of both the abscess and the biliary obstruction.⁴

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mudireddy PR, Gaduputi V, Tariq H, Vennalaganti P. Endoscopic ultrasound-guided drainage of hepatic abscess using a lumen-apposing metal stent. *Clin Gastroenterol Hepatol* 2018; 16 (9): e145–6. doi:10.1016/j.cgh.2017.11.046
- [2] Polkowski M, Jenssen C, Kaye P, Carrara S, Deprez PH, Gines A et al. Technical aspects of endoscopic ultrasound-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Guideline. *Endoscopy* 2017; 49 (10): 1024–42. doi:10.1055/s-0043-119219
- [3] Lin MS, Huang JX, Yu H. Elevated serum level of carbohydrate antigen 19-9 in benign biliary stricture diseases can reduce its value as a tumor marker. *Int J Clin Exp Med* 2014; 7 (3): 744–50. doi:10.3892/ijcem.2014.1941
- [4] Mortelet KJ, Ros PR. Cystic focal liver lesions in the adult: differential CT and MR imaging features. *Radiographics*. 2001; 21 (4): 895–910. doi:10.1148/radiographics.21.4.g01j106895

eP371 Kaposi Sarcoma of the GI tract in a Renal Transplant Recipient: A Rare Endoscopic Finding of Iatrogenic Immunosuppression

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DOI 10.1055/s-0046-1821698

Abstract Text

Kaposi sarcoma (KS) is an HHV-8–associated vascular malignancy that most commonly occurs in the setting of HIV infection but may also develop in immunosuppressed, HIV-negative solid-organ transplant recipients. Post-transplant KS is rare, accounting for only 0.4–5 % of malignancies, and visceral involvement—particularly of the gastrointestinal (GI) tract—is highly uncommon. We describe a case of disseminated KS with gastric, duodenal, and colonic involvement in an HIV-negative renal transplant recipient presenting with chronic diarrhea [1–8].

We present the case of a 56-year-old HIV-negative woman with a history of renal transplantation who developed disseminated Kaposi sarcoma following prolonged immunosuppression. The patient had been receiving azathioprine after previous intolerance to mycophenolate. She presented with chronic diarrhea and progressive painful cutaneous lesions involving the genital, perineal, and perianal regions. Skin biopsy demonstrated spindle cell proliferation with HHV-8 positivity, confirming KS. Subsequent PET/CT imaging revealed extensive nodal, cutaneous, and pulmonary involvement, along with nonspecific FDG uptake in the stomach and colon.

Gastrointestinal evaluation was pursued due to persistent diarrhea and abnormal imaging findings. Laboratory studies, including thyroid function, fecal calprotectin, fecal elastase, celiac serology, and infectious GI PCR panel, were unremarkable. Endoscopic assessment revealed multiple raised, erythematous lesions throughout the stomach, duodenum, and colon. Histology from these sites confirmed Kaposi sarcoma with spindle cell proliferation and HHV-8 positivity.

This case reflects the role of chronic immunosuppression as the primary pathogenic driver of KS in HIV-negative transplant recipients. Calcineurin inhibitors and azathioprine are recognized to potentiate HHV-8 reactivation and tumor development. Conversely, mTOR inhibitors such as sirolimus and everolimus possess anti-angiogenic and antiproliferative properties and have been associated with regression of KS lesions. Based on this evidence, immunosuppression was modified by discontinuing azathioprine and transitioning to everolimus with low-dose tacrolimus. Systemic treatment with liposomal doxorubicin was initiated due to disseminated disease.

Although well documented in HIV-positive individuals, colonic Kaposi sarcoma remains rare in HIV-negative transplant recipients. Review of the literature demonstrates only a small number of comparable cases, emphasizing that gastrointestinal KS can present with nonspecific symptoms such as diarrhea and may only be diagnosed through endoscopic biopsy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Youmbissi TJ, Krüger H, Brunkhorst R et al. Gastrointestinal Kaposi's sarcoma in renal-transplant patients: report of nine cases. *Q J Med* 1989; 73 (272): 1143–1149
- [2] El Fassi D, Gollig M, Seckinger J et al. Isolated intestinal Kaposi's sarcoma in a kidney transplant patient: diagnostic difficulty. *Nephro-Urol Mon* 2011; 3 (3): 204–206
- [3] Singh S, Pardi DS, Talwalkar JA et al. De novo Kaposi sarcoma in an HIV-negative liver transplant recipient with ulcerative colitis and primary sclerosing cholangitis. *Case Rep Transplant* 2025 Article ID 4699128. doi:10.1155/2025/4699128
- [4] Lebbé C, Legendre C, Francès C. Kaposi sarcoma in transplantation. *Transplant Rev* 2008; 22 (4): 252–61
- [5] Penn I. Kaposi's sarcoma in transplant recipients. *Transplantation*. 1997; 64 (5): 669–73
- [6] Ensoli B, Stürzl M. Kaposi's sarcoma: a result of the interplay among inflammatory cytokines, angiogenic factors and viral agents. *Cytokine Growth Factor Rev* 1998; 9 (1): 63–83
- [7] Cesarman E, Mesri EA, Gershon PD. Kaposi sarcoma: mechanisms and pathogenesis. *Nat Rev Cancer* 2019; 19 (11): 697–710
- [8] Antman K, Chang Y. Kaposi's sarcoma. *N Engl J Med* 2000; 342 (14): 1027–38

eP372 Endoscopic Band Ligation for Esophageal Dieulafoy Lesion: A Rare Presentation

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DOI 10.1055/s-0046-1821699

Abstract Text

Dieulafoy's lesion is an uncommon vascular abnormality characterized by a large-caliber, tortuous submucosal arteriole that fails to taper as it approaches the mucosal surface. This anomaly can lead to sudden and severe upper gastrointestinal bleeding despite the absence of a visible ulcer or mucosal defect. Although it accounts for less than 2 % of cases of acute gastrointestinal hemorrhage, it remains a potentially life-threatening condition. The stomach, par-

ticularly the proximal lesser curvature, is the most frequent location; however, esophageal involvement is extremely rare, making careful endoscopic assessment essential when the bleeding source is not immediately evident [1–3].

We present the case of a 79-year-old man who arrived at the emergency department with presyncope, generalized weakness, mucocutaneous pallor, melena, and coffee-ground vomiting. Initial laboratory tests demonstrated a hemoglobin level of 6 g/dL, requiring transfusion and urgent endoscopic evaluation. During gastroscopy, a small red clot was identified in the distal esophagus, approximately 3 cm above the cardia. When gently displaced with the endoscope, brisk pulsatile bleeding was observed without an evident underlying mucosal injury, suggesting a Dieulafoy's lesion (Forrest I). Immediate endoscopic therapy was performed using elastic band ligation, achieving complete hemostasis with no further bleeding events. The patient remained clinically stable with no recurrence during follow-up.

Esophageal Dieulafoy's lesions pose significant diagnostic challenges due to their subtle appearance and uncommon location. Awareness of this entity is crucial, since failure to recognize it may delay treatment and worsen outcomes. Endoscopic therapy is considered first-line management, with band ligation and hemostatic clips demonstrating high success rates. Given the possibility of rebleeding, close monitoring and follow-up are recommended. This case highlights the importance of maintaining a high index of suspicion for Dieulafoy's lesions in patients with severe upper gastrointestinal bleeding and emphasizes the effectiveness of early endoscopic intervention in ensuring hemostasis and preventing complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Boutari R, Houmani ZS, Tarhini Y, Mroue AG. Esophageal Dieulafoy's Lesion: A Rare and Life-Threatening Cause of Massive Upper Gastrointestinal Bleeding Successfully Treated With Argon Plasma Coagulation. *Cureus*. 2025;
- [2] Robles-Fernandes LF et al. Esophageal Dieulafoy's lesion treated with band ligation. *Revista Gastroenterología de México*. 2023; Páginas 446–448
- [3] Inayat F, Ullah W, Hussain Q, Hurairah A. Dieulafoy's lesion of the oesophagus: a case series and literature review. *BMJ Case Rep*. 2017;

eP373 One Marker for All Territories? Fecal Calprotectin Across the Different Locations of Crohn's Disease

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DOI 10.1055/s-0046-1821700

Aims Fecal calprotectin is a widely used non-invasive biomarker to assess intestinal inflammation in Crohn's disease (CD). However, its reliability may vary depending on the anatomical location of disease involvement.

The objective of this study was to investigate the correlation between disease location, fecal calprotectin levels, and endoscopic disease activity measured by the Crohn's Disease Endoscopic Index of Severity (CDEIS).

Methods We conducted a retrospective study including 172 patients with Crohn's disease who underwent both fecal calprotectin testing and ileocolonoscopy with CDEIS scoring.

Disease locations were classified according to the Montreal classification: L1 (ileal), L2 (colonic), L3 (ileocolonic), L4 (upper gastrointestinal), and L3L4 (combined ileocolonic and upper GI involvement).

Statistical analyses were performed using **Jamovi software**. Spearman's rank correlation was used to assess the relationship between fecal calprotectin and CDEIS scores, both globally and stratified by disease location. Comparisons of calprotectin and CDEIS values across locations were made using the **Kruskal-Wallis test**, as data were not normally distributed.

Results Among the 172 patients included, fecal calprotectin demonstrated a moderate and statistically significant correlation with endoscopic activity across the entire cohort (Spearman's $\rho = 0.53$, $p < 0.001$). When analyzed by disease location, the strongest correlations were observed in colonic disease (L2: $\rho = 0.62$) and combined ileocolonic and upper GI involvement (L3L4: $\rho = 0.76$). Ileal disease (L1) showed a moderate correlation ($\rho = 0.41$), while isolated ileocolonic (L3: $\rho = 0.30$) and upper GI disease (L4: $\rho = 0.26$) showed weaker associations. A perfect correlation in the L1L4 subgroup ($\rho = 1.00$) was noted but was limited by the very small sample size. Despite these differences, Kruskal-Wallis tests revealed no statistically significant differences in calprotectin levels ($p = 0.99$) or CDEIS scores ($p = 0.89$) across the various disease locations.

Conclusions Fecal calprotectin demonstrates a good overall correlation with endoscopic disease activity in Crohn's disease, reinforcing its usefulness as a monitoring tool regardless of disease location. Although stronger correlations were noted in colonic and extended disease forms, no statistically significant differences were found across locations. These findings suggest that fecal calprotectin can be reliably used as a location-independent marker of mucosal inflammation in Crohn's disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP374 Comparative Analysis of Endoscopic Ultrasound and PET-CT Findings in the Diagnosis and Characterization of Pancreatic Masses

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DOI 10.1055/s-0046-1821701

Aims The diagnosis of pancreatic masses presents a significant clinical challenge due to their malignant potential. Endoscopic Ultrasound (EUS) and Positron Emission Tomography-Computed Tomography (PET-CT) are critical evaluation modalities. This study aimed to evaluate and compare EUS and PET-CT findings in a cohort of patients with pancreatic masses.

Methods Data from 94 consecutive patients evaluated with both EUS and PET-CT between 2020 and 2025 were retrospectively analyzed.

Results Histopathological examination revealed 84 malignant (89.4%) and 10 benign (10.6%) masses. EUS demonstrated a smaller median mass size in benign lesions (20 mm vs 30 mm; $p = 0.005$) and showed vascular invasion in 60.7% of malignant cases. PET-CT detected a lower median SUV-max in benign lesions (6 vs 8; $p = 0.023$). Median CA 19-9 levels were higher in the malignant group (216 U/mL vs 45 U/mL; $p = 0.039$). The highest diagnostic accuracy was the EUS endosonographic impression, based on ROC analysis. The AUCs (95% CI, p-value) were: EUS impression, 0.744 (95% CI: 0.583-0.905, $p = 0.002$); EUS size, 0.701 ($p = 0.011$); EUS vascular invasion, 0.647 ($p = 0.063$); PET-CT qualitative assessment, 0.601 ($p = 0.201$); and PET-CT SUV-max, 0.568 ($p = 0.399$). Kaplan-Meier analysis showed that median overall survival for patients with a benign EUS impression (49 months) was significantly longer than for those with a malignant impression (16 months) (log-rank $p = 0.001$). EUS-detected vascular invasion was associated with shorter median overall survival (6 months vs 24 months in its absence) (log-rank $p = 0.001$).

Conclusions These findings underscore the complementary roles of EUS and PET-CT. Integration of clinical information, imaging findings, and biomarker data is essential for optimal diagnosis and management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP375 From Rarity to Resection: Successful Endoscopic Full-Thickness Resection of Colonic Schwannomas

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DOI 10.1055/s-0046-1821702

Introduction Colonic schwannoma is an extremely rare neurogenic tumor of the gastrointestinal tract, often presenting as incidental finding or with non-specific gastrointestinal symptoms. The diagnosis can be challenging due to overlapping endoscopic and imaging features with other subepithelial lesions. Traditional management has relied on surgical resection, yet advances in endoscopic techniques have enabled minimally invasive alternatives. We report two cases of colonic schwannoma successfully managed by Endoscopic Full-Thickness Resection (EFTR).

Case Report 1 A 66-year-old man with a medical history of arterial hypertension and pacemaker under aspirin therapy was referred to our department due to an asymptomatic suspected subepithelial lesion, incidentally found during an outpatient screening colonoscopy, with inconclusive biopsy results. Endoscopy ultrasound showed a 12*10-mm heterogeneous hypoechoic lesion arising from the submucosal layer. After multidisciplinary discussion, a minimally invasive endoscopic resection was proposed by Endoscopic Submucosal Dissection (ESD). During colonoscopy, a 12-mm subepithelial lesion was identified at the proximal sigmoid colon with superficial erosion. During the clip-band traction-assisted ESD, the involvement of muscularis propria layer was observed leading to a switch for EFTR using the colonic FTRD system (Ovesco Endoscopy, Tübingen, Germany). A transmural en-bloc resection was achieved with no complication. Histopathological analysis revealed a R0-resection of a S-100 positive spindle-cell tumor, compatible with a reticular/microcystic-type schwannoma [1, 2].

Case Report 2 A 60-year-old woman with a medical history of arterial hypertension was referred to our department for evaluation of an asymptomatic subepithelial lesion, incidentally identified during an outpatient screening colonoscopy. It was decided for minimally invasive endoscopic resection at multidisciplinary meeting. A 10-mm yellowish and firm-elastic subepithelial lesion at the cecum with no involvement of appendix was observed in the therapeutic colonoscopy, with non-lifting sign. An EFTR was attempted with an en-bloc transmural resection of the lesion after being grasped into the cap using the colonic FTRD system, with no complications. A schwannoma was diagnosed on histopathological examination with positivity for S-100, SOX-10 and CD-68.

Conclusion EFTR proved to be an effective and safe minimally invasive approach for the management of small colonic schwannomas regardless colonic location. EFTR may represent a valuable alternative to conventional surgical resection for selected patients with subepithelial colonic tumors up to 20/25-mm, depending on the lesion consistency and the presence of fibrosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bohlok A, El Khoury M, Bormans A et al. Schwannoma of the colon and rectum: a systematic literature review. *World J Surg Oncol* 2018; 16 (1): 125
- [2] Cai MY, Zhong YS, Zhou PH et al. Feasibility of endoscopic full-thickness resection in the treatment of colorectal submucosal tumors. *Zhonghua Wei Chang Wai Ke Za Zhi* 2012; 15 (7): 679–681

eP376 Enhancing Endoscopic Retrograde Cholangiopancreatography (ERCP) Care in a UK NHS District General Hospital – Successful modernisation of a Local Service

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DOI 10.1055/s-0046-1821703

Aims Endoscopic Retrograde Cholangiopancreatography (ERCP) is a complex therapeutic procedure often requiring temporary stent placement. While clinical success hinges on technical skill, the quality of the consenting process is equally imperative for patient understanding, satisfaction, procedural safety and reduces medicolegal risk. Furthermore, if not removed or exchanged in a timely manner, retained stents can cause serious sequelae such as cholangitis, biliary obstruction, ductal damage, or perforation, while increasing length of stay and need for further investigations. In many institutions, the consent for ERCP often occurs on the day of the procedure, occasionally under significant time pressure. This practice can limit the opportunity for meaningful patient discussion, potentially reducing understanding, satisfaction and concordance. The primary aim of this project was to ameliorate the ERCP process via pre-consenting, as well as to develop a robust, integrated stent tracking system within the electronic patient record (EPR).

Methods A retrospective review was conducted over an 8-month period across two years (April 2024 – July 2025). All ERCP procedures were included and data was extracted from EPR and local audit records. Baseline measurements assessed the proportion of patients pre-consented prior to the day of procedure, with inpatient (IP) and outpatient (OP) sub-analysis. Pre-consent clinic slots were made available weekly. OP identified for ERCP were offered an appointment in this clinic, during which consent discussions were held and educational material provided. For IP, registrars consented patients during the admission. An enhanced ERCP patient information leaflet that included simplified explanations of procedure indications, risks, recovery expectations and contact information. The leaflet was reviewed and approved by the local endoscopy user group prior to implementation. A multidisciplinary working group involving endoscopy and the digital informatics teams convened to formulate a stent tracking tool within our EPR. Temporary stents and relevant data (type, date of insertion, planned removal date) were inputted and extracted into a live Excel tracker (► Table 1).

Results A total of 116 procedures were analysed and a marked improvement in pre-consenting rates was observed post intervention with pre-consenting rates increasing from 26% to 48%. OP pre-consent rates doubled from 28% to 55%, while IP completion also upgraded from 22% to 39%. Qualitative feedback from clinicians highlighted improved workflow efficiency, reduction in on-the-day administrative delays and enhanced patient understanding. Patients were reported to be more informed and confident during pre-assessment, allowing more meaningful discussions about risks, alternatives and expectations. The EPR-linked stent tracking module was successfully embedded, ensuring that every temporary stent inserted was logged for follow-up. Early post-implementation audit confirmed 100% accuracy of data capture for stent tracking fields, demonstrating the reliability of the digital workflow.

► Table 1

Period	Total ERCPs	Inpatients (IP)	Outpatients (OP)	Pre-consented (n)	% Pre-consented	% IP Pre-consented	% OP Pre-consented
Apr–Jul 2024	47	18	29	12	25.5 %	22.2 %	27.6 %
Apr–Jul 2025	69	31	38	33	47.8 %	38.7 %	55.3 %

Conclusions This service improvement initiative demonstrates that pre-consent can substantially improve preparedness for ERCP procedures. Pre-consenting represents more than an administrative step, it embodies patient-centred care. By providing information early, patients can reflect, discuss with family members and make informed decisions without time pressure. The redesigned pre-consent workflow and automated stent tracking support safer, more consistent pathways. Updates to the ERCP patient information leaflet, enhances access to clear, standardised information. The addition of automated stent tracking promotes continuity of care beyond the procedure and reduces risk associated with retained temporary stents, as well as being JAG mandated. Future steps include introducing patient-facing digital consent options and maintaining continuous audit cycles to ensure sustained improvement and patient-centred outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP377 Emphasizing outcomes: Systematic Review of EUS-Guided Radiofrequency Ablation Compared with Surgery for Pancreatic Insulinoma

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DOI 10.1055/s-0046-1821704

Aims Objective Minimally invasive techniques, including endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA), have been proposed as potential alternatives to surgery for the treatment of pancreatic insulinomas (IP). The aim of this systematic review was to synthesize existing evidence on the safety, efficacy, and long-term outcomes of EUS-RFA compared with traditional surgical approaches [1].

Methods Methods A systematic search was conducted in PubMed, Scopus, and Embase databases up to 2024. Inclusion was limited to studies reporting on the treatment of IP with either EUS-RFA or surgery that provided data on complications, clinical response, recurrence, and long-term follow-up. Strict selection criteria were applied, and the PRISMA guidelines were followed for the review process. Data on follow-up duration (up to 24–36 months) and monitoring strategies (clinical and radiological) were analyzed as secondary outcomes.

Results Results Out of 742 identified articles, 22 studies met the inclusion criteria. Evidence indicated that EUS-RFA had a superior safety profile compared with surgery, with a low rate of adverse events. Effectiveness in normalizing glucose levels and controlling hypoglycemic symptoms was similar between the approaches. Long-term follow-up (24–36 months) in most studies showed stability of clinical response, with sporadic recurrences typically managed with repeat EUS-RFA procedures. However, methodological heterogeneity and the limited number of comparative studies remain significant limitations.

Conclusions Conclusion Current evidence suggests that EUS-RFA represents a safe and effective alternative to surgery for patients with pancreatic insulinoma, offering clear advantages in terms of invasiveness and recovery time. Long-term outcome data are promising, but the evidence remains fragmented.

Prospective, comparative, and standardized studies are required to definitively establish the role of EUS-RFA as a first-line therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lahlali T. et al. 2023; Safety and efficacy of endoscopic ultrasound-guided radiofrequency ablation for pancreatic insulinoma: A single-center experience. Endoscopic Ultrasound. 10 patients, 100% technical success, low adverse events

eP378 Bridging the Disconnection: ERCP Management of Pancreatic Ascites and Pseudocysts in a High-Risk Patient Referred for TIPS

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DOI 10.1055/s-0046-1821705

Abstract Text

Pancreatic ascites is a rare condition marked by high amylase ascitic fluid accumulation in the peritoneal cavity, often resulting from pancreatic duct disruption/ "disconnected pancreatic duct syndrome"/, due to necrotizing pancreatitis at most cases. Its rarity and unclear clinical presentation make diagnosis and treatment challenging. Conservative management, including nutritional support and therapeutic paracentesis, has a high failure rate. In contrast, interventional therapies like endoscopic pancreatic stenting have shown better outcomes. However, standardized management guidelines are lacking. We present a 56-year-old man, referred for TIPS placement due to refractory ascites. He was diagnosed with decompensated liver cirrhosis with portal hypertension and chronic pancreatitis with pseudocysts. Multiple paracenteses were conducted at various hospitals, utilizing maximal diuretic therapy; however, no significant reduction in the ascites was achieved. Upon physical examination, the patient exhibited severe tenderness in the epigastric region and periumbilical area, without signs of peritoneal irritation. The abdomen was distended due to ascites, and there was no peripheral edema. A diagnosis of pancreatic ascites was confirmed following diagnostic paracentesis, revealing high levels of amylase (963U/l) and lipase (359U/l). An MRI identified three pancreatic pseudocysts, dilatation of the main pancreatic duct up to 6cm, and discontinuity of the duct at the distal body and tail with pseudocyst formation measuring 12×8.3 cm leading to the diagnosis of disconnected pancreatic duct. An ERCP was performed with pancreatography, revealing contrast filling in the dilated proximal part of the main pancreatic duct with partial disruption and a contrast "leak" at the level of the pancreatic body/tail along with cyst formation. There was an absence of contrast filling downstream of the Wirsung, indicating a 10 mm long stenosis at the proximal part of the pancreatic duct, which precluded the passage of a standard sphincterotome and of a needle-knife. After selective pancreatic sphincterotomy, a 6-fr cystotome was utilized to traverse the distal ductal stricture, enabling pancreatic stenting with a 7fr/10cm plastic stent and bridging the disruption/leak/. Post-procedure, the patient experienced a decrease in abdominal pain. A CT scan demonstrated a reduction the volume of ascites and the size of the pseudocysts. Within four weeks, the abdominal fluid and pseudocysts completely resolved.

There are no established treatment protocols for pancreatic ascites, but early intervention is key for better outcomes. For patients with DPD, crossing the disconnection with a guidewire to the excluded segment is very difficult, with high failure rates of 50 % to 100 %. Sphincterotomy reduces outflow resistance, facilitating pancreatic drainage and promoting healing, effectively decreasing recurrence rates and reducing the need for repeated paracentesis [1–4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Pancreatic stents for treatment of pancreatic duct disruption syndrome: Analysis of outcomes and factors associated with therapeutic success Author links open overlay panel C. Prieto , B. Gonzalez de la Higuera , D. Ruiz-Clavijo, J.M. Urman , F. Bolado , M. Casi , J.J. Vila Complejo Hospitalario de Navarra, Servicio de Digestivo, Pamplona, Spain Available online 24 June 2015, Version of Record 24 June 2015
- [2] Disconnected Pancreatic Duct Syndrome: A Case Series Satyam Satyam1 , Sapna Singh2 , Punit Kumar Sah3
- [3] Cross-sectional imaging of pancreatic leak: a pictorial review Special Section: Editor's Invite Published: 20 June 2024 Volume 49, pages 4507–4520 2024;
- [4] Management of the Disconnected Pancreatic Duct in Pancreatic Necrosis C. Mel Wilcox1 charles.wilcox@orlandohealth.com · Ji Young Bang1 · Akwi Asombang2 · ... · Field F. Willingham31 · Shyam Varadarajulu1 On behalf of the U.S. Pancreatic Disease Study Group ...

eP379V Successful healing of necrotic cavity by long full-thickness gastric myotomy

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DOI 10.1055/s-0046-1821706

Abstract Text

A 42-year-old obese woman presented with severe postoperative sepsis and MODS ten days after sleeve gastrectomy. The condition was caused by a large dehiscence of the staple line beneath the GE junction. Despite multiple surgical revisions and negative-pressure wound therapy, she developed additional complications, including Aspergillus pneumonia and acute renal failure requiring hemodialysis. After three months of intensive care, follow-up imaging revealed a 12-cm retrogastric cavity containing purulence and necrotic tissue. Thirteen consecutive sessions of endoscopic vacuum therapy failed to achieve healing. We ultimately decided to perform endoscopic full-thickness gastric myotomy along the staple line to open and connect the cavity with gastric lumen. This intervention resulted in complete resolution of the cavity within five weeks.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/d7fe2f0f-8540-4a3d-9c58-a2144bc7a841/Uploads/19978_ESGE_video%20final.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP380 Peroral Endoscopic Myotomy in Pediatric Population: A Comparative Study With Adult Population in a Tertiary Centre of a South-European Country

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DOI 10.1055/s-0046-1821707

Aims Peroral endoscopic myotomy (POEM) is emerging as a minimally invasive therapeutic option for achalasia. Data are limited in pediatric population. Aim: To compare the efficacy and safety of POEM between pediatric and adult patients with achalasia diagnosis

Methods A prospective study was conducted, including all patients who underwent POEM, since August/2022-October/2025, in a tertiary centre from Portugal. Patients aged under 18yo were included in the pediatric group and above 18yo in adult group. Procedural-related parameters, adverse events, pre- and post-intervention clinical, manometric and radiologic outcomes were evaluated [1]

Results Sixty-four consecutive patients underwent POEM, including six pediatric patients aged 13–16 years (mean age: 14.5 ± 1.2 vs. 53.1 ± 18.6 years; male gender: 83.3 % (n = 5) vs. 50.0 % (n = 29); p = 0.12). According to Chicago classification v4.0, five children had type II achalasia and one had type I achalasia (adults: type I 6.9 % (n = 4), type II 86.2 % (n = 50), type III 6.9 % (n = 4)).

No significant differences were observed between groups regarding pre-procedure Eckardt score (7.2 ± 1.7 vs. 8.0 ± 2.1; p = 0.39), symptom duration (26.2 ± 16.8 vs. 71.8 ± 95.3 months; p = 0.17), pre-POEM IRP (38.5 ± 6.5 vs. 27.1 ± 11.9 mmHg; p = 0.08), EGJ-Cl or barium column height at 1/5 minutes (5.2/4.8 vs. 12.1/10.2 cm; p = 0.12/0.21). Technical success was 100 % with comparable procedure duration (82.5 ± 18.3 vs. 90.2 ± 39.1 min; p = 0.48) and exclusive posterior approach. At a mean follow-up of 8.3 in pediatric patients vs. 10.8 months in adults, clinical success was achieved in 100 % of pediatric and 94.8 % of adult patients (post-POEM Eckardt 0.3 ± 0.5 vs. 1.2 ± 1.5; p = 0.31). Minor intraprocedural adverse events occurred in 50 % vs. 32.8 % (p = 0.41); No major adverse events, perforation, or mortality occurred in either group. Symptomatic gastroesophageal reflux disease was significantly less frequent in pediatric patients (0/6, 0 %) than adults (10/58, 17.2 %) (p = 0.021, Fisher's exact test), all managed with proton pump inhibitors.

Conclusions POEM proved to be effective and safe for achalasia both in adults and pediatric patients, with no statistically significant differences regarding technical, clinical, manometric and imaging success or complications. Symptomatic post-POEM GERD was significantly lower in children. Early POEM appears to be equally effective and safe compared to late POEM, with less long-term symptomatic post-POEM GERD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mendo R, Barreiro P, Rodrigues J, Félix C, O'Neill C, Carina I, Chivia J, Chagas C. Peroral Endoscopic Myotomy for Esophageal Achalasia in Portugal: Outcomes of the First Prospective Series. GE Port J Gastroenterol 30 2021; 28 (3): 162–169

eP381 EUS-guided biliary drainage: experience from a tertiary center

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DOI 10.1055/s-0046-1821708

Aims EUS-guided biliary drainage (EUS-BD) is emerging as a potential alternative to percutaneous transhepatic biliary drainage and ERCP in the management of malignant biliary and pancreatic strictures. This study aimed to analyze and detail the epidemiological, clinical, biological, and radiological profile of patients who underwent EUS-BD for malignant biliary obstructions, after failure retrograde drainage

Methods This was a retrospective, descriptive, and analytical study including all patients who underwent EUS-guided biliary drainage between 2021 and 2025. All procedures were performed using a therapeutic linear echoendoscope (Olympus).

Results Our study involved 16 patients, 8 women and 8 men, with a mean age of 64.3 years (range: 37–78 years). Clinically, all patients presented with jaundice, 6 suffered from hepatic colic, 7 from pancreatic-type pain, and 2 others

from diffuse and atypical abdominal pain. Radiologically, all had dilation of the common bile duct (CBD) and intrahepatic bile ducts (IHBD). All patients were in cholangitis.

The indication for EUS-BD was duodenal tumor invasion related to pancreatic head adenocarcinoma with failed ERCP for 7 patients, duodenal tumors invading the CBD for 2 patients, perihilar cholangiocarcinoma for 3 patients, for an afferent loop syndrome after Whipple surgery, and finally, 3 patient with an antral adenocarcinoma invading the lower common bile duct, who had previously undergone a gastrojejunostomy.

Regarding the procedure, three drainage approaches were used:

- Cholecysto-bulbar drainage in 6 cases,
- Antegrade drainage in 4 cases,
- Hepatico-gastric drainage in 6 cases.

The procedure was technically successful in 87.5% of cases. The targeted bile duct was punctured using a 19-. The creation of the tract was performed with different instruments: a 7 Fr cystotome for 7 cases, a 8.5 Fr cystotome for 3 cases, a Soehendra dilatation bougie for 2 cases, and a needle knife for 4 others. Post-operative follow-up showed clinical and biological improvement, with pain resolution and a reduction in total bilirubin (TB) of over 75% after one week of drainage.

During follow-up, 10 patients died, mostly due to tumor progression, at intervals ranging from 2 to 5 months after drainage. 2 patients died two weeks after drainage due to septic shock related to an infectious pneumonia, and one other died due to combined respiratory and neurological failure. Five patients remained alive at the time of evaluation, maintaining good clinical and biological status.

Conclusions EUS-guided biliary drainage constitutes a reliable and minimally invasive alternative to percutaneous drainage and ERCP in the management of malignant biliary obstruction, especially in cases of ERCP failure. The technique provides rapid relief of cholestasis and infection, with high technical and clinical success rates. Mortality in this series was primarily related to disease progression rather than the procedure itself highlighting the value of rigorous patient selection and appropriate follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP382 Saved by Ileoscopy: The Unexpected Around the Corner

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DOI 10.1055/s-0046-1821709

Introduction Neuroendocrine Tumors (NETs) are a heterogeneous group of neoplasms with distinct clinical, biological, and histological characteristics. Although rare, the incidence and prevalence of these tumors have increased over the past few decades, particularly in the gastrointestinal tract. NETs are predominantly asymptomatic and are often diagnosed incidentally [1].

Clinical Case A 66-year-old female patient with a history of duodenal peptic ulcer disease was referred for evaluation of an 8 mm sessile polyp (Paris 0-Is) located in the terminal ileum. The polyp was excised during a colonoscopy performed at a private facility in the context of colorectal cancer screening. Histological analysis revealed a well-differentiated NET (Grade 1) in the mucosal and submucosal layers of the terminal ileum, measuring 5.6 mm, with an endoscopic resection achieving R0 status (IVL0, 170 µm from the vertical margin). Following multidisciplinary discussion, staging was performed using CT of the abdomen and pelvis, enterography CT, and 68-Ga PET, which showed an ileocolic lymphadenopathy with high expression of somatostatin receptors and elevated serum Chromogranin A (238.7; N < 85). A decision was made to reevaluate with 68-Ga PET for four months to determine the course of action regarding surgery versus chemotherapy. Due to the persistence of findings and after

further multidisciplinary discussion, a right hemicolectomy with laparoscopic lymphadenectomy was performed. The procedure revealed no mural lesions; however, 5 out of 20 ileocolic lymph nodes were positive for TNE invasion (ypT-1N1M0, Ki-67 < 1%, mitotic index < 1/10 HPF, stage III). The follow-up at five months showed no recurrence.

Discussion This case underscores the importance of ileoscopy during colonoscopy, even in the absence of symptoms, in order to exclude lesions of the small intestine. Existing literature indicates that jejunoileal NETs are often diagnosed when symptomatic, with lymph nodal or distant metastasis occurring more frequently than in other locations and often associated with a poor prognosis. Approximately two-thirds of such tumors are found within 60 cm of the ileocecal valve. Given their aggressive nature, increasing incidence, and more frequent ileal location, the performance of ileoscopy during total colonoscopy offers significant clinical benefit without a substantial increase in procedure time, even in asymptomatic individuals.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Chauhan A, Chan K, Halfdanarson TR, Bellizzi AM, Rindi G, O'Toole D et al. Critical updates in neuroendocrine tumours: Version 9 american Joint Committee on Cancer staging system for gastroenteropancreatic neuroendocrine tumors. *Ca Cancer J Clin* 2024; 74 (4): 359–367

eP383 Type I Gastric Neuroendocrine Tumors and Autoimmune Gastritis: Experience of a Reference Centre in Northern Greece

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DOI 10.1055/s-0046-1821710

Aims Autoimmune gastritis (AIG) predisposes to type I gastric neuroendocrine tumors (NETs), which are usually well-differentiated and of low malignant potential. Early endoscopic recognition is critical for adequate management and follow-up. This study aimed to assess the prevalence of gastric NETs among patients with AIG and explore potential endoscopic and clinical correlations.

Methods A retrospective study was conducted including patients with histologically confirmed AIG diagnosed between 2010 and 2025 at a tertiary referral center in Northern Greece. Demographic, clinical, and endoscopic data were reviewed. Archived endoscopic images were re-evaluated and graded according to the Kimura–Takemoto classification to determine the extent of atrophy. The prevalence, localization, histological grade, and management of NETs were analyzed. The chi-square (χ^2) test was used to examine associations between atrophy severity and NET occurrence [1, 2].

Results A total of 210 patients were included (median age 61.8 years, range 34–84; 60.9% female). Endoscopic atrophy distribution was: C-1, 18%; C-2, 15.2%; C-3, 31.4%; O-1, 8%; O-2, 8.5%; and O-3, 18.5%. Type I gastric NETs were diagnosed in 47 patients (22.3%), with a median size of 0.5 cm (range 0.2–3 cm) and median age 56.6 years (range 34–75); 46.8% were male. Most lesions were located in the corpus (85%), and were graded as G1 in 70% and G2 in 30%. Endoscopic resection was performed in 51%, and surgical resection in 4.2% for lesions > 1 cm. Severe atrophy (C-3/O-3) was significantly associated with NET occurrence ($p = 0.007$). No other significant associations were observed.

Conclusions Type I gastric NETs were identified in 22.3% of patients with autoimmune gastritis, predominantly as small, well-differentiated lesions. The severity of endoscopic atrophy correlated significantly with tumor development. These results support structured endoscopic surveillance and grading of atrophy in AIG as essential for early detection and timely management of type I gastric NETs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Massironi S, Gallo C, Elvevi A, Stegagnini M, Coltro LA, Invernizzi P. Incidence and prevalence of gastric neuroendocrine tumors in patients with chronic atrophic autoimmune gastritis. *World J Gastrointest Oncol* 2023; 15 (8): 1451–1460. doi:10.4251/wjgo.v15.i8.1451
- [2] Shah SC, Piazuelo MB, Kuipers EJ, Li D. AGA Clinical Practice Update on the Diagnosis and Management of Atrophic Gastritis: Expert Review. *Gastroenterology* 2021; 161 (4): 1325–1332.e7. doi:10.1053/j.gastro.2021.06.078

eP384 Effect of a self-assembling peptide on delayed bleeding and healing of post-resection defects after advanced endoscopic therapy: a retrospective cohort study

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DOI 10.1055/s-0046-1821711

Aims The study evaluates the association of SAP use with delayed bleeding and endoscopic healing after advanced endoscopic therapy. The findings may support the integration of SAP into standard post-endoscopic care protocols.

Methods A retrospective analysis was conducted at a single tertiary endoscopy center including consecutive patients undergoing EMR or ESD. The primary outcome was delayed bleeding within 30 days, defined as clinically evident bleeding requiring medical attention. Secondary outcomes included endoscopic healing of the post-resection defect at 4, 8, and 24 weeks using the Sakita–Fukutomi classification. Defect size was measured during the index procedure using endoscopic forceps or a polypectomy snare as reference. Data were abstracted from medical records.

Results A total of 167 patients were included (65 women, 102 men). Procedures comprised ESD in 110 (66 %), piece-meal EMR in 47 (28 %), hybrid EMR + ESD in 8 (5 %), and en bloc EMR in 2 (1 %). Lesion locations were esophagus 19 (11 %), stomach 18 (11 %), duodenum 3 (2 %), colon 34 (20 %), and rectum 93 (56 %). Mean lesion size was 35.5 (SD 21.5) mm. Among 112 en bloc resections, R0 was achieved in 84 (75 %). Delayed bleeding occurred in 6 patients (4 %), with a median onset of 4 days (range 0–13). All cases were managed endoscopically: SAP alone (n = 3), SAP plus coagulation (n = 1), coagulation plus hemoclips (n = 1), and coagulation plus hemostatic powder (n = 1); 2 patients required transfusion. Mean post-resection defect size was 38.4 (SD 20.2) mm, decreasing to 20.4 mm, 13.7 mm, and 10.9 mm at 4, 8, and 24 weeks, corresponding to 47 %, 64 %, and 72 % reductions, respectively.

Conclusions In this single-center cohort, use of a self-assembling peptide was associated with a low rate of delayed bleeding and progressive endoscopic healing of post-resection defects after EMR/ESD. These findings support the selective use of SAP to enhance the safety of advanced endoscopic procedures; prospective controlled studies are warranted.

The project is supported by the Ministry of Health of the Czech Republic (NU22-08-00424) and Scientific projects MO1012 and Cooperatio.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP385 Acute abdominal pain resolved following gastroscopy

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DOI 10.1055/s-0046-1821712

Abstract Text

A 68-year-old male with a complex medical history, including chronic ischemic heart disease (seven prior myocardial infarctions), COPD, and previous duodenal ulcer perforation, presented to the surgical department with acute epi-

gastric pain lasting approximately 24 hours. The onset of pain followed coffee ingestion. On first evaluation, he was hemodynamically stable, afebrile, with a soft, non-tender abdomen, normal bowel sounds, and no peritoneal signs. Laboratory tests revealed CRP 6 mg/L and leukocytes $11.8 \times 10^3/\mu\text{L}$, with otherwise normal liver, pancreatic, renal, and hematologic parameters. Initial abdominal ultrasound and native X-ray were unremarkable, including ECG. The patient was treated with intravenous analgesics and an increased dose of proton pump inhibitor (omeprazole) and discharged with instructions for outpatient follow-up.

Approximately 20 hours later, the patient returned due to persistent epigastric pain. Repeat examination revealed a soft, non-tender abdomen without peritoneal signs. Laboratory testing demonstrated CRP 19 mg/L and leukocytes $11 \times 10^3/\mu\text{L}$, while all other parameters remained within normal limits. Given ongoing symptoms, urgent gastroscopy was performed. During gastroscopy, two flat wooden sticks were noted in the gastric antrum, partially protruding from the mucosa. Upon careful extraction with a loop, they were identified as toothpicks approximately 40 mm in length, each embedded through two-thirds of the gastric wall. Post-procedure, the patient experienced immediate relief of pain. Upon discussion of the findings, the patient recalled having eaten small sandwiches but had not realized that he might have ingested toothpicks. The procedure was completed without mucosal perforation or bleeding. Despite recommendation for hospital observation due to comorbidities and antiaggregation therapy (acetylsalicylic acid + ticagrelor), the patient declined admission. He was discharged under close outpatient follow-up with continuation of omeprazole therapy and a soft diet, without any antibiotic therapy prescribed [1, 2]. Follow-up evaluation demonstrated complete resolution of symptoms, normal bowel movements, and no gastrointestinal complaints. Repeat abdominal ultrasound and native X-ray showed no abnormalities.

This case illustrates a rare cause of acute epigastric pain—ingestion of sharp foreign bodies—that is often not initially considered, particularly when the patient history does not suggest foreign body ingestion. Prompt recognition and endoscopic retrieval allowed safe management and complete symptom resolution, emphasizing the importance of maintaining a high index of suspicion for unusual etiologies in patients presenting with unexplained abdominal pain.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bathobakae L, Mahmoud A, Wilkinson T, Melki G, Cavanagh Y, Siau K. Pain in the Gut: An Intriguing Case of Toothpick Ingestion Causing Gastric Perforation. *Journal of Investigative Medicine High Impact Case Reports* 2023; 11:1. doi:10.1177/23247096231211056
- [2] Steinbach C, Stockmann M, Jara M, Bednarsch J, Lock JF. Accidentally ingested toothpicks causing severe gastrointestinal injury: a practical guideline for diagnosis and therapy based on 136 case reports. *World J Surg* 2014; 38 (2): 371–377

eP386 Novel motorized biopsy device for EUS-guided liver biopsy: a prospective matched-controlled study

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Aims EndoDrill is a novel motorized biopsy tool for endoscopic ultrasound that is designed to collect high quality tissue cores with less blood contamination. This single use flexible biopsy device with a 17G rotating drill-tip cylinder is driven by a reusable electric motor unit, and the tip rotation is activated by pressing a foot pedal.

In this prospective matched-controlled study, we compared the diagnostic performance of the novel endodrill biopsy device and conventional 19G fine needle biopsy (FNB) needles for obtaining EUS-guided liver biopsies.

Methods Consecutive eligible patients scheduled for untargeted EUS-guided liver biopsy were biopsied using the endodrill.

These patients were matched 1:2 for age and indications with patients undergoing untargeted EUS-LB using conventional 19 G EUS-FNB needles in wet-suction technique with one pass and 3–6 actuations. EUS-guided liver biopsies were performed by two experienced endoscopists.

Primary outcomes were the number of complete portal tracts (CPT) and aggregate specimen length. Secondary outcomes were user experience scores (0–10) for tissue penetration, visibility during biopsy, flexibility, handling and preparation of the biopsy device, and adverse events.

Results Seven consecutive patients underwent EUS-guided liver biopsy with endodrill and 14 patients with 19G-FNB needles. Median age was 49 years with 57 % male and 43 % female patients. Aggregate sample length with endodrill and EUS-FNB was 14 mm $\pm$ 7 mm vs. 40 mm $\pm$ 16 mm, respectively ($p < 0.001$). Adequate samples defined as more than 10 CPT were obtained in 2/7 (29 %) vs. 13/14 (93 %; $p < 0.01$) of cases with endodrill and 19G FNB, respectively. Number of CPT was 5 $\pm$ 4 vs. 16 $\pm$ 6 ($p < 0.003$), respectively.

The drill device was rated highly in flexibility (8.9 $\pm$ 0.4) and easiness of preparation (9.8 $\pm$ 0.4). Visibility was hampered by artefacts due to the rotation (5.1 $\pm$ 2.8), and tissue penetration was scored low (2.9 $\pm$ 2.3).

There was one bleeding from the gastric wall requiring endoscopic clip application in the drill biopsy group.

Conclusions For EUS-guided liver biopsies, the motorised biopsy device was not superior to the conventional 19G FNB needles regarding aggregate length of cores or count of portal tracts.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP387 Black Esophagus with Atypical Presentation

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DOI 10.1055/s-0046-1821714

Abstract Text

Acute necrotizing esophagitis (ANE) is a rare and severe form of esophageal inflammation characterized by diffuse mucosal necrosis predominantly involving the distal esophagus. Its etiology is multifactorial and associated with hypoperfusion states, severe infections (pneumonia, sepsis, etc.), and diabetes mellitus, among others. It primarily affects elderly males and presents as upper gastrointestinal bleeding (UGIB) in up to 90 % of cases [1–3].

We present the case of a 78-year-old male with poorly controlled diabetes who presented to the emergency department with a 10-day history of odynophagia and dysphagia, without food impaction. Symptoms began concomitantly with a pneumonia episode treated with oral antibiotics. During this period, he also experienced episodes of hypotension.

Upper endoscopy revealed from the proximal esophagus an erythematous mucosa with confluent erosions involving the entire circumference from 20 cm to the cardia, with diffuse black plaques. The duodenal bulb was edematous and erythematous with fibrin-covered erosions. In the first portion of the duodenum, a 10-mm Forrest IIc ulcer was identified. Biopsies were not obtained due to poor tolerance.

The patient was admitted for supportive management and intravenous proton pump inhibitors. Follow-up endoscopy after one week demonstrated near-complete mucosal recovery, with erythematous areas undergoing re-epithelialization and minimal residual sloughing.

Although UGIB is the most common presentation, the presence of acute odynophagia and dysphagia should prompt consideration of this entity in the differential diagnosis. In our case, given the patient's recent antibiotic use, the initial suspicion was esophageal candidiasis, which can present with similar symptoms; however, ischemia and inflammation in ANE can also produce them. Obtaining biopsies may be useful in cases where diagnostic uncertainty exists.

Patients with ANE benefit from early diagnosis and prompt supportive treatment, along with management of the underlying cause. This typically leads to favorable recovery, with complete or near-complete re-epithelialization of the esophageal mucosa within 1–2 weeks after initiating therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gurvits GE, Shapsis A, Lau N, Gualtieri N, Robilotti JG. Acute esophageal necrosis: A rare syndrome. *J Gastroenterol.* enero de 2007; 42 (1): 29–38
- [2] Gurvits GE, Cherian K, Shami MN, Korabathina R, El-Nader EMA, Rayapudi K et al. Black Esophagus: New Insights and Multicenter International Experience in 2014. *Dig Dis Sci.* 23 de enero de 2015; 60 (2): 444–53
- [3] Schizas D, Theochari NA, Mylonas KS, Kanavidis P, Spartalis E, Triantafyllou S et al. Acute esophageal necrosis: A systematic review and pooled analysis. *World J Gastrointest Surg.* 27 de marzo de 2020; 12 (3): 104–15

eP388 Environmental impact of digestive endoscopy: experience from a hospital-based endoscopy unit

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DOI 10.1055/s-0046-1821715

Aims To quantitatively assess the environmental impact of a hospital-based digestive endoscopy unit, including waste production and water and electricity consumption, and to identify areas for improvement toward more sustainable practices.

Methods This descriptive study was conducted in the Hepato-Gastroenterology Department “Medicine B” at Ibn Sina University Hospital over a 12-month period (January–December 2024). Data were collected retrospectively from endoscopy registries and included the number and type of procedures (diagnostic or therapeutic), number of biopsies, and use of disposable or reusable devices. Direct observation was used to measure the average amount of waste generated per procedure, sorted and weighed by category, and annual waste production was extrapolated accordingly. Water and electricity consumption related to endoscope reprocessing and endoscopy equipment were calculated.

Results A total of 1282 digestive endoscopic procedures were performed, including 1078 diagnostic procedures (509 upper endoscopies, 381 colonoscopies, 126 sigmoidoscopies, 62 endoscopic ultrasounds) and 204 therapeutic procedures (102 ERCPs, 39 dilations, 38 polypectomies, 17 argon plasma coagulations, 6 gastrostomies, 2 stent placements). A total of 704 biopsies were performed. Single-use devices represented the majority of the material used, including personal protective equipment, anesthesia consumables, endoscopic accessories (biopsy forceps, polypectomy snares, catheters, sphincterotomes), device packaging and waste generated during endoscope reprocessing. Annual waste production was 2734 kg (2.73 tons), ranging from 1.5 kg to 5 kg per procedure depending on procedure type. (► **Table 1**) Water consumption for endoscope reprocessing was 64,100 L/year ($\approx$ 50 L/procedure). Annual electricity consumption of endoscopy equipment (endoscopy tower, reprocessor, electrosurgical generators, room lighting) reached 3,575 kWh, corresponding to 1.95 tons of CO₂ emitted.

► **Table 1** Waste generated by procedure type

Procedure type	Waste generated (kg)
Simple diagnostic (no biopsy)	1.5 kg
Diagnostic with biopsy	2.0 kg
Simple therapeutic	2.0–2.5 kg
ERCP	5.0 kg

Conclusions These results confirm the substantial environmental footprint of digestive endoscopy, driven by extensive use of disposable devices and high resource consumption. Several improvement pathways emerge, including optimization of indications, reduction of unnecessary procedures, and limitation of non-essential biopsies through optical characterization and decision-support tools. The integration of innovative technologies, including artificial intelligence, and more efficient energy management (automatic standby systems, workflow planning) may contribute to a more sustainable endoscopy practice that balances diagnostic performance with environmental responsibility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP389 EFTR 2.0: Prospects for Improving Safety and Standardization of Full-Thickness Resections Using Hybrid Endoscopic Solutions

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DOI 10.1055/s-0046-1821716

Problem to solve Although EFTR has expanded therapeutic options for complex subepithelial and early neoplastic lesions, a significant unmet clinical need remains in European practice: achieving a safer, more reproducible, and standardized resection technique that is less dependent on operator experience and variability in center equipment. Current limitations and complication risks demonstrate that the existing EFTR model requires technological reinforcement. The innovative contribution of this work is positioning hybrid EFTR approaches as a conceptual foundation for a “next-generation EFTR” – a technologically enhanced and methodologically standardized procedural model. Full-thickness resection (EFTR) has expanded endoscopic options for complex subepithelial and early neoplastic gastrointestinal lesions. However, significant limitations remain in European practice: variability of technique between centers, differences in equipment availability, high dependence on operator experience, risk of perforation, and the need for surgical intervention in some cases. ESGE Strategy 2025 highlights the need to improve safety, reproducibility, and standardization of advanced procedures.

These limitations emphasize the need for a technologically enhanced and methodologically standardized next-generation EFTR model.

Innovation Hybrid EFTR approaches combine full-thickness resection with additional endoscopic technologies, such as:

- advanced hemostasis modalities (advanced coagulation devices, vessel-sealing tools);
- enhanced defect closure systems (over-the-scope clips, full-thickness suturing systems, combined clipping);
- visual assist tools (optical magnification, digital filters, image stabilization);
- traction-assisted methods (suture-traction, clip-line traction);
- integration of EFTR with ESD- or STER-based elements to improve control of the resection layer.

These hybrid technologies are considered a pathway toward a safer, more standardized, and more reproducible EFTR model.

Results A structured review of PubMed, Embase, and Scopus literature (2018–2025) was performed, assessing EFTR for subepithelial and early neoplastic lesions of the stomach, small intestine, and colon.

Evidence shows that hybrid EFTR approaches contribute to:

Improved safety: Enhanced visualization, hemostasis, and closure tools provide more stable control of the resection field and reduce complications.

Higher R0 resection rates: Hybrid series report R0 rates consistently above 90 %, comparable to or higher than standard EFTR.

Reduced inter-operator variability: Hybrid tools provide more predictable resection trajectories and easier defect closure.

Better reproducibility and training potential: Combined technologies support modular education following the ESGE “train-to-standard” concept.

Foundations for EFTR 2.0 registries: Several studies highlight the need for multicenter registries as a basis for future guideline development.

Conclusions Hybrid endoscopic solutions have the potential to form the concept of EFTR 2.0 – a safer, more standardized, and more reproducible model for full-thickness resection in the gastrointestinal tract. They align with ESGE priorities by improving safety, visual control, complication reduction, and training standardization.

Contemporary evidence underscores the need for further prospective, multicenter studies aimed at establishing registries and developing standardized protocols under ESGE guidance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP390 AI Tools for Polypectomy Guidance: Talk or Transcribe?

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DOI 10.1055/s-0046-1821717

Aims Artificial intelligence tools such as ChatGPT and Gemini are increasingly used by trainee endoscopists for rapid access to guideline-based recommendations. During colonoscopy, endoscopists often encounter polyps requiring endoscopic resection. Rapid support from AI tools can be obtained either in voice mode (direct verbal interaction with vocal responses) or via audio-to-text (spoken input transcribed to text with written AI output), offering different levels of hands-free support.

The aim of our study is to evaluate the concordance of two commonly used AI tools with ESGE 2024 polypectomy recommendations, comparing audio-to-text and voice mode performance.

Methods Ten clinical scenarios covering different polyp types were submitted to ChatGPT and Gemini in both modalities. Responses were compared to ESGE 2024 colorectal polypectomy and endoscopic mucosal resection guidelines. For discordant responses, follow-up prompts (“Are you sure?”) assessed each model’s ability to self-correct. Descriptive analyses were performed using Jamovi.

Results For ChatGPT, audio-to-text responses achieved a concordance of 100 % (10/10) with ESGE guidelines, and minor transcription inaccuracies (40 %) did not affect the correctness of the answers. In voice mode, initial concordance was 50 % (5/10), and follow-up prompts corrected 2 of the discordant answers, yielding a final concordance of 70 %.

For Gemini, audio-to-text responses showed 60 % concordance, 20 % mixed answers (two techniques suggested, only one matching the guidelines), and 20 % discordance. Gemini’s live voice mode showed a concordance of 70 %, which remained unchanged after prompting.

Conclusions AI tools can assist in selecting appropriate polypectomy techniques according to ESGE recommendations; however, their performance varies significantly between models and usage modes. ChatGPT provided consistently accurate responses via audio-to-text, offering an almost hands-free support tool during endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP391 Clinical Profiles and Outcomes of Patients Undergoing Endoscopic Retrograde Cholangiopancreatography in a Tertiary Care Center

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DOI 10.1055/s-0046-1821718

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is a cornerstone technique for the diagnosis and management of biliary and pancreatic obstructive diseases. Despite its widespread use, ERCP remains associated with potentially severe complications. In Morocco, few large-scale descriptive series have been reported.

This study aimed to describe the indications, cholangiographic findings, therapeutic interventions, and immediate complications of ERCPs.

Methods A retrospective descriptive monocentric study including all consecutive ERCP procedures performed from May 2019 to September 2025. Data collected from a structured Excel registry included demographics (age, sex), indication, presence of cholangitis, bilirubin level, type of biliary stenosis, bile appearance, therapeutic gestures, biopsies, and complications. Quantitative variables were analyzed using means, medians, and interquartile ranges; qualitative variables with frequencies and percentages.

Results A total of 759 ERCPs were analyzed. The mean age was 60.9 years (median 63; range 18–100). Sex was available for all patients: 55 % were female ($n \approx 420$) and 45 % male ($n \approx 338$), giving a sex ratio M/F of 0.80.

The main indications were: choledocholithiasis (38.5 %), pancreatic head tumors (15.4 %), cholangiocarcinoma (8.0 %), and complicated hydatid cysts (3.0 %). Documented cholangitis was present in 71.3 % of interpretable cases. Biliary stenoses were predominantly distal (61.1 % of characterized stenoses). Bile was purulent in 9.1 % of documented cases. The most common interventions were stone extraction (31.5 %), metallic stent placement (24.4 %), and plastic stent placement (18.2 %). Endobiliary biopsies with forceps were performed in 10 % of procedures. The overall complication rate was 8.3 %, mainly immediate hemorrhage (3.8 %), post-ERCP pancreatitis (1.2 %), infectious complications (0.9 %), and perforation (0.1 %). Two deaths (0.3 %) were recorded.

Conclusions This six-year descriptive series provides one of the largest Moroccan datasets on ERCP. The activity is dominated by lithiasic and malignant biliary obstruction, frequently in a context of acute cholangitis. The therapeutic profile relies mainly on stone extraction and stent placement. The complication rate remains comparable to international standards. Structured registries represent an essential tool for quality monitoring and clinical research, and their enrichment could enable multicentric national studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP392 Long-term follow-up of Lumen-Apposing Metal Stent (LAMS) in benign pathology

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Aims Luminal apposing stents are used to treat digestive tract stenosis with better results than endoscopic dilation and with a better morbidity and mortality profile than surgery. Despite an increase in their use, there is no evidence regarding their long-term safety. Below is a series of patients who have had LAMS for more than twelve months at our center [1, 2].

Methods Observational, descriptive, and retrospective study of patients with LAMS for more than one year due to benign digestive pathology.

Results The sample consisted of five patients with a mean age of 68.8 years (SD: 25.23) and 60 % males. The indication in all cases was benign stenosis: three duodenal stenoses (two secondary to chronic pancreatitis and the third post-ulcerative) in which gastroenteroanastomosis was performed, one peptic pyloric stenosis in which a transpyloric LAMS was placed, and one gastrointestinal anastomotic stenosis in which a prosthesis was used in the anastomosis. The most commonly used Hot-Axios prosthesis (60 %) had a diameter of 10x10 mm; in both cases indicated for duodenal stenosis secondary to chronic pancreatitis, it presented as a complication of obstruction at 17 and 23 months, requiring replacement with a 20x10 stent, and in the third case, used for pyloric stenosis, it was removed at 17 months due to restenosis and requiring reinsertion. In post-ulcer duodenal stenosis, a 15x10 diameter was used and after 13 months of follow-up, no complications have been reported. Finally, in gastro-

intestinal anastomotic stenosis, a 20x10 Hot-Axios was used without incident after 26 months of follow-up.

Conclusions The placement of LAMS in benign stenoses has revolutionized the management of many digestive pathologies with good results and an acceptable complication rate, allowing other more aggressive therapies such as surgery to be avoided. In our experience with long-term prostheses, there were no serious complications, with prosthesis obstruction in those with a smaller diameter being the most frequent adverse effect (40 %).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Larson B, Adler DG. Lumen-apposing metal stents for gastrointestinal luminal strictures: current use and future directions. *Ann Gastroenterol*. 2019; 32 (2): 141–146. doi:10.20524/aog.2018.0337 Epub 2018 Dec 14 PMID: 30837786 PMID: PMC6394263
- [2] Mahmoud T, Beran A, Bazerbachi F, Matar R, Jaruvongvanich V, Razzak FA, Abboud DM, Vargas EJ, Martin JA, Kellogg TA, Ghanem OM, Petersen BT, Levy MJ, Law RJ, Chandrasekhara V, Storm AC, Wong Kee Song LM, Buttar NS, Abu Dayyeh BK. Lumen-apposing metal stents for the treatment of benign gastrointestinal tract strictures: a single-center experience and proposed treatment algorithm. *Surg Endosc*. 2023; 37 (3): 2133–2142. doi:10.1007/s00464-022-09715-8 Epub 2022 Oct 31 PMID: 36316581

eP393 EndoDrill-Assisted EUS Biopsy: Unmasking an extrinsic rectal mass

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Abstract Text

EndoDrill is a novel electromechanical device designed for EUS-guided core biopsy, featuring a motorized handle and a flexible 17-gauge cylindrical tip that drills tissue rather than relying on conventional needle puncture. We report an unusual case where EndoDrill allowed easy one-step EUS-guided sampling of an extrinsic rectal mass. A 72-year-old man undergoing CT urogram for hematuria was found to have a pelvic mass extending toward the rectum. Colonoscopy revealed a 3-cm extrinsic lesion eroding into the rectal lumen, located 10 cm from the anal verge. EUS-guided EndoDrill biopsies provided ample core tissue without adverse events. Histopathology and immunohistochemistry confirmed high-grade urothelial carcinoma. This case highlights the diagnostic potential of the novel EUS biopsy device in complex pelvic tumors [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bibb instruments (n.d.) Endodrill GI <https://www.bibbinstruments.com/en/#endodrill-gi>

eP394 Closer to Endoscopic Gastrectomy... Curative Endoscopic Submucosal Dissection of an extensive Early Gastric Cancer

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Introduction: Gastric carcinoma remains a significant cause of morbidity and mortality worldwide. Early detection allows for minimally invasive therapeutic options, including Endoscopic Submucosal Dissection (ESD), which enables en-bloc resection of superficial gastric neoplasms with curative intent regardless the lesion size. We report a case of an extensive early gastric carcinoma successfully treated with ESD, highlighting its role as a safe and effective alternative to conventional surgical resection [1].

Case Report: A 69 year-old woman with a medical history of gastroesophageal reflux disease, lactose intolerance and thyroidectomy was referred for evaluation of a gastric flat lesion with biopsies suggesting intestinal-type adenocarcinoma, identified during an outpatient upper gastrointestinal endoscopy performed for pyrosis. Repeat upper endoscopy using WLI (White Light Imaging), virtual chromoendoscopy (Blue Laser Imaging, BLI) and magnification revealed a large flat lesion (Paris 0-IIb) extending from the cardia to pylorus at the lesser curvature and a large extension of anterior and posterior wall of the stomach. Imaging evaluation by endoscopic ultrasound and CT-scan showed a pre-resection staging of T1aN0M0. After multidisciplinary discussion, it was decided for a minimally invasive resection by ESD. ESD was performed using Flush Knife 2.0 (Fujifilm, Japan) with Endocut I 2.0/Swift Coag 4.5 mode (VIO3 ERBE, Germany), after prior marking of the entire lesion with Forcep Coag 2.0 mode using BLI and magnification. The procedure was performed in the operating theatre with the patient intubated and ventilated, with total procedure duration of 7 hours, without immediate complications. An en-bloc resection was achieved with a final resected specimen of 130*105mm. Histopathological analysis confirmed a R0-resection of a low-grade intramucosal tubular adenocarcinoma, without lymphovascular/perineural invasion, in the context of chronic atrophic gastritis with extensive intestinal metaplasia. On post-operative D1, peripheral bilateral pulmonary thromboembolism with pro-thrombotic risk was diagnosed on CT-angiography performed due to mild epigastric pain without respiratory symptoms. The patient was started on anticoagulation and a second-look endoscopy was decided for delayed bleeding prophylaxis due to high bleeding risk. Coagulation of potentially bleeding vessels using hot-biopsy forceps with Soft Coag mode 4.0 and eschar covering with EndoClot Adhesive 3g (Olympus, Japan) was performed. At 1-month follow-up after a very low-risk curative resection, the patient is asymptomatic and remains on anticoagulation due to a prothrombotic risk status (MTHFR A1298C and PAI 4G/5G mutation).

Conclusion: This case highlights the challenge of endoscopic resection limits for early gastric cancer as a minimally invasive and organ-sparing strategy. Despite the post-procedural complication of pulmonary thromboembolism treated conservatively, ESD has proven to be an effective and safe endoscopic technique in selected patients, regardless the lesion size, avoiding major surgery with associated mortality and morbidity and providing a better quality of life.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Tanaka M., Ono H. et al. 2023; Long-term outcomes of gastric endoscopic submucosal dissection for early gastric cancer under expanded criteria: a multicenter cohort study. *Gastric Cancer* 26 (1): 120–131

eP395 C-Reactive Protein on Day 1 After Peroral Endoscopic Myotomy : Is It a Predictive Factor for Complications?

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Aims Peroral endoscopic myotomy (POEM) is now considered one of the reference treatments for achalasia. However, predictive factors for unfavorable postoperative outcomes remain insufficiently defined. C-reactive protein (CRP), a simple, rapid, and accessible inflammatory biomarker, could help early identify patients at increased risk of complications. The objective of this preliminary study is to assess the association between the CRP level measured on day 1 after POEM, the occurrence of postoperative complications, and the length of hospitalization.

Methods This is a prospective, descriptive, and analytical study conducted over 2 years and 10 months, from January 2023, including 52 patients who underwent POEM. We evaluated demographic data (age, sex), the type of achalasia, the Eckardt score, previous treatments (dilation or myotomy), the CRP

level at day 1 post-POEM, and postoperative outcomes (complications and length of hospital stay). A prolonged hospitalization was defined as a stay longer than 4 days. Statistical analyses used Welch's t-test for continuous variables and χ^2 or Fisher's exact test for categorical variables. A ROC curve was constructed to determine the optimal CRP threshold predictive of complications.

Results The mean age of the patients was 43.7 years, with a male predominance

(53.8%). 11.5% of patients had previously undergone treatment. Type II achalasia was predominant, representing 52.1% of cases. Patients with postoperative complications had significantly higher CRP levels than those without complications (82.6 mg/L vs. 52.5 mg/L; $p=0.003$).

Using a CRP threshold of 50 mg/L, the sensitivity was 27.8% and the specificity 88.9%. The positive predictive value (PPV) was 83.3%, while the negative predictive value (NPV) was 38.1%. The area under the curve (AUC) for this threshold was 0.293, indicating limited discriminative ability.

These results suggest that, although this threshold identifies at-risk patients with good precision (high PPV), its low sensitivity and limited AUC show that it cannot detect all cases of complications by itself. However, it could serve as a clinical alert marker, to be combined with other risk factors to optimize postoperative surveillance.

The overall rate of immediate postoperative complications was 17.3%, including:

- Mucosal breach: 3.85%
- Pneumoperitoneum: 5.77%
- Subcutaneous emphysema: 7.69%
- Pneumomediastinum: 1.92%
- Death: 1.92%

Moreover, a post-POEM CRP > 50 mg/L was strongly associated with a prolonged hospital stay ($\chi^2=4.98$, $p=0.026$; Fisher's exact test $p=0.042$), with an odds ratio of 10.1 (95% CI: 1.04–98).

Conclusions Our preliminary study demonstrates that CRP at day 1 post-POEM is a significant predictive factor for postoperative complications ($p=0.003$). A CRP level above 50 mg/L is also associated with an increased risk of prolonged hospitalization, making CRP a simple and potentially valuable tool to enhance postoperative monitoring.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP396 “Novel underwater” submucosal injection for precise resection of a sessile serrated lesion in the ascending colon

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DOI 10.1055/s-0046-1821723

Abstract Text

A 78-year-old woman with multiple comorbidities underwent screening colonoscopy. A 15-mm homogeneous granular laterally spreading tumour (LST) was detected straddling the lower lip of the ileocecal valve. The lesion showed regular surface and vascular patterns and was classified as NICE I on NBI, consistent with sessile serrated lesion (SSL). We adopted the “novel underwater” technique: after complete gas aspiration and water filling, submucosal injection of saline plus indigo carmine (IC) was performed directly under water immersion using a standard 23-G needle. The cushion created excellent lift and vivid blue demarcation of the flat borders. *En bloc* underwater endoscopic mucosal resection (UEMR) was then carried out using a diathermic stiff snare. Inspection of the resection bed revealed no residual lesion, bleeding, or perforation. One

prophylactic clip was applied. Histopathology confirmed a SSL without dysplasia and with negative margins [1–4].

Conventional EMR (CEMR) and UEMR show comparable technical success and adverse event rates, although recurrence is higher after CEMR. Most studies predominantly include adenomas, with SSLs representing a minority. SSLs remain challenging due to their subtle margins. While IC chromoendoscopy may assist in demarcation, its use before UEMR can impair visibility. Perforation has been reported when injection precedes water filling. Conversely, a recent Japanese study demonstrated that submucosal injection performed directly under water immersion ('novel underwater') is safe and effective.

This case study shows that the 'novel underwater' technique is safe and dramatically improves margin delineation in challenging SSLs. To our knowledge, this is the first reported use of this technique for treating colorectal lesions outside of Japan.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dekker E. Top tips for finding and treating serrated colon lesions (with video). *Gastrointest Endosc* 2025; 101 (4): 879–884. doi:10.1016/j.gie.2024.09.044
- [2] Hirai Y., Toyoshima N., Takamaru H., Sekiguchi M., Yamada M., Kobayashi N., Sekine S., Saito Y. Procedural outcomes of a novel underwater injection endoscopic mucosal resection technique for colorectal polyps ≥ 10 mm. *Endoscopy* v. 57 (n. 5): p 494–499 2025. doi:10.1055/a-2479-9227.
- [3] Tanaka K, Yabuuchi Y, Imai K, Hosotani K, Morita S, Takada K, Kishida Y, Ito S, Hotta K, Mori K, Inokuma T, Ono H. Safety and efficacy of underwater EMR for 10- to 20-mm colorectal serrated lesions (SEA CLEAR study). *Gastrointestinal Endoscopy* v. 101 (n. 3): p 632–638 2025. doi:10.1016/j.gie.2024.08.040
- [4] Lenz L., Martins B., de Paulo G.A., Kawaguti F.S., Baba E.R., Uemura R.S. et al. Underwater versus conventional EMR for nonpedunculated colorectal lesions: a randomized clinical trial. *Gastrointestinal Endoscopy* v. 97 (n. 3): p 549–558 2023. doi:10.1016/j.gie.2022.10.033.

eP397 Osseous metaplasia in duodenal nodule: A rare case report

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DOI 10.1055/s-0046-1821724

Aims Heterotopic bone formation is an uncommon finding in the gastrointestinal tract. Mesenchymal metaplasia, particularly osseous metaplasia (OM), is occasionally reported in malignant tumors but remains rare in benign polyps. OM is more frequently described in colonic polyps, whereas its occurrence in gastric polyps is exceptional, with only about ten cases reported in the literature. It has also been described in juvenile polyps, either sporadically or in association with Peutz–Jeghers syndrome. The exact pathogenesis is not well established, although most hypotheses suggest an inflammation-driven mechanism leading to osteogenic stimulation. While heterotopic ossification has been documented in various benign and malignant intestinal lesions, its development in the duodenum is exceedingly rare. We report a case of OM occurring in a duodenal nodule in a 31-year-old woman.

Methods A 31-year-old female patient with no significant medical history presented with chronic epigastric pain. Laboratory investigations were within normal limits (Hb 13.9 g/dL). An esophagogastroduodenoscopy (EGD) was performed.

Results EGD revealed a sliding hiatal hernia, congestive antral gastropathy, and a millimetric duodenal nodule. Histopathologic examination showed inflammatory and edematous–congestive changes in the duodenal mucosa with clear evidence of osseous metaplasia. No *Helicobacter pylori* infection, dysplasia, or malignancy was identified. A follow-up EGD performed one month later was normal. Although OM is considered to have limited clinical significance, its recognition is important to avoid misdiagnosis. No endoscopic surveillance is recommended once the diagnosis is confirmed.

Conclusions Osseous metaplasia is a rare entity in the upper gastrointestinal tract and exceptionally uncommon in the duodenum. Increased awareness among en-

doscopists and histopathologists is essential for accurate identification and appropriate diagnosis, preventing unnecessary interventions or follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP398 Same Success, Same Safety: Rethinking Needle-Knife Technique Selection in ERCP

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DOI 10.1055/s-0046-1821725

Aims To compare the cannulation success, and complications of Needle Knife Papilotomy Vs Fistulotomy in both benign and malignant cases.

Methods We conducted a retrospective comparative analysis of patients undergoing papillotomy (n = 118) or fistulotomy (n = 52) in our local centre. Outcomes included success, failure, overall complications, and specific complications (bleeding and pancreatitis). Subgroup analyses were performed for both benign and malignant indications. Proportions were compared using Chi-square and Fisher's exact tests with Wilson 95% confidence intervals, risk differences, and risk ratios.

Results Success rates were similarly high for both papillotomy and fistulotomy (88.1% vs 90.4%; p = 0.668). Differences in unsuccessful rates (11.9% vs 9.6%; p = 0.668) and overall complications rates (12.7% vs 7.7%; p = 0.434) were not statistically significant. Both rates of bleeding (5.1% vs 7.7%; p = 0.497) and pancreatitis (7.6% vs 1.9%; p = 0.286) also showed no meaningful disparity. Subgroup analyses of benign and cancer indications echoed these findings. All risk differences were minimal, and confidence intervals included zero.

Conclusions No statistically significant differences were acknowledged between papillotomy and fistulotomy in terms of success or complication profiles, indicating that both techniques are equally safe and effective. Fistulotomy demonstrated a numerically lower risk of pancreatitis; however, this difference did not achieve statistical significance. Therefore, real-world decision-making may hinge more on anatomy, case complexity, and operator judgment rather than relying on expected clinical outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP399 Endoscopic Full-Thickness Resection of a Challenging Upper Submucosal Lesion: An unexpected diagnosis

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DOI 10.1055/s-0046-1821726

Introduction Subepithelial lesions (SELs) of the gastrointestinal tract are often incidentally found and can range from benign to potentially malignant tumors. Traditional management includes endoscopic surveillance or resection, but deeper lesions may be difficult to remove endoscopically. Endoscopic Full-Thickness Resection (EFTR) is a minimally invasive technique that allows complete removal of such lesions. We report a case of a subepithelial lesion successfully treated with EFTR, highlighting its diagnostic and therapeutic utility [1].

Case Description A 71-year-old man with a medical history of Schatzki ring, arterial hypertension, dyslipidemia, coronary artery disease and psoriasis, was referred for a subepithelial lesion on the greater curvature at the body-antrum junction, diagnosed during an outpatient upper gastrointestinal endoscopy performed for dyspepsia. An endoscopic ultrasound was performed, identifying a well-defined elongated subepithelial lesion, measuring approximately 16x6

mm in size, hypoechoic, heterogeneous, arising from the muscularis propria layer, with features that do not allow the potential malignancy of the lesion to be ruled out, including the distinction between Gastrointestinal Stromal Tumor (GIST) and leiomyoma. Considering these findings, it was decided to excise the lesion by a cap-assisted EFTR technique using the gastroduodenal FTRD system (Ovesco Endoscopy, Tübingen, Germany). An en-bloc resection was achieved without complications. Histopathological analysis revealed a R0-resection of a solitary inverted hamartomatous polyp. No other hamartomas were detected on colonoscopy, excluding hereditary polyposis syndromes. At 1-month follow-up, the patient remains asymptomatic with no complications.

Conclusion This case highlights the efficacy and safety of EFTR for the management of gastrointestinal subepithelial lesions allowing complete resection for histopathological purposes. Endoscopic resection as a minimally invasive approach allows for both definitive diagnosis and treatment, avoiding the need for ongoing surveillance, being the size of the lesion the main limitation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Jacobson BC, Bhatt A, Greer KB, Lee LS, Park WG, Sauer BG, Shami VM. ACG Clinical Guideline: Diagnosis and Management of Gastrointestinal Subepithelial Lesions. *Am J Gastroenterol*. 2023 Jan 1;118(1):46-58. doi:10.14309/ajg.0000000000002100 Epub 2022 Sep 6 PMID: 36602835

eP400 Contribution of biliopancreatic endoscopic ultrasound in the evaluation of pancreatic masses: diagnostic performance and practical implications

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DOI 10.1055/s-0046-1821727

Aims Pancreatic masses represent a major diagnostic challenge, requiring high-precision imaging to guide therapeutic decision-making. Biliopancreatic endoscopic ultrasound (EUS) has emerged as a reference technique owing to its high resolution and the ability to perform fine-needle aspiration/biopsy (FNA/FNB). It enables detailed lesion characterization and improves the distinction between benign and malignant processes. The aim of this study was to assess the diagnostic performance of biliopancreatic EUS in the evaluation of pancreatic masses [1].

Methods A retrospective descriptive and analytical study was conducted in the Hepato-Gastroenterology Department "Médecine B" of Ibn Sina University Hospital over a 3-year period (January 2022 – January 2025). All patients managed for a pancreatic mass and who underwent biliopancreatic EUS in the interventional endoscopy unit were included. Demographic, clinical, EUS, and histopathological data were collected and analyzed.

Results Fifty-six patients were included (31 men, 55.4%, sex ratio 1.24), with a mean age of 64.3 ± 14.1 years. Thirty-one patients (55.3%) were symptomatic, most commonly with cholestatic jaundice (42.9%). EUS identified a cystic mass in 2 cases (3.6%), a multilocular cystic lesion in 3 cases (5.4%), and a mixed cystic–solid lesion in 2 cases (3.6%), while 49 patients (87.5%) had a solid mass, heterogeneous in 69.6% and hypoechoic in 17.9%. Most lesions were located in the pancreatic head (67.9%), with a mean size of 40 × 30 mm. The EUS appearance suggested a pancreatic tissue process in 46 cases (82.1%). Specific lesions were also identified, including 4 neuroendocrine tumors (7.1%), 3 intraductal papillary mucinous tumors (IPMN, 5.4%), along with isolated cases of pancreatic metastasis, pseudocyst, and cystic lymphangioma (► **Table 1**). EUS-guided tissue sampling was performed in 50 patients (89.3%) using various needle calibers, predominantly 20G ProCore (45.6%). Histopathological analysis was positive in 15 cases (26.8%), including 14 pancreatic ductal adenocarcinomas (21.4% moderately differentiated, 3.6% well-differentiated) and one well-differentiated grade 3 neuroendocrine tumor (1.8%).

► **Table 1** EUS Findings (N = 56)

EUS diagnosis	N (%)
Pancreatic head process	35 (62.5%)
Uncinate process lesion	5 (8.9%)
Neuroendocrine tumor	4 (7.1%)
Cephalo-isthmus process	4 (7.1%)
Intraductal papillary mucinous neoplasm	3 (5.4%)
Corpus-caudal process	1 (1.8%)
Pancreatic body process	1 (1.8%)
Pancreatic metastasis	1 (1.8%)
Pancreatic pseudocyst	1 (1.8%)
Pancreatic cystic lymphangioma	1 (1.8%)

Conclusions Biliopancreatic EUS is a reference technique for the evaluation of pancreatic masses, offering high-precision morphological characterization and targeted tissue acquisition. Caution remains necessary, as the pancreas is one of the organs most prone to cytopathological interpretation difficulties, sometimes requiring repeated sampling with multiple needle passes. Optimizing sampling techniques and integrating advanced EUS technologies may further enhance diagnostic performance and improve patient management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Facciorusso A, Wani S, Triantafyllou K et al. Comparative accuracy of fine-needle biopsy versus fine-needle aspiration for tissue acquisition in pancreatic masses: a systematic review and meta-analysis. *Gastrointest Endosc* 2022; 95: 233–243

eP401 Clinical performance of endoscopic intermuscular dissection for challenging rectal lesions

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DOI 10.1055/s-0046-1821728

Aims Endoscopic intermuscular dissection (EID) is an emerging technique that exploits the anatomical plane between the circular and longitudinal layers of the rectal muscularis propria. [1, 2] By enabling dissection within this intermuscular space, EID has the potential to secure vertical margins more confidently than standard submucosal dissection (ESD) and to remove lesions that extend deeper than the conventional ESD indication range. To clarify the practical utility of this approach, we assessed our center's experience with EID for difficult rectal lesions.

Methods We retrospectively reviewed consecutive cases in which EID was attempted for suspected deeply submucosal invasive rectal carcinomas or submucosal tumors located in the Ra/Rb region between 2021 and 2023. Key endpoints included procedural success, histological completeness of resection, and procedure-related adverse events.

Results A total of 14 patients (median age 68 years; 79% male) underwent EID. Median lesion diameter was 19 mm (IQR 12–20 mm). Technical success was achieved in all cases, and complete (R0) resection was obtained in 71.4% (95% CI 45.4%–90.6%). Final pathology revealed T1b carcinoma in six patients, T2 carcinoma in four, neuroendocrine tumors in three, and a gastrointestinal stromal tumor in one. No severe complications occurred; only one patient reported mild transient abdominal symptoms that resolved without additional intervention.

Conclusions Our early experience suggests that EID is a feasible and safe method for removing deeply situated rectal lesions while offering improved vertical margin control. Importantly, for individuals who are unsuitable for surgery, EID may provide a meaningful endoscopic alternative even for lesions traditionally categorized as non-curative by current guidelines. A demonstration video of the EID technique will be shown during the presentation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ichimasa K, Kudo SE, Misawa M. Endoscopic intermuscular dissection for rectal cancer: are we ready to skip surgery? *Gut* 2025. doi:10.1136/gutjnl-2025-336308
- [2] Van der Schee L, Albers SC, Didden P et al. Results of endoscopic intermuscular dissection for deep submucosal invasive rectal cancer: a three-year follow-up study. *Gut* 2025. doi:10.1136/gutjnl-2024-334612

eP402 Innovative Double-Tunneling D + E-Peroral Endoscopic Myotomy (POEM) Approach for Symptomatic Left-Side Esophageal Diverticula: Two-Patient Experience

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DOI 10.1055/s-0046-1821729

Problem to solve Two male patients, aged 83 and 74, both taking antithrombotic drugs (one under anticoagulation with edoxaban and the other patient under dual antiplatelet therapy with acetylsalicylic acid and ticlopidine) were referred to our department due to a large epiphrenic esophageal diverticulum (mean size of 45. ± 7.1 mm) on outpatient upper gastrointestinal endoscopy, associated with achalasia-like symptoms (dysphagia, regurgitation and nonintentional weight loss) with a mean Eckardt score of 6.5 ± 2.1. High-resolution esophageal manometry revealed distal esophageal spasm in one of the cases. Esophageal motility disorders are often associated with esophageal diverticula, indicating the need for intervention to address not only the structural esophageal problem but also the associated motility disorder. Left-side esophageal diverticula (6–12 o'clock position), especially epiphrenic diverticula pose an additional major bleeding risk for Peroral Endoscopic Myotomy (POEM) due to the potential injury of the aorta and other major vessels [1, 2].

Innovation For this specific subtype of left-side esophageal diverticula, we propose a double tunneling approach in a single procedure: the left tunnel limited to septotomy (D-POEM) and the right tunnel for E-POEM from the diverticulum to the cardia, reducing the risk of major bleeding. For both cases, left tunnel in a posterior approach (7 o'clock position) for D-POEM was performed using a triangle-tip (TT) Knife J (Olympus, Japan) with Spray Coag 2.5 mode (VIO3 ERBE, Germany), starting 3cm proximal to the diverticular septum and extending 3cm distal to the septum. After isolating the septum, a complete septotomy was performed with TT-knife J with Endocut Q 2.0/Forced Coag 3.0 mode. Then, right tunnel in a posterior approach (5 o'clock position) and subsequently complete myotomy were performed for E-POEM, from the level of the diverticular septum to the cardia, using the same knife and electrosurgical parameters described for D-POEM. Both mucosotomies were closed with TTS clips. Mean procedure time was 97.5 ± 31.8min. One patient presented subcutaneous emphysema and capnoperitoneum requiring intraprocedural percutaneous drainage. No other complications were reported.

Results At a mean follow-up of 5.0 ± 4.2months, both patients remain completely asymptomatic (Eckardt score of 0), with no complications.

Conclusions We present a variant double tunneling technique combining D-POEM with a complete septotomy and limited esophageal myotomy at the left side of the esophagus and E-POEM with a complete myotomy up to the cardia at the right side of the esophagus, that has proven to be effective and safe for the treatment of symptomatic left-side epiphrenic esophageal diver-

ticula, addressing both structural and motility abnormalities in a single procedure. This minimally invasive endoscopic approach highlights the effective treatment of symptoms associated with the diverticulum, the prevention of its recurrence, treating underlying motility disorders, which are often associated with it, and avoiding potential injury of large vessels and major bleeding complication, given the diverticulum proximity to the aorta and other major vessels, even in patients under antithrombotic drugs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yang J, Zeng X, Yuan X, Chang K, Sanaei O, Fayad L, Kumbhari V, Singh V, Kalloo AN, Hu B, Khashab MA. An international study on the use of peroral endoscopic myotomy (POEM) in the management of esophageal diverticula: the first multicenter D-POEM experience. *Endoscopy*. 2019; 51: 346–349
- [2] Ren L, Ye H, Zhu Y, Xie W, Liang Y, Liu Y, Dong J, Chen W, Chen X, Wang B, Pan L, Shi R. Diverticular peroral endoscopic myotomy (D-POEM) for symptomatic oesophageal diverticulum: a multicentre cohort study with a minimum follow-up of 3 years. *Surg Endosc*. 2024; 38 (1): 253–259. doi:10.1007/s00464-023-10471-6 Epub 2023 Nov 20 PMID: 37985492

eP403 Clinical outcomes and prognosis of endoscopic submucosal dissection for esophageal neoplasm: a retrospective study

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DOI 10.1055/s-0046-1821730

Aims Endoscopic submucosal dissection (ESD) is an organ-preserving treatment for superficial esophageal neoplasm with the potential for high-quality resection and favorable outcomes. We described the clinical characteristics and analyzed outcomes and prognosis at a single tertiary center [1–8].

Methods We retrospectively reviewed 118 consecutive patients with 128 esophageal lesions treated by ESD from January 1, 2012 to December 31, 2024. Primary endpoints were en bloc resection rate, recurrence rate, all-cause mortality, and disease-free survival. Continuous variables are presented as median (IQR) and categorical variables as number (%) (► **Table 1**).

► **Table 1** Baseline characteristics of patients

Characteristics	Value
Age, median (IQR), years	68.0 (59.0-74.0)
Sex, n (%)	
Male	113 (88.3%)
Female	15 (11.7%)
BMI, mean ± SD	23.2 ± 3.2
Smoking history, n (%)	51 (39.8%)
Medical history, n (%)	
Head & Neck cancer	5 (3.9%)
Hypertension	54 (42.2%)
Diabetes	24 (18.8%)
Chronic kidney disease	2 (1.6%)
Liver cirrhosis	6 (4.7%)
COPD	4 (3.1%)
Hospital days, mean ± SD	5.8 ± 1.7

Results The median tumor long-axis size was 15.0mm (IQR 10.0-21.2) and 10.0mm (IQR 10.0-15.0) in the short axis. En bloc resection rate was 97.7% (125/128) and curative resection rate was 80.5% (103/128). In the histologic analysis, lesions comprised squamous cell dysplasia [low-grade, 11 cases (8.6%); high-grade, 54 cases (42.2%)], squamous cell carcinoma in situ (20 cases, 15.6%), and squamous cell carcinoma (41 cases, 32.0%). Procedural complications occurred in 10.9% (14/128): bleeding requiring endoscopic therapy or transfusion 0.0% (0/128), perforation 0.8% (1/128) successfully managed with endoscopic clipping, and post-ESD stricture 10.2% (13/128). Median follow-up duration was 27.6 months (IQR 12.3-58.0). During follow-up, recurrence occurred in 6.3% and all-cause mortality in 2.3%; median disease-free survival was 24.0 months (IQR 9.4-57.1), and overall survival was 97.7% (► **Table 2**).

► **Table 2** ESD procedural and clinical outcomes

Clinical outcomes	Value
En bloc resection, n (%)	125 (97.7%)
Curative resection, n (%)	103 (80.5%)
Complications, n (%)	14 (10.9%)
Bleeding	0 (0.0%)
Perforation	1 (0.8%)
Post-ESD stricture	13 (10.2%)
Recurrence, n (%)	8 (6.3%)
All-cause mortality, n(%)	3 (2.3%)
Disease-free survival, median (IQR), months	24.0 (9.4-57.1)

Conclusions In this single center series, ESD achieved a high en bloc resection rate with low recurrence and mortality over mid-term follow-up, supporting its role as an effective organ-preserving therapy for superficial esophageal neoplasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ten-year experience of esophageal endoscopic submucosal dissection of superficial esophageal neoplasms in a single center 2016;
[2] Konishi H, Urabe Y, Nakamura T, Ishibashi K, Mizuno J, Fukuhara M, Takasago T, Tanaka H, Tsuboi A, Yamashita K, Hiyama Y, Takigawa H, Kotachi T, Yuge R, Ishikawa A, Oka S. Long-term prognosis after endoscopic submucosal dissection for esophageal cancer in older adult patients. *BMC Gastroenterol* 2024; 24 (1): 164
[3] Libânio D, Pimentel-Nunes P, Bastiaansen B, Bisschops R, Bourke MJ, Deprez PH, Esposito G, Lemmers A, Leclercq P, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, Fuccio L, Bhandari P, Dinis-Ribeiro M. Endoscopic submucosal dissection techniques and technology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2023; 55 (4): 361–389
[4] Okubo Y, Ishihara R. Endoscopic Submucosal Dissection for Esophageal Cancer: Current and Future. *Life (Basel)* 2023; 13 (4): 892
[5] Suzuki G, Yamazaki H, Aibe N, Masui K, Sasaki N, Shimizu D, Kimoto T, Shiozaki A, Dohi O, Fujiwara H, Ishikawa T, Konishi H, Naito Y, Otsuji E, Yamada K. Endoscopic submucosal dissection followed by chemoradiotherapy for superficial esophageal cancer: choice of new approach. *Radiat Oncol* 2018; 13 (1): 246
[6] Domper Arnal MJ, Ferrández Arenas Á, Lanás Arbeloa Á. Esophageal cancer: Risk factors, screening and endoscopic treatment in Western and Eastern countries. *World J Gastroenterol* 2015; 21 (26): 7933–43
[7] Probst A, Aust D, Märkl B, Anthuber M, Messmann H. Early esophageal cancer in Europe: endoscopic treatment by endoscopic submucosal dissection. *Endoscopy*. 2015; 47 (2): 113–21
[8] Minamide T, Kawata N, Maeda Y, Yoshida M, Yamamoto Y, Takada K, Kishida Y, Ito S, Imai K, Hotta K, Sato J, Ishiwatari H, Matsubayashi H, Ono H.

Clinical outcomes of endoscopic submucosal dissection for superficial circumferential esophageal squamous cell carcinoma. *Gastrointest Endosc* 2023; 97 (2): 232–240.e4

eP404 Challenging Diagnosis of Insulinoma: Endoscopic Ultrasound as a Clarifying Method

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DOI 10.1055/s-0046-1821731

Introduction: Insulinomas are rare tumors, with an estimated incidence of 0.1–0.4 cases per 100,000 inhabitants, and are almost always functioning, causing limiting symptoms related to hypoglycemia. Initial imaging exams such as computed tomography (CT) and magnetic resonance imaging (MRI) usually identify the lesion; however, in a small percentage of cases they are inconclusive.

Case Report: A 36-year-old female patient presented with episodes of sweating, dizziness, and loss of consciousness, during which hypoglycemia was documented. She also exhibited weight gain due to an increase in both frequency and volume of meals in an attempt to avoid hypoglycemic episodes. After laboratory tests indicated elevated insulin and C-peptide levels, abdominal imaging studies were performed, but no lesions were identified on either CT or MRI. To further investigate the pancreas as the source of symptoms, endoscopic ultrasound (EUS) was performed, revealing a well-defined, heterogeneous, hypoechoic nodular lesion with firm consistency in the pancreatic tail, measuring approximately 23 × 16 mm. Fine Needle Biopsy was performed during the procedure, and subsequent histopathology and immunohistochemistry demonstrated a well-differentiated neuroendocrine neoplasm producing insulin, confirmed by positivity for Chromogranin A, Synaptophysin, beta-catenin, and insulin.

Discussion: The diagnosis of insulinoma can be challenging, especially when lesions are small and not detectable on traditional imaging modalities. In this case, Endoscopic Ultrasound proved fundamental—not only for localizing the lesion but also for obtaining tissue for analysis and confirming the diagnosis—thus enabling definitive treatment [1–9].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Joseph AJ, Kapoor N, Simon EG, Chacko A, Thomas EM, Eapen A, Abraham DT, Jacob PM, Paul T, Rajaratnam S, Thomas N. Endoscopic ultrasonography—a sensitive tool in the preoperative localization of insulinoma. *Endocr Pract* 2013; 19 (4): 602–8
[2] Yang Y, Shi J, Zhu J. Diagnostic performance of noninvasive imaging modalities for localization of insulinoma: A meta-analysis. *Eur J Radiol* 2021; 145: 110016
[3] Shah P, Rahman SA, Demirbilek H, Güemes M, Hussain K. Hyperinsulinaemic hypoglycaemia in children and adults. *Lancet Diabetes Endocrinol* 2017; 5 (9): 729–742
[4] Vinik AI, Woltering EA, Warner RR, Caplin M, O'Dorisio TM, Wiseman GA, Coppola D, Go VL North American Neuroendocrine Tumor Society (NANETS). NANETS consensus guidelines for the diagnosis of neuroendocrine tumor. *Pancreas*. 2010; 39 (6): 713–34
[5] Glover JR, Shorvon PJ, Lees WR. Endoscopic ultrasound for localisation of islet cell tumours. *Gut*. 1992; 33 (1): 108–10
[6] Rösch T, Lightdale CJ, Botet JF, Boyce GA, Sivak MV, Yasuda K, Heyder N, Palazzo L, Dancygier H, Schusdziaza V, Classen M. Localization of Pancreatic Endocrine Tumors by Endoscopic Ultrasonography. *New England Journal of Medicine* 1992; 326 (26): 1721–1726
[7] Kurakawa KI, Okada A, Manaka K, Konishi T, Jo T, Ono S, Uda K, Michihata N, Matsui H, Fushimi K, Yamaguchi S, Yamauchi T, Nangaku M, Yasunaga H, Kadowaki T. Clinical Characteristics and Incidences of Benign and Malignant Insulinoma Using a National Inpatient Database in Japan. *J Clin Endocrinol Metab* 2021; 106 (12): 3477–3486

[8] Okabayashi T, Shima Y, Sumiyoshi T, Kozuki A, Ito S, Ogawa Y, Kobayashi M, Hanazaki K. Diagnosis and management of insulinoma. *World J Gastroenterol* 2013; 19 (6): 829–37

[9] Hofland J, Refardt JC, Feelders RA, Christ E, de Herder WW. Approach to the Patient: Insulinoma. *J Clin Endocrinol Metab* 2024; 109 (4): 1109–1118

eP405 Bibliometric Analysis of the 100 Most-Cited Articles on Endoscopic Band Ligation in Esophageal Variceal Bleeding

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DOI 10.1055/s-0046-1821732

Aims To identify, characterize, and visualize trends among the top 100 most-cited articles on EBL in the treatment of gastrointestinal bleeding, with a focus on esophageal varices, using a comprehensive bibliometric approach.

Methods A systematic search was conducted in the Scopus database on April 11, 2025, using predefined keywords related to EBL and gastrointestinal bleeding. Only English-language review and original research articles were included. Data such as citation count, author affiliations, country of origin, journal, and keywords were extracted. Analysis and visualizations were performed using the Bibliometrix R-package and VOSviewer.

Results Out of 1,115 records screened, 100 articles were selected (71 original articles, 29 reviews), published between 1989 and 2021, and collectively cited 17,298 times (range: 43–1,046 citations). Spain, the UK, and the USA led in research output. Hospital Clinic (Spain) and Royal Infirmary of Edinburgh (UK) were the most productive institutions. *Gastrointestinal Endoscopy* and *Hepatology* were leading journals in terms of publication count and citation impact. The most cited authors included Bosch J. and García-Pagán J.C., with strong collaborative networks visualized. Co-occurrence analysis of keywords identified key research themes and evolving trends over time.

Conclusions This bibliometric analysis provides a comprehensive overview of the most impactful literature on EBL for esophageal variceal bleeding. It highlights key contributors, institutions, and journals, offering insights into historical progress and emerging directions in this critical area of gastroenterology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP406 Risk Factors and Prediction Model for False Negative Results in Repeated EUS-FNA/B of Pancreatic Solid Lesions

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DOI 10.1055/s-0046-1821733

Aims Repeat endoscopic ultrasound-guided fine-needle aspiration/biopsy (rEUS-FNA/B) is recommended in solid pancreatic lesions (SPLs) with inconclusive initial results. However, even rEUS-FNA/B cannot completely eliminate false negatives in challenging cases. This study aims to identify risk factors of false-negative results in rEUS-FNA/B and develop a prediction model.

Methods Data of patients who had initial inconclusive diagnosis and underwent rEUS-FNA/B for SPLs across eight Chinese medical centers from January 2013 to June 2024 were retrospectively reviewed. Logistic regression was performed to identify the risk factors of false-negative results in rEUS-FNA/B. A clinical prediction model using random forest (RF) algorithm was developed with leave-one-hospital-out cross validation [1].

Results A total of 230 patients were enrolled in this study. Among them, 159 patients (69.1 %) were diagnosed with malignancies, while 71 patients (30.8 %) had benign lesions. The diagnostic accuracy, sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of rEUS-FNA were

75.00 %, 62.63 %, 100 %, 100 %, and 56.98 %, respectively, whereas those of rEUS-FNB were 84.15 %, 78.33 %, 100 %, 100 %, and 62.86 %. At multivariate analysis, lesion size 20–40mm (OR 0.26), lesion size ≥ 40 mm (OR 0.20), ≤ 2 needle passes (OR 3.1), no liquid-based cytology (LBC) examination (OR 3.95) were found to be independently associated with false-negative results. A final RF model with 4 features (lesion size, rEUS-FNA/B needle type, LBC, smear cytology) showed moderate ability to distinguish false-negative results in both training (AUC = 0.78) and validation sets (AUC = 0.68).

Conclusions To minimize false-negative outcomes during rEUS-FNA/B, LBC is strongly recommended. Additionally, SPLs with a maximum diameter of ≤ 20 mm exhibit a higher probability for producing false-negative results during rEUS-FNA/B procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dumonceau JM, Deprez PH, Jenssen C et al. Indications, results, and clinical impact of endoscopic ultrasound (EUS)-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated January 2017. *Endoscopy*. 2017; 49 (7): 695–714

eP407 EUS-RFA as a Therapeutic Approach for Gastrinoma

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DOI 10.1055/s-0046-1821734

Abstract Text

Zollinger-Ellison syndrome (ZES) is a rare condition, characterized by acid hypersecretion, due to a gastrin-secreting neuroendocrine tumour (NET) – gastrinoma, linked to multiple endocrine neoplasia type 1 (MEN-1) syndrome in 25 % of the cases. Surgical resection is the standard treatment for localized gastrinomas, but Endoscopic Ultrasound-Guided Radiofrequency Ablation (EUS-RFA) is emerging as a minimally invasive alternative for selected pancreatic NETs, supported mainly by experience with insulinomas [1–6].

We report a 33-year-old male with end-stage kidney disease and history of Wilms and parathyroid tumors, who presented with gastrointestinal bleeding from erosive esophagitis, esophageal ulcer, complicated by stricture, and peptic ulcers. Computed tomography showed a 1,2cm solid nodule between the distal duodenum and the pancreatic uncinate process. Serum gastrin level was 4982 pg/ml (normal: < 115 pg/ml). EUS revealed a 14-mm homogeneous, hypoechoic, round peripancreatic nodule adjacent to the uncinate process and close to the superior mesenteric vein. Fine-needle biopsy (22G-FNB) confirmed a well-differentiated NET (CD56 +, chromogranin +, synaptophysin +, Ki-67 < 2 %), establishing the diagnosis of ZES and MEN1.

Given his comorbidities and high-surgical risk, after a multidisciplinary team reunion, it was opted for EUS-RFA. After esophageal balloon dilation (12 mm), EUS-RFA was successfully performed (30 W for 25 seconds, impedance > 500 Ohms) without adverse events. The patient was discharged after 48 hours. Serum gastrin decreased to 311 pg/ml within six days. Upon follow-up, the patient remained asymptomatic.

This case highlights the potential role of EUS-RFA as a therapeutic option for gastrinomas, particularly in patients who are poor surgical candidates. Further studies are warranted to better define its role, long-term outcomes, and ideal clinical indications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Crinò SF, Partelli S, Napoleon B, Conti Bellocchi MC, Facciorusso A, Salvia R, Forti E, Cintolo M, Mazzola M, Ferrari G, Carrara S, Repici A, Zerbi A, Lania A, Tacelli M, Arcidiacono PG, Falconi M, Larghi A, Rizzatti G, Alfieri S, Panzuto F, Hindryckx P, Berrevoet F, Lapauw B, Lakhtakia S, Sundaram S, Samanta J, Rastogi A, Landoni L. Study protocol for a multicenter randomized controlled trial to compare radiofrequency ablation with surgical resection for treatment of pancreatic insulinoma. *Dig Liver Dis* 2023; 55 (9): 1187–1193. doi:10.1016/j.dld.2023.06.021
- [2] Biermann MR, Sundar P, Veeramachaneni H, Chawla S, Patel V, Orr J, Keilin S, Willingham FF. Radiofrequency ablation for the management of symptomatic pancreatic insulinomas. *VideoGIE* 2023; 9 (1): 45–50. doi:10.1016/j.vgie.2023.08.007
- [3] Marasco M, Galasso D, Larghi A, Panzuto F. When Should We Adopt EUS-Guided Radiofrequency Ablation in Pancreatic Neuroendocrine Tumors? *J Clin Med* 2023; 12 (14): 4581. doi:10.3390/jcm12144581
- [4] Rimbaş M, Dumitru A-C, Tripodi G, Larghi A. EUS-Guided Radiofrequency Ablation Therapy for Pancreatic Neoplasia. *Diagnostics* 2024; 14 (19): 2111. doi:10.3390/diagnostics14192111
- [5] Rossi G, Petrone MC, Healey AJ, Arcidiacono PG. Approaching small neuroendocrine tumors with radiofrequency ablation. *Diagnostics* 2023; 13 (9): 1561. doi:10.3390/diagnostics13091561
- [6] ERASING Study Collaborators Crinò SF, Napoleon B, Facciorusso A, Lakhtakia S, Borbath I, Caillol F, Do-Cong Pham K, Rizzatti G, Forti E, Palazzo L, Belle A, Vilman P, van Laethem J-L, Mohamadnejad M, Godat S, Hindryckx P, Benson A, Tacelli M, De Nucci G, Binda C, Kovacevic B, Jacob H, Partelli S, Falconi M, Salvia R, Landoni L, Larghi A Endoscopic ultrasound-guided radiofrequency ablation versus surgical resection for treatment of pancreatic insulinoma. *Clin Gastroenterol Hepatol* 2023; 21 (11): 2834–2843.e2. doi:10.1016/j.cgh.2023.02.022

eP408 Organ Preservation and Escalation-Free Palliation in Rectal Cancer Using Endoscopic Electroporation: A Prospective Observational Cohort Study

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DOI 10.1055/s-0046-1821735

Aims Rectal cancer is challenging to manage in elderly or frail patients, for whom chemoradiotherapy, brachytherapy, radical surgery, and local endoscopic excision may be poorly tolerated. Existing organ-preservation and palliative strategies often provide limited or short-lived benefit with significant toxicity. Early work with endoscopic electroporation (EE) has shown feasibility for palliation, but its structured role in organ preservation for stage II–III disease and escalation-free palliation in stage IV rectal cancer has not been established. The aim of this study was to evaluate the role of dual EE in supporting organ preservation, palliation, and salvage therapy in frail or medically unfit patients with treatment-naïve, residual, or recurrent rectal cancer.

Methods Eighteen consecutive patients with rectal or rectosigmoid cancer (below the peritoneal reflection) were treated with combined calcium electroporation and irreversible electroporation between October 2023 and September 2025. Demographics, oncological history, symptoms, clinical response, complications and survival were obtained from a prospectively maintained database. Organ-preservation (stage II–III) was defined as avoidance of any rectal surgical resection after EE. Successful palliation (stage IV) required documented symptom control (bleeding, pain, obstruction) and absence of escalation of care (no new stoma, stenting, haemostatic-endothelium, transfusion, or iron infusion). Follow-up and overall survival (OS) were calculated from first EE to death or data cut-off. All procedures were performed as day-case treatments under sedation using CE-approved equipment.

Results Median age was 84.9 years (range 54–93), with a male: female ratio of 2:1. Baseline symptoms included bleeding in 77.8%, pain in 61.1%, and sub-

acute obstruction in 22.2%. Disease stages were II (11.1%), III (66.7%), and IV (22.2%). Fifteen tumours (83.3%) were mismatch-repair proficient. Eleven patients (61.1%) had residual or recurrent tumours after prior therapy (short-course radiotherapy 8/11; chemoradiotherapy 3/11), with additional brachytherapy (3/11), attempted endoscopic resection (3/11), or systemic therapy (2/11). Seven patients (38.9%), including all four rectosigmoid tumours, were treatment-naïve. Nine (50%) patients received a single EE session, and nine received multiple sessions (2–6). Median follow-up was 6.9 months (range 2.9–24.9). Median OS was 6.4 months (range 2.9–25.9), with 88.9% (16/18) alive at data cut-off. Organ-preservation occurred in 100% (14/14) of stage II–III patients at 6 months, with a 28.6% (4/14) complete clinical response rate. Among stage IV patients, 75% (3/4) achieved successful palliation, and 100% avoided invasive escalation of care. Overall symptomatic response was 88.9% (16/18), and tumour response was 77.8% (14/18). No procedure-related severe adverse events occurred.

Conclusions Dual EE enabled universal organ preservation in stage II–III rectal cancer and meaningful escalation-free palliation in stage IV disease, with high symptomatic response and excellent safety in a frail, elderly cohort. EE may represent a versatile option for organ preservation, salvage therapy, and palliation in selected patients. Larger prospective comparative studies are warranted.

Conflicts of Interest This project is part of the PhD thesis of Ademola Adeyeye. The tuition fees are funded by Mirai Medical

eP409 What factors are associated with post ERCP pancreatitis(PEP) among patients undergoing endoscopic retrograde pancreatic duct drainage (ERPD) ?

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DOI 10.1055/s-0046-1821736

Aims Post-ERCP pancreatitis(PEP) is the most common complication following endoscopic retrograde cholangiopancreatography (ERCP) and represents a frequent clinical challenge. Placement of an endoscopic retrograde pancreatic duct drainage (ERPD) stent has been recognized as an important preventive measure against post-ERCP pancreatitis. The aim of this study was to identify factors associated with post-ERCP pancreatitis in patients who underwent ERPD placement

Methods This single – tertiary center retrospective study was conducted at Chosun University Hospital and included patients who underwent ERCP between January 1, 2024, and December 31, 2024. A total of 576 ERCP procedures were performed during the study period, of which 60 cases involved the placement of an ERPD. Among patients who received an ERPD, potential risk factors associated with post-ERCP pancreatitis (PEP) were evaluated, including age, sex, naïve cannulation, cannulation time, procedure time, endoscopic papillary balloon dilation (EPBD), and trainee involvement.

Results Among the 60 patients who received an ERPD, the incidence of post-ERCP pancreatitis (PEP) was 21 cases (35%), which was higher compared with the overall ERCP population. The mean cannulation time was longer in patients who developed PEP compared with those who did not (637 seconds vs. 516.6 seconds), although the difference did not reach statistical significance ($P=0.343$). Similarly, the mean procedure time tended to be longer in the PEP group (34.1 minutes vs. 30.69 minutes), but this difference was also not statistically significant ($P=0.242$). No risk factors evaluated in this study demonstrated a statistically significant association with the development of PEP.

Conclusions Among patients who received an ERPD, no procedure-related factors were identified as predictors of increased risk for PEP. These findings suggest that ERPD placement itself may be the most important procedural measure for preventing PEP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP410 Risk of pancreatitis for combined EUS ERCP in distal malignant biliary obstruction may be lower than previously reported

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DOI 10.1055/s-0046-1821737

Aims A recent meta-analysis (Beran et al., 2024) showed that overall risk of post-ERCP pancreatitis is approximately 5.4%. Previous studies comparing same-session EUS tissue acquisition and ERCP with separate procedures did not show a significant difference in the incidence of Post-Procedure Pancreatitis (PPP). However, the absolute incidence of PPP was high, at 19% in the same session arm and 12% in the separate session group (Gorris et al., 2022). Hence, we analyzed our database to ascertain the risk of PPP in same-session interventions [1, 2].

Methods Single center retrospective analysis of all patients undergoing the same session EUS ERCP for head of pancreas mass from July 2019 to November 2025. All procedures were performed by single endoscopist (MD). Outcomes, including technical success, clinical success, FNA results, and immediate and long-term adverse events (AE), were analyzed.

while the rest underwent Percutaneous Transhepatic catheter with drain. Prophylactic rectal NSAID were administered to 33 patients (89%), and 24 patients (65%) received periprocedural IV hydration with lactated Ringer's solution. Overall, the incidence of AE was low, and the specific incidence of PPP was 2.7% (1/37). (► **Table 1**)

Conclusions Same session EUS guided tissue acquisition and ERCP for the head of pancreas mass may have lower risk for PPP than previously reported. The availability of ROSE, appropriate number of FNA passes, endoscopist with advanced technical expertise, case complexity, prophylactic rectal NSAIDs, and IV fluids could have positively impacted the risk of PPP in our study.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gorris M, van der Valk NP, Fockens P et al. Does same session EUS-guided tissue acquisition and ERCP increase the risk of pancreatitis in patients with malignant distal biliary obstruction. *HPB (Oxford)* 2022; 24 (10): 1634–1641. doi:10.1016/j.hpb.2022.04.003
- [2] Beran A, Aboursheid T, Ali AH et al. Predictors of Post-endoscopic Retrograde Cholangiopancreatography Pancreatitis: A Comprehensive Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol* 2025; 23 (11): 1905–1916. doi:10.1016/j.cgh.2024.11.014

► **Table 1**

Category	Data
Age	Mean ≈ 75.7 years
Sex (M/F)	16 : 21
Fine Needle Aspiration Performed	100 %
Needle Gauge Usage	• 22G only: 43.2 % (16/37) • 25G only: 35.1 % (13/37) • Both 22G & 25G: 21.6 % (8/37)
Total Passes (by Gauge)	• 22G: 67 passes (54.5 %) • 25G: 57 passes (45.5 %)
Average Number of Passes per Gauge	• 22G: $67 \div 24 = 2.79$ • 25G: $57 \div 21 = 2.71$
Endoscopic Ultrasound Route	• Transduodenal (TD): 35/37 (94.6 %) • Transgastric (TG): 3/37 (8.1 %)
Same-session Biliary Cannulation	28/37 (75.7 %)
Percutaneous Transhepatic Catheter with Drain	10/37 (27 %)
Stent Placement	• Stent placed: 27/37 (73 %) • No stent placed: 10/37 (27 %)
Type of Biliary Stent (Among 27 placed)	• Plastic: 11/27 (40.7 %) • Uncovered metal: 7/27 (25.9 %) • Covered metal: 11/27 (40.7 %)
Prophylaxis	• NSAIDs: 33/37 (89.2 %) • IV fluids: 24/37 (64.9 %)
Complication	Post-ERCP Pancreatitis: 1/37 (2.7 %)

Results 37 patients with pancreatic head masses underwent index EUS ERCP as part of the diagnostic workup. FNA was performed on all patients (100%), with a 25-gauge needle in 13 patients (35%), a 22-gauge needle in 16 patients (43%), and both needles in 8 patients (22%). FNA access was transduodenal (TD) in 35 patients (95%) and transgastric (TG) in 3 patients (8%). On average, three passes were performed per patient. Rapid on-site evaluation (ROSE) for preliminary cytologic exam and specimen adequacy was available for all patients. Same-session biliary cannulation was successful in 28 patients (76%),

eP411 Guideline-Optimized Large-Language Models for Colonoscopy and Pathology Interpretation: A Three-Model Comparative Study Revealing Distinct Performance Behaviors

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DOI 10.1055/s-0046-1821738

Aims Large-language models (LLMs) are increasingly used to support colonoscopy report interpretation, but their diagnostic reliability and behavior before and after guideline optimization have not been systematically evaluated. This study compared the accuracy and completeness of ChatGPT, DeepSeek and Copilot when interpreting colonoscopy and corresponding anatomopathology reports, assessed the effect of structured evidence-based prompting, examined cost-related practical considerations and identified performance domains in which any model surpassed ChatGPT.

Methods Ninety-one colonoscopy reports combined with their available anatomopathology results were processed by each LLM in two conditions: before and after receiving standardized guideline-based instructions. Each model was asked to interpret the full clinical sequence, integrating both endoscopic findings and pathology outcomes. The dataset was derived from real-world procedures performed at Hôtel-Dieu de France, Beirut, Lebanon, ensuring clinically authentic case representation. Two binary outcomes were recorded: accuracy, defined as correct interpretation of report and pathology correlation, and completeness, defined as inclusion of all essential reporting elements. Paired analyses used the McNemar test. Comparisons were conducted within each model pre- vs post-guidelines and between models at each timepoint.

Results Across all three LLMs, the most frequent pre-guideline error was incorrect assignment of surveillance intervals, reflecting insufficient integration of evidence-based follow-up rules before structured prompting. ChatGPT demonstrated the largest improvement after guideline optimization, with accuracy increasing from 56.0% to 92.3% ($p < 0.001$) and completeness from 79.1% to 92.3% ($p < 0.001$). DeepSeek showed a moderate increase in accuracy (53.8% to 70.3%, $p < 0.01$) but a significant decline in completeness (46.1% to 29.7%, $p < 0.001$), suggesting a restrictive or “restorative” behavior where structured prompting leads the model to remove rather than expand essential descriptors. Copilot improved in both domains, with accuracy rising from 57.1% to 86.8% and completeness from 57.1% to 81.3% ($p < 0.001$).

Before guidelines, accuracy did not differ significantly between models. Completeness, however, differed markedly, with Copilot achieving the highest

pre-guideline completeness at 95.6%, outperforming both ChatGPT and DeepSeek. This was the only performance domain in which ChatGPT was surpassed. After guideline prompting, ChatGPT achieved the highest overall performance. Its accuracy significantly exceeded DeepSeek's and was comparable to Copilot's, while its completeness remained significantly higher than DeepSeek and borderline higher than Copilot.

Practical considerations included the fact that ChatGPT was the only paid model, whereas DeepSeek and Copilot were freely accessible. Although ChatGPT delivered the best overall post-guideline performance, cost differences may influence accessibility, equity and feasibility in low-resource settings. Copilot, as a free tool demonstrating strong accuracy and completeness after optimization, represents a scalable alternative when paid models are not feasible.

Conclusions Guideline prompting markedly enhanced LLM performance in the interpretation of colonoscopy and anatomopathology findings. ChatGPT showed the most consistent and robust improvements and was significantly superior to DeepSeek in all post-guideline comparisons. Copilot outperformed ChatGPT in pre-guideline completeness and remained a strong free alternative after optimization. DeepSeek's decline in completeness highlights functional limitations and a restrictive response to structured guidance. Overall, ChatGPT was the most reliable model, while Copilot offers a promising cost-accessible option for endoscopic reporting support. As LLMs become increasingly accessible to lay people seeking guidance after their colonoscopy, our findings highlight the importance of directing them toward models that prioritize accuracy and completeness, ensuring that patient self-education remains aligned with evidence-based recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP412 Beyond the Obvious: Analyzing Demographic Trends and Predictive Factors for Successful Endoscopic Retrieval of Foreign Bodies from Gastrointestinal tract

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DOI 10.1055/s-0046-1821739

Aims Studies exploring demographic factors associated with foreign body (FB) ingestion are typically uncommon in adults, resulting in limited information available in the current literature. We aimed to identify demographic factors associated with FB ingestion and to evaluate predictors of successful endoscopic removal (ER).

Methods This descriptive cross-sectional study was conducted at the SDLD OPD and Endoscopy Suite, Department of Gastroenterology, SDLD, IPGMR & SSKM Hospital, Kolkata, India, from July 2021 to December 2022. Consecutive patients of all ages presenting with clinical and/or radiological evidence of FB ingestion were included. Data on demographic, clinical, and socio-economic factors were collected. All patients underwent evaluation and endoscopic management as per standard protocols. Descriptive statistical analysis was performed using MS Excel and Epi Info 7.2.2.2, and $p < 0.05$ was considered significant.

Results The patients who met the inclusion criteria had a median age of 6.25 years (range 0.2–75.0) and 58.6% males. Socio-economic status distribution was predominantly lower-middle (40.23%) and upper-lower (31.05%). Most patients (88.5%) presented with FB ingestion via the oral route. The time since ingestion varied, with 44.83% presenting after > 72 hours. The most common FBs were coins (34.48%) and meat bones/dentures (11.49% each). A significant ($p = 0.00058$) association between the individuals' denture ingestion and the endoscopic outcome was observed. Sharp objects accounted for 35.63% of cases. Dysphagia and odynophagia were reported in 29.89% and 21.83%, respectively, showing a strong association ($p < 0.0001$). Logistic regression analysis identified age as the only significant predictor of successful ER (odds ratio [OR] 0.96, $p = 0.0008$), indicating a slight decrease in removal success with

increasing age. Socio-economic status, sex, time since ingestion, and size of the food bolus were not significantly predictive. The predictive model integrating multiple factors demonstrated good discrimination with an area under the ROC curve (AUC) of 0.79 (sensitivity- 65.5%, specificity-83.3%). Models with socio-economic status or sex alone had poor predictive power (AUC 0.52 and 0.51, respectively). Age alone as a predictor showed an AUC of 0.73 (sensitivity-70.5%, specificity-72.2%), comparable to the full model. Endoscopic success in old patients (> 50 years) was significantly lower (46.7%). Logistic models exhibited modest discriminatory capacity (AUC 0.75 and 0.589), suggesting restricted prognostic significance for endoscopic outcomes in the older population.

Conclusions In this cohort, younger age was the sole significant predictor of successful ER of FBs, with removal success decreasing slightly with increasing age. The predictive model demonstrated good discrimination (AUC 0.79), with age alone performing comparably well (AUC 0.73). These findings highlight the importance of age as a clinical factor in endoscopic management of FB ingestion and suggest that ER is a generally effective procedure regardless of other demographic variables. Further research may focus on strategies to enhance timely presentation and optimize management protocols in diverse patient populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP413V Early Detection and Successful Endoscopic Submucosal Dissection of a Superficial Hypopharyngeal Cancer

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DOI 10.1055/s-0046-1821740

Problem to solve Oesophageal squamous cell carcinoma (ESCC) increases the relative risk of developing head and neck cancer by up to 34.9-fold [1]. This association is explained by the *field cancerization* phenomenon, in which the entire epithelial surface of the upper aerodigestive tract becomes susceptible to malignant transformation after chronic exposure to shared carcinogens such as alcohol and tobacco. Consequently, multiple synchronous or metachronous squamous cell carcinomas may arise throughout this region [2]. Despite their clinical relevance, pharyngeal cancers are frequently missed on standard white-light endoscopy. Even with advances such as magnification and digital chromoendoscopy, early detection remains challenging, and many cases continue to be diagnosed at advanced stages [3–6].

Early identification of superficial pharyngeal cancers enables curative resection, improving survival and reducing the long-term functional consequences associated with advanced disease and its treatments, including swallowing and voice impairments [6]. Endoscopic submucosal dissection (ESD) has emerged as a minimally invasive, organ-preserving, and safe therapeutic option with excellent outcomes and low complication rates [3–6]. Although well established for early gastric, rectal, and colonic tumors, its use for superficial pharyngeal cancers is relatively recent. Most evidence originates from Asian centers, and limited global exposure may be hindering widespread familiarity and adoption of this promising technique [4, 7].

Innovation We describe the case of a 71-year-old male patient with a history of oesophageal squamous cell carcinoma (ESCC) who had previously undergone subtotal esophagectomy. During follow-up endoscopy, and considering the field cancerization theory, a meticulous examination of the oral cavity and upper gastrointestinal tract was performed. On the right wall of the hypopharynx, an extremely subtle flat area with only minimal erythema was noted so discreet

that it was barely visible on white-light endoscopy. Under NBI chromoendoscopy, this area showed mildly brownish, raising suspicion. The biopsy, confirmed high-grade dysplasia. After multidisciplinary discussion with the head and neck surgeon, ESD was indicated.

First, the patient was anesthetized with orotracheal intubation, and no accessory device for laryngeal elevation was required. During the procedure, the lesion margins were difficult to identify, making 1.25 % Lugol chromoendoscopy necessary to clearly delineate the affected area, revealing a flat lesion of approximately 40 x 20 mm. Circumferential marking and the submucosal dissection was performed using the Orise™ProKnife. Submucosal lifting with 6 % hydroxyethyl starch and indigo carmine was then carried out, followed by submucosal dissection. Near the end of the procedure, the clip-with-line traction technique was employed to enhance lesion exposure and facilitate submucosal dissection. Complete *en bloc* resection of the lesion was successfully achieved. The procedure was completed in approximately 40 minutes.

Results The lesion was successfully resected *en bloc* using ESD, without intra-procedural or postprocedural adverse events. Histopathological evaluation confirmed *in situ* squamous cell carcinoma, with both lateral and deep margins free of neoplasia. No lymphovascular invasion was detected. The patient recovered uneventfully. Food intake was resumed on day 1 post-ESD, and the patient was discharged on day 2 post-ESD. Endoscopic follow-up was scheduled at 6 months after the procedure (not done yet).

Conclusions This case illustrates the importance of meticulous oral cavity and pharynx evaluation in patients with a history of ESCC, given their high risk of developing secondary neoplasia due to field cancerization. Even minimal subtle pharyngeal lesions may correspond to early carcinoma and can be easily missed on white-light endoscopy. Adjunctive imaging techniques significantly enhance lesion detection and margin delineation. Wider adoption of systematic screening protocols and pharyngeal ESD in Western centres could improve early detection rates and survival, while preserving laryngeal function in this population.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/40a4f3fe-5e32-4301-a6bc-c424f1434727/Uploads/19990_versions%3A3o_final%20hipofaringe%20esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Iizuka T, Kikuchi D, Suzuki Y, Tanaka M, Takeda H. Clinical relevance of endoscopic treatment for superficial pharyngeal cancer: feasibility of techniques corresponding to each location and long-term outcomes. *Gastrointest Endosc* 2021; 93 (4): 818–27
- [2] Fukuhara M, Urabe Y, Nakamura T, Ishibashi K, Konishi H, Mizuno J et al. Comparative analyses of short- and long-term outcomes between endoscopic submucosal dissection and endoscopic laryngo-pharyngeal surgery for superficial pharyngeal carcinomas. *DEN Open*. 2025; 5 (1):
- [3] Lee J, Chen KM, Chang C, Liu Y, Yang C. Endoscopic submucosal dissection for superficial pharyngeal squamous cell carcinoma. *Advances in Digestive Medicine*. 2021; 8 (1): 33–9
- [4] Kamal F, Khan MA, Lee-Smith W, Sharma S, Imam Z, Jowhar D et al. Outcomes of Endoscopic Submucosal Dissection for Treatment of Superficial Pharyngeal Cancers: Systematic Review and Meta-Analysis. *Digestive Diseases and Sciences*. Springer; 2022: Vol. 67: p 3518–28
- [5] Kikuchi D, Suzuki Y, Yamashita S, Ochiai Y, Hoteya S. Comprehensive Endoscopic Management of Superficial Pharyngeal Cancer – From Detection and Diagnosis to Treatment and Surveillance. *DEN Open*. Vol. 6: Blackwell Publishing Asia; 2026
- [6] Kato M, Ishihara R, Hamada K, Tonai Y, Yamasaki Y, Matsuura N et al. Endoscopic surveillance of head and neck cancer in patients with esophageal squamous cell carcinoma. *Endosc Int Open* 2016; 04 (7): E752–5
- [7] Matsubara T, Yamada K, Nakagawa A. Risk of second primary malignancy after esophagectomy for squamous cell carcinoma of the thoracic esophagus. *Journal of Clinical Oncology* 2003; 21 (23): 4336–41

eP414V Balloon-Assisted Redirection: A Novel Endoscopic Technique for Complex Biliary Injury Post-Cholecystectomy

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DOI 10.1055/s-0046-1821741

Abstract Text

A 52-year-old woman developed persistent high-output bile leak after a difficult open cholecystectomy, with imaging revealing a long proximal CBD–CHD stricture and upstream non-opacified ducts. Repeat ERCP attempts failed as the guidewire repeatedly entered the large defect. A novel balloon-assisted redirection technique was used, wherein a biliary balloon catheter was advanced through the percutaneous drain and inflated at the defect, creating a temporary barrier that enabled successful guidewire entry into the left hepatic duct. Bilateral stents were placed, achieving internal drainage. Drain output decreased rapidly, collections resolved, and the patient improved without requiring surgery. This minimally invasive method offers an effective alternative for complex bile duct injuries where standard endotherapy fails.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/90fd5e98-d615-47be-aafc-118364ae88e3/Uploads/19978_bile_leak%208.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP415 EUS-FNA Diagnosis of Pancreatic Lymphangioma: A Rare Chylous Cyst of the Pancreas

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Background: Pancreatic lymphangioma is an uncommon benign cystic lesion that may closely resemble mucinous or serous cystic neoplasms on imaging. EUS-FNA with biochemical and cytological assessment is critical for establishing a definitive diagnosis.

Case Description: A 50-year-old woman with hypothyroidism and thalassemia minor was evaluated for persistent dyspepsia and abdominal pain. Abdominal ultrasound identified a 25 × 35 mm cystic structure adjacent to the pancreatic head. MRI demonstrated a well-defined 3.6 × 2.7 cm cystic lesion arising exophytically from the pancreatic body–tail, showing T1 hypointensity, marked T2 hyperintensity, thin septations, and no mural nodules or ductal dilatation. Linear EUS revealed a 37 × 26 mm anechoic lesion at the head–isthmus junction, without communication with the main pancreatic duct and without internal solid components or Doppler signal. Initial sampling was performed with a 22G FNA needle, followed by a FNB pass with a 22G FNB Franseen-tip needle, resulting in aspiration of milky-white chylous fluid.

Biochemical analysis demonstrated marked hypertriglyceridemia (6250 mg/dL), low CEA (2.2 ng/mL), and low amylase and lipase levels (221/412 U/L). Cytology showed fibrino-leukocytic material with a lymphocyte-rich background and no epithelial cells. These findings were consistent with pancreatic lymphangioma.

Conclusion: EUS-FNA enabled definitive distinction between pancreatic lymphangioma and other cystic pancreatic lesions. The biochemical profile of the aspirate—chylous fluid with markedly elevated triglycerides, low CEA, and low amylase and lipase levels—is characteristic of lymphangioma and effectively excludes mucinous or other neoplastic cysts, supporting a conservative, non-operative approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP416 Does Extent-Integrated Colonoscopic Scoring Better Predict Ulcerative Colitis Relapse Than Severity Alone?

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DOI 10.1055/s-0046-1821743

Aims The Mayo Endoscopic Subscore (MES) is widely used to assess endoscopic inflammatory activity in ulcerative colitis (UC). More recently, additional indices such as the Modified MES (MMES) and Dublin index have been proposed to improve the prediction of clinical outcomes. However, real-world evidence directly comparing these scoring systems remains limited. Therefore, we evaluated the predictive performance of MES, Modified MES (MMES) [1], and the Dublin index [2] in patients with clinical remission UC undergoing colonoscopy.

Methods Consecutive patients who had maintained sustained corticosteroid-free remission for at least 6 months, had a partial Mayo score ≤ 1 , and underwent colonoscopy at our institution between August 2022 and February 2023 were prospectively enrolled. Following index colonoscopy, patients were followed every 8 or 12 weeks for 24 months or until clinical relapse occurred. Clinical relapse was defined as a partial Mayo score > 2 . The area under the receiver operating characteristic curve (AUC) of each endoscopic index was compared. The sensitivity, specificity, and risk ratio (RR), were also assessed. MMES was calculated by multiplying the sum of MES across five colonic segments (MS) by the maximal evaluated extent of the colon measured in decimetres during withdrawal, and dividing the resulting EMS by the number of segments with MES > 0 . The DUBLIN score was calculated as the product of the highest MES (0–3) observed during colonoscopy and disease extent classified according to the Montreal system (E1–E3).

Results A total of 166 patients were included. Ten patients were lost to follow up. The remaining 156 patients were analysed. Among them, 21 patients experienced clinical relapse. The AUCs were 0.766, 0.754, and 0.787 for MES, MMES, and the Dublin index, respectively. The best cut-off values for predicting clinical relapse were 1, 4, and 2 for MES, MMES, and the Dublin index, respectively. At the best cut off, the sensitivity, specificity, and relative risk were 0.857, 0.556, and 6.000 for MES; 0.857, 0.474, and 4.517 for MMES; and 0.429, 0.933, and 5.750 for the Dublin index, respectively.

Conclusions Both the MMES and Dublin index showed no clear advantage over the conventional MES in predicting clinical relapse. Although these indices provide more detailed segmental assessment, they did not yield improved discriminative performance. In this post hoc analysis, the results suggest that the conventional MES may also have potential for predicting relapse risk in routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rowan CR et al. DUBLIN [Degree of Ulcerative colitis Burden of Luminal Inflammation] Score, a Simple Method to Quantify Inflammatory Burden in Ulcerative Colitis. *J Crohns Colitis* 2019; 13 (11): 1365–1371
- [2] Lobatón T et al. The Modified Mayo Endoscopic Score (MMES): A New Index for the Assessment of Extension and Severity of Endoscopic Activity in Ulcerative Colitis Patients. *J Crohns Colitis* 2015; 9 (10): 846–852

eP417 Comparing the Efficacy and Adverse Outcomes of Plastic Versus Metallic Stents in Patients with Malignant Distal Biliary Obstruction: A Retrospective Study

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Aims Endoscopic retrograde cholangiopancreatography (ERCP) with stent placement remains the cornerstone of palliation for patients with malignant

distal biliary obstruction (MDBO). The choice between plastic stents (PS) and self-expanding metallic stents (SEMS) continues to ignite debate due to their varying patency duration, complication rates and cost effectiveness. While PS are less expensive and suitable for short term drainage, SEMS are favored for longer term management owing to their wider diameter and reduced occlusion rates. Nevertheless, clinical decisions are often influenced by patient survival, local resources, and anticipated need for reintervention. This study was conducted at King Hamad University Hospital, a tertiary care center in Bahrain to compare outcomes of PS versus SEMS in patients with MDBO [1–19].

Methods A retrospective cohort study was conducted at King Hamad University Hospital between January 2019 and May 2024. Demographic data, comorbidities, malignancy type, biochemical parameters, and post ERCP complications were reviewed. Comparative analyses between PS and SEMS groups were performed using appropriate statistical tests. Primary outcomes included improvement in bilirubin levels and liver enzymes post ERCP. Secondary outcomes assessed adverse events, reintervention and readmission rates.

Results A total of 54 patients with MDBO underwent ERCP with stenting for palliation (24 metallic, 30 plastic). Both groups demonstrated significant reductions in total and direct bilirubin, AST, and ALT following ERCP ($p < 0.001$). There were no statistically significant differences in cholangitis, migration or readmission rates. Reintervention was less frequent among PS recipients (58% vs. 43%), though not statistically significant. Additionally, time to reintervention was longer with patients who received SEMS compared to PS. Overall, both stent types achieved comparable biochemical improvement and palliation.

Conclusions In this retrospective study, both PS and SEMS provided effective biliary drainage and comparable biochemical improvement in patients with MDBO. Complications and readmission rates were similar, while SEMS demonstrated a longer time to reintervention. Overall, either stent type can be used effectively and stent selection should remain individualized based on prognosis, cost, and institutional resources.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Perdue DG, Freeman ML, DiSario JA, Nelson DB, Fennerty MB, Lee JG et al. ERCP Outcome Study (ERCOST) Group. Plastic versus self-expanding metallic stents for malignant hilar biliary obstruction: a prospective multicenter observational cohort study. *J Clin Gastroenterol* 2008; 42 (9): 1040–1046
- [2] Adams MA, Anderson MA, Myles JD, Khalatbari S, Scheiman JM, Elta GH. Self-expanding metal stents (SEMS) provide superior outcomes compared with plastic stents for pancreatic cancer patients undergoing neoadjuvant therapy. *Gastrointest Endosc* 2012; 76 (1): 93–99
- [3] Moss AC, Morris E, Mac Mathuna P. Palliative biliary stents for obstructing pancreatic carcinoma. *Cochrane Database Syst Rev* 2006; 2:CD004200
- [4] Kaassis M, Boyer J, Dumas R et al. Plastic or metal stents for malignant stricture of the common bile duct: results of a randomized prospective study. *Gastrointest Endosc* 2003; 57 (2): 178–182
- [5] Isayama H, Nakai Y, Kawakubo K et al. Management of malignant biliary obstruction with self-expandable metallic stents: update and future perspectives. *J Hepatobiliary Pancreat. Sci.* 2011; 18 (5): 646–654
- [6] Isayama H, Nakai Y, Kawakubo K et al. Management of malignant biliary obstruction with self-expandable metallic stents: update and future perspectives. *J Hepatobiliary Pancreat Sci.* 2011; 18 (5): 646–654.
- [7] Hong WD, Chen XW, Wu WZ, Zhu QH, Chen XR. Metal versus plastic stents for malignant biliary obstruction: an updated meta-analysis. *Clin Res Hepatol Gastroenterol* 2013; 37 (5): 496–500
- [8] Sangchan A, Kongkasame W, Pughkhem A, Jenwitheesuk K, Mairiang P. Efficacy of metal and plastic stents in unresectable complex hilar cholangiocarcinoma: a randomized controlled trial. *Gastrointest Endosc* 2012; 76 (1): 93–99
- [9] Almadi MA, Barkun AN, Martel M. Plastic vs self-expandable metal stents for palliation in malignant biliary obstruction: a series of meta-analyses. *Am J Gastroenterol* 2017; 112 (2): 260–273
- [10] Park CH, Park SW, Jung JH, Jung ES, Kim JH, Park DH. Comparative efficacy of various stents for palliation in patients with malignant extrahepatic biliary obstruction: a systematic review and network meta-analysis. *J Pers Med* 2021; 11 (2): 86

- [11] Sawas T, Al Halabi S, Parsi MA, Vargo JJ. Self-expandable metal stents versus plastic stents for malignant biliary obstruction: a meta-analysis. *Gastrointest Endosc* 2015; 82 (2): 256–267 e7
- [12] Luo X, Huang Z, Ali K, Hayat K. Evaluating safety and efficacy of plastic versus metal stenting in malignant hilar biliary obstruction: a systematic review and meta-analysis of randomized controlled trials. *Front Oncol* 2023; 13:1216753
- [13] Song TJ, Lee JH, Lee SS, Jang JW, Kim JW, Ok TJ, Oh DW, Park DH, Seo DW, Lee SK, Kim M-H, Kim SC, Kim CN, Yun SC. Metal versus plastic stents for drainage of malignant biliary obstruction before primary surgical resection. *Gastrointest Endosc* 2016; 84 (5): 814–821. doi:10.1016/j.gie.2016.04.018
- [14] Van Steenberghe W. Treatment of malignant biliary stenosis: which stent to use? *Acta Gastroenterol Belg* 2001; 64 (4): 309–13
- [15] Davids PH, Groen AK, Rauws EA, Tytgat GN, Huibregtse K. Randomised trial of self-expanding metal stents versus polyethylene stents for distal malignant biliary obstruction. *Lancet*. 1992; 340 (8834–8835): 1488–1492
- [16] Prat F, Chapat O, Ducot B, Ponchon T, Pelletier G, Fritsch J et al. A randomized trial of endoscopic drainage methods for inoperable malignant strictures of the common bile duct. *Gastrointest Endosc* 1998; 47 (1): 1–7
- [17] Jang S, Stevens T, Parsi MA et al. Superiority of self-expandable metallic stents over plastic stents in treatment of malignant distal biliary strictures. *Clin Gastroenterol Hepatol* 2022; 20 (2): e182–e195
- [18] Jang S, Stevens T, Parsi MA et al. Superiority of self-expandable metallic stents over plastic stents in treatment of malignant distal biliary strictures. *Clin Gastroenterol Hepatol*. 2022; 20 (2): e182–e195
- [19] Prat F, Chapat O, Ducot B, Ponchon T, Pelletier G, Fritsch J et al. A randomized trial of endoscopic drainage methods for inoperable malignant strictures of the common bile duct. *Gastrointest Endosc*. 1998; 47 (1): 1–7

ePosters 06

eP418 Patient Satisfaction Among Individuals Undergoing Endoscopic Procedures at Naimat Begum Hamdard University Hospital: A Prospective Pareto-Based Evaluation

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DOI 10.1055/s-0046-1821745

Aims To assess patient satisfaction following outpatient endoscopic procedures at Naimat Begum Hamdard University Hospital and to identify the major contributors to dissatisfaction using Pareto analysis to guide quality improvement strategies.

Methods This prospective observational study enrolled 300 consecutive outpatients undergoing endoscopic procedures from the Gastroenterology Department. After undergoing the procedure, all patients filled a structured satisfaction questionnaire assessing the following domains: (1) pre-endoscopy guidance and booking communication, (2) interaction with staff on the day of the procedure, (3) waiting time, (4) technical aspects of the procedure, (5) discomfort during endoscopy, (6) sedation-related concerns, and (7) post-procedure recovery. Procedures included 210 upper gastrointestinal (GI) endoscopies and 90 colonoscopies. The study population consisted of 180 males and 120 females. All participants completed the satisfaction form.

Dissatisfaction responses were categorized and quantified. A Pareto analysis was applied to identify the most frequent contributors to dissatisfaction and to determine the “vital few” domains responsible for the majority of negative feedback. Descriptive statistics were used to calculate proportions and cumulative percentages [1, 2].

Results A total of 62 dissatisfaction events were reported across all domains. Pre-endoscopy communication issues were the leading source of dissatisfaction, reported by 22 patients (35.5%), primarily relating to booking confirma-

tion delays or inadequate instructions. Sedation-related anxiety was the second most common issue, reported by 14 patients (22.6%), predominantly among younger female patients. Endoscopy-related discomfort was noted in 12 patients (19.4%); discomfort was higher among colonoscopy patients (n = 8) compared with upper GI endoscopy (n = 4). Other issues contributed smaller proportions, including waiting time (6 patients, 9.7%), staff interaction concerns (4 patients, 6.5%), technical/information-related issues (2 patients, 3.2%), and delayed recovery discharge (2 patients, 3.2%).

Pareto analysis showed that the top three dissatisfaction categories—communication issues, sedation-related anxiety, and procedural discomfort—accounted for 77.4% of all dissatisfaction events. This aligns with the 80/20 principle, indicating that addressing these three domains would yield the greatest improvement in overall patient satisfaction. The remaining categories collectively contributed only 22.6% of dissatisfaction, indicating relatively minor impact.

Conclusions Communication gaps, sedation-related anxiety, and procedural discomfort were the main contributors to dissatisfaction, accounting for most negative feedback. Focusing on improving pre-procedure counselling, appointment communication, and patient reassurance may significantly enhance overall satisfaction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] [Level of satisfaction from patients who undergone an endoscopic procedure and related factors.] November 2009 *Revista de Gastroenterología de México* 75(4):374-379
- [2] Ko HH, Zhang H, Telford JJ, Enns R. Factors influencing patient satisfaction when undergoing endoscopic procedures.

eP419 Clinical Profile and Treatment Outcomes in Patients with Solitary Rectal Ulcer Syndrome: A Three-Year Prospective Study from a Tertiary Care Centre

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DOI 10.1055/s-0046-1821746

Aims To evaluate the frequency, clinical presentation, and treatment response of patients diagnosed with solitary rectal ulcer syndrome (SRUS) among individuals presenting with bleeding per rectum

Methods This prospective observational study was conducted from January 2022 to January 2025 at a tertiary care hospital. A total of 250 patients presenting with bleeding per rectum underwent colonoscopic assessment. Individuals diagnosed with SRUS were followed as a focused cohort. Standardized management included dietary and lifestyle modification, careful use of laxatives, sucralfate enemas, and biofeedback therapy. Patients were assessed during follow-up visits for clinical improvement, symptom persistence, treatment compliance, and psychosocial impact [1, 2].

Results Among the 250 patients evaluated, 42 (16.8%) were diagnosed with SRUS. Only 6 patients (14.3%) showed significant improvement with lifestyle modification and judicious laxative use. The remaining 36 patients (85.7%) remained symptomatic despite adherence to conservative treatments, including sucralfate enemas and biofeedback therapy. Of these non-responders, only 3 patients consented to undergo surgical rectopexy. Although the procedure was technically successful, all three patients reported significant post-procedure psychological distress, including heightened anxiety, fear of symptom recurrence, and impaired confidence in daily functioning. The majority of the overall non-responder group required frequent outpatient visits, continued to experience bleeding and discomfort, and reported marked deterioration in quality of life with associated personal, professional, and emotional challenges.

Conclusions SRUS remains a difficult condition to manage, with poor response to conventional conservative therapies. While surgical rectopexy was accepted by only a small subset of refractory patients, postoperative psychological issues further complicated their recovery. These findings highlight the need for more

effective therapeutic strategies, early psychological support, and a multidisciplinary approach to improve long-term outcomes and quality of life in patients with SRUS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Clinical, Endoscopic, and Histologic Characteristics of Patients with Solitary Rectal Ulcer Syndrome at a Tertiary Care Center Syed Shafiq¹ 1Department of Gastroenterology, St. John's Medical College Hospital, Bengaluru, Karnataka, India
[2] Solitary rectal ulcer syndrome: characteristics, outcomes and predictive profiles for persistent bleeding per rectum. Singapore Med J. 2006; 47 (12): 1063–8

eP420 Use of a Modified Condom Catheter as a Protective Cap During Endoscopic Retrieval of Ingested Needles: A Case Series of 10 Patients

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DOI 10.1055/s-0046-1821747

Aims Endoscopic removal of foreign bodies from the stomach is among the most common emergency indications in gastrointestinal endoscopy. Needle ingestion is a particularly common among women who secure their headscarves with needles. The main complications that may occur during the extraction procedure are mucosal injury, bleeding, laceration, or perforation of the stomach and esophagus. In this study, we evaluated the presence and severity of esophageal injury during the removal of a swallowed needle using an easily accessible and low-cost modified condom catheter attached to the tip of the gastroscope.

Methods Fourteen female patients who accidentally swallowed a needle were admitted to the emergency department. After radiologic imaging confirmed that the foreign body was located in the stomach, endoscopic removal was performed under sedation with midazolam and meperidine. Before the procedure, a condom catheter with 35 mm diameter was modified by cutting and adapted to the tip of the gastroscope. Since swallowed needles could not be found in 2 patients, 12 patients were evaluated. During the procedure, the proximal one-third of each needle was grasped with a snare, and once the modified condom catheter cap at the gastroscope tip completely enclosed the needle at the esophagogastric junction, the instrument was withdrawn. Post-procedure endoscopic examinations were performed to assess possible esophageal mucosal damage, and the lengths of the removed needles were measured. Descriptive analysis was performed.

Results The mean age of the 12 female patients was 27.7 ± 8.7 years. All reported accidental needle ingestion while wearing a headscarf. The mean length of the extracted needles was 24.7 ± 6.2 mm (range: 15–35 mm). Follow-up endoscopic evaluations revealed no mucosal injury or laceration in any patient. All patients were discharged following the procedure.

Conclusions In this small case series of 12 patients with ingested needles, the use of a modified condom catheter attached to the gastroscope tip in conjunction with a snare was associated with successful retrieval without any endoscopically detectable esophageal mucosal injury. This easily accessible and low-cost modification may represent a useful adjunct in selected cases; however, larger comparative studies are needed to confirm its safety and efficacy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP421 Let it snow: a novel hemostatic agent to prevent delayed bleeding after duodenal adenoma resection

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DOI 10.1055/s-0046-1821748

Problem to solve Endoscopic mucosal resection (EMR) is a standard technique for removing duodenal adenomas but carries a relatively high risk of clinically significant delayed bleeding (CSDB), reported in 8–18 % of cases. CSDB contributes to patient morbidity and increased healthcare utilization. Preventive measures such as clip closure and prophylactic coagulation can reduce this risk but are technically demanding and time-consuming. In contrast, topical hemostatic agents are quick and easy to apply. Novel hemostatic powders may therefore offer a simpler and more efficient strategy to reduce CSDB following duodenal EMR.

Innovation A Polysaccharide Hemostatic System (PHS (Endoclot); Olympus, Tokyo, Japan) is a hemostatic powder applied to the resection site using controlled air pressure. The powder consists of absorbable modified polymers (AMP), which degrade naturally. By absorbing water from blood, AMP particles concentrate platelets, red blood cells, and coagulation proteins, thereby accelerating the clotting cascade. An air compressor ensures consistent air pressure, allowing uniform powder application to the resection site, forming a protective layer over the resection plane (► **Table 1**).

► **Table 1** (Post-)Procedural and histologic characteristics

Characteristic	Duodenal EMR (n = 34)
Sedation	
Propofol	32 (94.1)
Midazolam	2 (5.9)
Non-lifting sign (yes), n (%)	8 (23.5)
Piecemeal EMR (yes), n (%)	30 (88.2)
If piecemeal, number of pieces, median (IQR)*	4 (3)
Macroscopic complete resection (yes), n (%)	30 (88.2)
Successful application of hemostatic agent (yes), n (%)	33 (97.1)
Bleeding (yes), n (%)	
Intraprocedural	2 (5.9)
Post-procedural (delayed)	6 (17.6)
Timing of post-procedural bleeding (hours after EMR), median (IQR)	19 (110)
Perforation (yes), n (%)	0 (0)
Histology	
Tubular adenoma	16 (47.1)
Tubulovillous adenoma	17 (50 %)
Sessile serrated adenoma	1 (2.9)

EMR: endoscopic mucosal resection; IQR: interquartile range*: unknown for 12 patients

Results A total of 34 duodenal EMRs were performed using the novel hemostatic powder. Of these patients, 55.9% were male, with a mean age of 61 years (95% CI: 47.3–74.7). Most polyps were located in the second part of the duodenum (D2; 41.2%) and had a median size of 20 mm (IQR 20). Piecemeal resection was performed in 88.2% of cases. Application of the hemostatic agent was successful in 33 procedures (97.1%). Delayed bleeding occurred in 6 patients (17.6%) at a median of 19 hours post-EMR (IQR 110). Among these, a hemoglobin drop of ≥ 1.5 mmol/L was observed in 3 patients (8.8%), hematemesis in 2 (5.9%), hematochezia in 3 (8.8%), and melena in 5 (14.7%). Three patients were treated conservatively, and three underwent successful endoscopic hemostasis with clip placement.

Conclusions Compared with previous studies, this novel hemostatic agent does not appear to reduce the risk of CSDB. However, definitive conclusions cannot yet be drawn, as the study is ongoing and aims to include a total of 53 cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP422 Protective Effects of Escin Against Ethanol-Induced Gastric Mucosal Injury in Rats via Regulation of the TNF- α /NF- κ B Signaling Pathway

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DOI 10.1055/s-0046-1821749

Aims Therapeutic options for ethanol-induced gastric mucosal injury remain limited. To provide new drug options, this study investigated the protective mechanisms of Escin—a compound known for its anti-inflammatory and anti-edematous properties—against this condition, which are currently unreported.

Methods Male SD rats were divided into Control, Ethanol, Escin, and Omeprazole groups. Gastric ulcer index and histopathological scores were compared. Network pharmacology predicted Escin targets. Apoptosis proteins, NF- κ B inflammatory pathway proteins, inflammatory factors, and related mRNA expression were analyzed. An Ethanol-induced GES-1 cell injury model was established to evaluate the protective effect of Escin. Genes positively regulating the TNF- α /NF- κ B signaling pathway were identified through transcriptome sequencing and validated.

Results The study found that Escin significantly alleviated the damage of Ethanol to gastric mucosal tissue. Network pharmacology predicted that Escin was closely related to inflammation-related pathways such as NF- κ B in the action of gastric ulcers. Escin significantly mitigated ethanol-induced damage by restoring MUC5AC, TFF2, Occludin, suppressing NF- κ B activation, downregulating IL-1 β , IL-6, and TNF- α at both protein and mRNA levels, and modulating apoptosis by inhibiting Bax/Caspase-3 while promoting Bcl-2 expression. Escin's protection against ethanol-induced injury was further validated in cell proliferation assays. Finally, Transcriptomics revealed 27 inflammation-related genes upregulated by ethanol, of which 9 genes including Birc3, Bcl3, SOCS1, SOCS3, CCL2, CX3CL1, Pim1, SGK1, and OSMR positively regulated the TNF- α /NF- κ B signaling pathway. Western blot confirmed seven of these are modulated by Escin during its protective action.

Conclusions The study found that Escin significantly alleviated the damage of Ethanol to gastric mucosal tissue. Network pharmacology predicted that Escin was closely related to inflammation-related pathways such as NF- κ B in the action of gastric ulcers. Escin significantly mitigated ethanol-induced damage by restoring MUC5AC, TFF2, Occludin, suppressing NF- κ B activation, downregulating IL-1 β , IL-6, and TNF- α at both protein and mRNA levels, and modulating apoptosis by inhibiting Bax/Caspase-3 while promoting Bcl-2 expression. Escin's protection against ethanol-induced injury was further validated in cell proliferation assays. Finally, Transcriptomics revealed 27 inflammation-related genes upregulated by ethanol, of which 9 genes including Birc3, Bcl3, SOCS1, SOCS3, CCL2, CX3CL1, Pim1, SGK1, and OSMR positively regulated the TNF- α /NF- κ B

signaling pathway. Western blot confirmed seven of these are modulated by Escin during its protective action.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP423 Significance of D-LECS in Introducing Duodenal ESD for Superficial Non-ampullary Duodenal Epithelial Tumors in a Japanese Regional Hospital

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DOI 10.1055/s-0046-1821750

Aims Endoscopic submucosal dissection (ESD) for superficial non-ampullary duodenal epithelial tumors (SNADETs) has been reported to be effective, but the unique anatomical and physiological features of the duodenum are associated with a higher incidence of severe complications compared with other sites. In addition, SNADETs requiring ESD are relatively rare, making it difficult, especially in regional hospitals, to accumulate sufficient cases and gain experience. To ensure safety while building experience with duodenal ESD, we introduced duodenal laparoscopic and endoscopic cooperative surgery (D-LECS), in which ESD is followed by laparoscopic suturing of the mucosal defect. We then gradually shifted to standalone duodenal ESD after stepwise training, including endoscopic closure techniques in colorectal ESD. This study aimed to clarify the role of D-LECS in the introduction of duodenal ESD in a Japanese regional hospital.

Methods We retrospectively reviewed 37 patients with 37 SNADETs treated by D-LECS between September 2016 and November 2024, and 6 patients with 6 SNADETs treated by ESD alone from January 2025 onwards at our institution.

D-LECS cases were divided into an early phase (before national insurance reimbursement) with 12 lesions and a late phase (after reimbursement) with 25 lesions. Patient characteristics and treatment outcomes were compared between phases, including en bloc resection rate, R0 resection rate, dissection speed, intraoperative perforation, delayed bleeding, delayed perforation, and postoperative fever.

Treatment outcomes of standalone ESD cases were evaluated descriptively.

Results Patient characteristics, including age, sex, tumor size, tumor location, and malignancy rate, did not differ between the early and late D-LECS phases. En bloc resection was achieved in 100% of lesions in both phases. R0 resection rates were 16.7% in the early phase and 8.0% in the late phase, with no significant difference. Intraoperative perforation occurred in 41.7% and 12.0% of cases, respectively, showing a non-significant trend toward reduction in the late phase ($p = 0.083$). Postoperative fever occurred in 16.7% of early-phase cases and in none of the late-phase cases.

All 6 standalone ESD cases achieved R0 resection. One patient developed a perforation during clip closure of the mucosal defect; free air worsened on the following day, and surgical suturing of the defect was required. The remaining 5 patients experienced no major complications and were discharged on postoperative day 4.

Conclusions In a Japanese regional hospital where case accumulation is challenging, stepwise skill acquisition through D-LECS for duodenal ESD, combined with training in endoscopic closure after colorectal ESD, appears useful for safely introducing standalone duodenal ESD. However, the risk of emergency surgery due to complications remains and requires careful attention. Close collaboration with surgeons is essential, and D-LECS may contribute to both technical training of endoscopists and improvement of treatment outcomes during the introductory phase of duodenal ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP424 Analysis of the Efficacy and Safety of Endoscopic Intermuscular Dissection for the Treatment of Rectal Tumors: A Multicenter Retrospective Cohort Study

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DOI 10.1055/s-0046-1821751

Aims Endoscopic intermuscular dissection (EID) is an emerging, organ-preserving technique for rectal tumors; however, its clinical value necessitates further evidence. This study aimed to evaluate the efficacy and safety of EID for rectal tumors using multicenter data (► Table 1).

► Table 1 Patients baseline characteristics and endoscopic findings

Outcomes		Results
Number		33
Gender, male, n(%)		20(60.61)
Age, mean(SD), years		45.30 ± 13.00
Location, n(%)	Upper	4(12.12)
	Middle	2(6.06)
	Low	27(81.82)
Diameter, mean(SD),(mm)		
Subepithelial lesion		9.86 ± 3.86
Mucosal lesion		20-25
EUS, n(%)	Submucosal	21(63.64)
	Mucosal and submuscoal	9(27.37)
	Muscularis propria	3(9.09)
Paris classification, n(%)	0-Is	17(51.52)
	Ila	14(42.42)
	Isp	1(3.03)
	0-Ila + Ilc	1(3.03)
Color, n(%)	Yellow	26(78.79)
	White	5(15.15)
	Red	2(6.06)

Methods This retrospective cohort study included patients who underwent EID for rectal tumors at two tertiary centers between January 2019 and January 2025. Inclusion criteria were: (1) pathological confirmation of rectal tumor; (2) no distant metastasis on preoperative imaging (contrast-enhanced CT/MRI, endoscopic ultrasound, or 68Ga PET-CT); and (3) complete follow-up of ≥ 3 months. The primary outcome was R0 resection rate. Secondary outcomes included en bloc resection rate, procedure time, complication rate, and postoperative hospital stay.

Results A total of 31 patients (mean age 45.3 ± 13.0 years; 58.1 % male) were analyzed. Most tumors (87.1 %) were located in the middle/lower rectum. Pre-

operative diagnoses were predominantly submucosal tumors (93.6 %). EID achieved 100 % technical success and en bloc resection rates. The median procedure time was 60 minutes (IQR 42.3–68.0). Final pathology identified neuroendocrine tumors (G1, 87.1 %), leiomyoma (3.2 %), stromal tumor (3.2 %), and pT1 adenocarcinoma (6.5 %). The mean tumor diameter was 9.00 ± 3.86 mm. R0 resection was achieved in all cases (100 %), with no lymphovascular or perineural invasion. The complication rate was 9.7 % (3/31; fever: 2, pain: 1), all managed conservatively without re-intervention or surgery conversion. Median hospital stay was 5 days (IQR 5–6). Over a median follow-up of 22.5 months (IQR 11–62), no recurrence or metastasis was observed.

Conclusions EID is an effective and safe treatment for selected rectal tumors, offering high rates of R0 and en bloc resection with minimal complications. It represents a promising organ-preserving option for submucosal and early-stage rectal lesions. Larger prospective studies are warranted to confirm its long-term oncologic outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP425 Top Linear Incision–Assisted Endoscopic Submucosal Enucleation for the Resection of Large Subepithelial Lesions at the Esophagogastric Junction: A Multicenter Retrospective Study

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Aims Endoscopic submucosal excavation (ESE) for large subepithelial lesions (SELs) at the esophagogastric junction (EGJ) often faces challenges of large mucosal defects and difficult wound closure. This study aimed to preliminarily investigate the efficacy and safety of a modified technique—top linear incision-modified ESE (TLI-ESE)—for treating large SELs in this specific location.

Methods This multicenter retrospective study enrolled 7 consecutive patients with EGJ-SELs who underwent TLI-ESE between May 2024 and August 2025 at three tertiary centers. Inclusion criteria were lesions originating from the muscularis propria layer with a long diameter > 2 cm. Primary outcomes were technical success rate, en bloc resection rate, and R0 resection rate. Secondary outcomes included procedure time, complication rate, and follow-up results (► Table 1).

Results Seven patients (3 males, 4 females) with a mean age of 43.4 years were included. All lesions were successfully resected using TLI-ESE, achieving both a technical success rate and an en bloc resection rate of 100 %. The median procedure time was 65 minutes (range: 27-90 minutes). Postoperative pathology confirmed all lesions as leiomyomas with negative horizontal and vertical margins, resulting in an R0 resection rate of 100 %. No intraoperative bleeding or perforation occurred. Postoperatively, there were no instances of delayed bleeding, perforation, infection, or pneumothorax. During a median follow-up of 3-24 months, all patients recovered well, and endoscopic review showed no local recurrence.

► **Table 1** Baseline Characteristics and Treatment Outcomes of Patients Undergoing TLI-ESE for EGJ-SELs

Case No	Gender	Age (years)	Lesion Size (cm)	Procedure Time(min)	En Bloc Resection	R0 Resection	Pathological Result	Follow-up (months)	Postoperative Complications				Recurrence or Metastasis
									Bleeding	Perforation	Infection	Pneumothorax	
1	M	53	8	60	yes	yes	Leiomyoma	3	no	no	no	no	no
2	M	54	2.4	70	yes	yes	Leiomyoma	5	no	no	no	no	no
3	F	24	2	90	yes	yes	Leiomyoma	12	no	no	no	no	no
4	F	36	3.5	60	yes	yes	Leiomyoma	24	no	no	no	no	no
5	F	33	3	27	yes	yes	Leiomyoma	4	no	no	no	no	no
6	M	33	3.2	70	yes	yes	Leiomyoma	4	no	no	no	no	no
7	F	70	2.8	66	yes	yes	Leiomyoma	3	no	no	no	no	no

Conclusions This preliminary study suggests that TLI-ESE is a technically feasible, safe, and effective treatment strategy for large SELs in the EGJ region, achieving high en bloc and R0 resection rates with a low complication profile. This technique offers a novel approach to addressing the challenge of post-resection wound closure for large lesions, although its long-term efficacy requires further validation through larger prospective studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP426 Automated tumor documentation using a large language model

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DOI 10.1055/s-0046-1821753

Aims Tumor documentation for example for the Bavarian cancer registry to date is still done by typists, manually filling the information from the medical report to the cancer registry form. In this work, we explored the potential of a large language model based system (LLM) for automated tumor documentation.

Methods We developed an LLM based method, to read, output and fill in 10 typical tumor documentation related items from medical reports. We anonymized and modified potential identifying information of 10 physician letters. All patients had stage II or III colorectal cancer. We then measured the time it takes a typist to read and copy/paste the information from the medical report to the tumor documentation form. We compared and measured the time it takes for the LLM model alone. Finally, we measured the time it takes a typist to check for errors when the form was already prefilled by the LLM.

Results The typists manual fill in time was 14:45 minutes, the LLMs time was 0:45 minutes (-94.9%). The typist error check time with LLM prefill was 06:28 minutes (-56.2%). The LLM correctly extracted 100/100 items.

Conclusions State of the art large language models offer huge potential time saving benefits for automated tumor documentation. Larger studies are needed for evaluation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP427 A Tight Spot: EndoFLIP as a Diagnostic and Intra-POEM Compass in Type I Achalasia

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DOI 10.1055/s-0046-1821754

Introduction/Background Achalasia is a primary oesophageal motility disorder characterised by impaired lower oesophageal sphincter (LES) relaxation and absent peristalsis. While high-resolution manometry (HRM) remains the

diagnostic gold standard, the functional lumen imaging probe (EndoFLIP) has emerged as a valuable adjunct in the evaluation of LES distensibility, hence aiding diagnosis¹. In addition, EndoFLIP can provide real-time, intraoperative feedback during peroral endoscopic myotomy (POEM) in assessing procedural adequacy [1]. We present a case of type I achalasia in which EndoFLIP was used both for diagnostic clarification and intra-procedural assessment of myotomy effectiveness during POEM.

Case Presentation A 32-year-old male was referred to Gastroenterology from his primary care physician for progressive dysphagia to solids and liquids, regurgitation and significant loss of weight over the past year (Eckardt score 6 points). A computed tomography (CT) scan of the chest and abdomen were unremarkable. Oesophagogastroduodenoscopy (OGD) revealed a dilated oesophagus with retained food residue up until the proximal oesophagus and a puckered gastro-oesophageal junction. A high-resolution manometry (HRM) was unsuccessful due to difficulty traversing the catheter beyond the LES. An EndoFLIP was then performed which found a low esophagogastric junction (EGJ) distensibility index (DI) of 1.7 mm²/mmHg at 60 mL fill volume and an absent contractile response during volumetric distension, confirming severe EGJ outflow obstruction and supporting a diagnosis of type I achalasia. He subsequently underwent a POEM, during which an intra-procedure EndoFLIP was performed post-myotomy to assess adequacy prior to mucosal incision closure – this revealed a DI of 6.3 mm²/mmHg at 60 mL fill volume, indicating adequate disruption of the LES muscle fibres. The patient had significant improvement in symptoms and was discharged 2 days post-POEM.

Conclusion This case report highlights the utility of EndoFLIP as a diagnostic tool in patients with underlying oesophageal motility disorders, especially in circumstances where HRM is challenging to perform. Furthermore, its use as an intra-procedure guide in providing objective, real-time physiological feedback in the setting of POEM has great potential in guiding and optimising therapeutic outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Gyawali CP, Carlson DA, Chen JW, Patel A, Wong RJ, Yadlapati RH. ACG clinical guidelines: clinical use of esophageal physiologic testing. *Am J Gastroenterol* 2020; 115 (9): 1412–28. doi:10.14309/ajg.0000000000000734

eP428 Single-center experience with endoscopic management of demarcated walled-off pancreatic necrosis (WOPN)

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DOI 10.1055/s-0046-1821755

Aims The revised Atlanta Classification delineates the local complications of acute pancreatitis, categorizing them as acute (peri)pancreatic fluid collections (PFCs), acute necrotic collections, pancreatic pseudocysts, and walled-off pancreatic necrosis (WOPN). Various endoscopic interventions are employed for the management of WOPN, notably including direct transluminal endoscopic necrosectomy (DEN) following the placement of an endoscopic ultrasound-guided (EUS) lumen-apposing metal stent (LAMS). This study aims to assess the clinical outcomes and safety profile of DEN in patients diagnosed with pancreatic WOPN.

Methods Between October 2021 and October 2025, we performed a total of 3337 endoscopic procedures, including 1705 EUS examinations. During this period, a total of 75 WOPN cases were identified, comprising 40 LAMS insertions, 11 conventional double pigtail plastic stent insertions, and 24 cases of spontaneous regression. This single-center retrospective analysis encompasses patients with pancreatic WOPN who underwent DEN at Semmelweis University between May 2022 and Oct 2025. The procedures were performed by three seasoned specialists in EUS. Comprehensive data on patient demographics, procedural specifics, and follow-up outcomes were collected, with adverse events classified according to the AGREE criteria.

Results We successfully placed LAMS in 40 patients (65,0% female, average age 55,9 years, SD 15,41). The primary indications for intervention included the dimensions of WOPN, exacerbation of gastric outlet obstruction, and signs of infection. The mean dimensions of WOPN were recorded as 104 mm in the anteroposterior direction (SD 54,0), 96,7 mm laterolateral (SD 46,6), and 104,9 mm craniocaudal (SD 53,0), with a predominant occurrence in the head of the pancreas (60%). Biliary reasons (42,3%) and alcohol consumption (38,5%) emerged as the leading etiological factors for WOPN in male patients and biliary causes were identified in 85,7% of female patients. In total, we conducted 111 DEN procedures across the 40 patients (26 males and 14 females). The average number of DEN sessions was three for both male and female groups (range: 0-7). The technical success rate achieved was 100%, accompanied by a clinical success rate of 97%. Six of the 40 patients required intensive care. Four of these six patients needed surgical intervention due to complications from endoscopic necrosectomy, including bleeding and perforation. Unfortunately, one patient succumbed to multiorgan failure. To enhance the resolution of infection between DEN sessions, we employed 7 Fr/250 cm nasocystic tubes for irrigation of the WOPN with a saline solution in 36 patients, with no adverse events reported as a result of this intervention.

Conclusions DEN can be performed safely in experienced medical centers and demonstrates a high success rate in the treatment of infected WOPN, effectively alleviating symptoms and decreasing enzyme levels.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP429 A Rare Cause of Gastric Outlet Obstruction: Post-Caustic Pyloric Stenosis in an Adult Filipino Female

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DOI 10.1055/s-0046-1821756

Abstract Text

Caustic ingestion is an important global health problem that is largely under-reported. In adults, it is typically associated with suicide attempts, with alcohol or recreational drug use, or in those with other mental health problems. The extent of injury following caustic ingestion depends on the type of product (alkali or acid), the amount ingested, and length of contact time. It is an emergent condition that may lead to serious morbidity, with deleterious complications, and even death. This paper aims to give awareness on the possible complications of such cases; and what may be done. This is to report on a singular case of a 32-year-old, Filipino, female, who intentionally ingested hydrochloric acid, approximately 50ml in volume. She was diagnosed with epilepsy at 12 years old, maintained on Phenobarbital, and had associated developmental delay. She is mainly dependent on her mother and elder sister. An immediate endoscopy was done within 24 hours of ingestion, which showed circumferential erosions and ulcerations throughout the length of the esophagus, and necrotic and friable stomach mucosa (Zargar IIIB). She was maintained on nothing-per-ore, given intravenous hydration, parenteral nutrition and proton pump inhibitor drip. A re-look endoscopy was done after 96 hours post-acid ingestion, which revealed a mid-esophageal stricture at 25cm from the incisors occupying about 10% of the lumen; still with circumferential erosions and friable mucosa throughout the length of the esophagus; the stomach had linear brownish black ulcers in the entire stomach; and the pylorus was distensible and intubated, revealing friable and erythematous mucosa involving the first and second portion of the duodenum (Zargar IIIA). In coordination with the General Surgery service, patient was observed for progressive feeding from liquids to soft diet, which was generally tolerated. Patient was discharged and advised for repeat endoscopy after 2 months post-injury when stricture formation commonly occurs. However, at 5 weeks post-ingestion, patient consulted at the out-patient department due to episodes of post-prandial vomiting following intake of food or liquids. Repeat endoscopy was then advised, which still revealed an esophageal stricture occupying 10% of the lumen, esophagitis LA grade A, and now with a stenotic pylorus with a linear clean-based ulcer. Biopsy taken revealed mucin-secreting columnar epithelium with chronic active inflammation. The duodenum was no longer accessible. Patient then underwent laparoscopic gastrojejunostomy under the General Surgery service, and re-started on progressive diet. With multidisciplinary coordination, patient was stabilized and discharged with ongoing monitoring and rehabilitation. Endoscopy is a reliable technique for assessing the extent of caustic injury and the presence of complications, such as stricture formation and stenosis. These may occur earlier or even years thereafter, and timing is of the essence. Early, and individualized, surgical intervention may also result in excellent long-term outcome for such instances [1–4].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Challine A, Maggiori L, Katsahian S et al. Outcomes Associated With Caustic Ingestion Among Adults in a National Prospective Database in France. *JAMA Surg* 2022; 157 (2): 112–119. doi:10.1001/jamasurg.2021.6368
- [2] Karon AB. et al Pyloric Stenosis Caused by the Ingestion of a Corrosive Acid, Simulating Gastric Carcinoma: Report of a Case. *Gastroenterology Volume* 17 (Issue 3): 445–449
- [3] Almalki M, Yaseen W, Althobaiti S. Suicidal acid ingestion leading to gastric outlet obstruction treated by early definitive surgery—case report. *Journal of Surgical Case Reports Volume* 2021 (Issue 2): 2021rjab027. doi:10.1093/jscr/rjab027
- [4] Zeng N, Liu L, Xiao X, Guo W, Wang R, Zhou X et al. Outcomes of surgical management for acid-related upper gastrointestinal injuries. *JAMA Surg* 2022; 157 (2): 112–9. doi:10.1001/jamasurg.2021.6368

eP430 Performance of Colorectal Endoscopic Vacuum Therapy in Anastomotic Dehiscence Using the Tube-in-Tube Endoscopic Vacuum Therapy Method (CR TT-EVT)

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DOI 10.1055/s-0046-1821757

Aims Anastomotic dehiscence remains one of the most severe and potentially fatal complications following colorectal surgery. Despite technical advances and improved perioperative care, its incidence remains around 11% and is associated with high morbidity (2-16%) and mortality rates (20-35%). [1] In recent decades, endoscopic vacuum therapy (EVT) has become a minimally invasive and effective option for managing anastomotic fistulas and leaks, preserving anastomosis and reducing the need for reoperations. [2]

The conventional EVT method, described in 2001, uses a sponge attached to a catheter inserted transanally and positioned intraluminally or intracavitary, connected to a continuous, controlled negative-pressure system. [3]

In 2019, the Tube-in-Tube Endoscopic Vacuum Therapy (CR TT-EVT) technique was introduced, allowing vacuum system placement without sponge, transanally or through transperitoneal access. Its structural features eliminate the need for frequent device exchanges and allow cavity irrigation, improving infectious control and wound healing. [4]

The aim was to evaluate technical success, clinical success, and adverse events associated with the CR TT-EVT method in the management of colorectal anastomotic dehiscence.

Methods This retrospective observational study was conducted at the São Paulo Cancer Institute and included patients with colorectal anastomotic dehiscence treated with CR TT-EVT between 2019 and 2024.

Results Thirty patients with colorectal anastomotic dehiscence were treated using CR TT-EVT, 70% were male and the mean age was 58 years. Twenty-six were operated for colorectal cancer, three for diverticulitis, and one for endometriosis. Diagnosis was predominantly established by computed tomography (93%), and the mean volume of associated collections was 203mL.

CR TT-EVT was used as primary therapy in 21 patients and as rescue therapy after failure of initial treatment in nine. Seventeen had a protective ostomy at the time of diagnosis. Treatment access was mainly through transperitoneal (20 patients), followed by transanal (nine) and intraluminal via colostomy (one). The median interval between surgery and diagnosis of dehiscence was 8 days, and between diagnosis and CR TT-EVT initiation, 5 days. Technical and clinical success were 100% and 87%, respectively, with median time therapy of 21 days, and an average of three rectoscopies per patient. Eleven patients required additional therapy, but none required reoperation. Thirteen patients underwent treatment without an ostomy.

The most frequent complication was device displacement when positioned transanally (27%). Three patients developed anastomotic stenosis – two successfully treated with endoscopic dilation. One patient developed complete anastomotic stenosis requiring permanent colostomy. One patient died during late therapy, without evidence of pelvic infection.

Conclusions CR TT-EVT demonstrated high efficacy and safety in the management of colorectal anastomotic dehiscence, with no need of surgery. Adverse events were infrequent, mainly limited to device displacement, and anastomotic stenosis, mostly endoscopically manageable. The relationship between time for defect to closing and the limited need for device exchanges, highlights the potential advantages of CR TT-EVT.

These findings support CR TT-EVT as an effective minimally invasive strategy, that optimizes the management of colorectal fistulas and anastomotic leaks, avoiding unnecessary surgical interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rennie O, Sharma M, Helwa N. Colorectal anastomotic leakage: a narrative review of definitions, grading systems, and consequences of leaks. *Front Surg.* 2024;
- [2] Forcignanò E, Verra M, Lo Secco G, Arezzo A. Endoscopic Management of Anastomotic Insufficiencies in the Lower GI Tract. *Visc Med.* 2025;
- [3] Kühn F, Schardey J, Wirth U et al. Schiergens T, Crispin A, Beger N, Andrade D, Drefs M, Zimmermann P, Burian M, Andrassy J, Werner J. Endoscopic vacuum therapy for the treatment of colorectal leaks – a systematic review and meta-analysis. *Int J Colorectal Dis.* 2022;
- [4] de Lima MS, Figueiredo LZ, Furuya CK Jr, Pombo AAM, Hora JAB, Maluf-Filho F. Tube-in-tube endoscopic vacuum therapy for treatment of colorectal anastomotic leaks: A low-cost, patient-friendly, feasible and efficient technical modification of sponge-based endoscopic vacuum therapy. *Colorectal Dis.* 2023;

eP431 Endoscopic Ultrasound Guided FNA and FNB Are Both Safe And Effective Modalities In Diagnosis Of Focal Liver Lesions – A Prospective Comparative Study

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DOI 10.1055/s-0046-1821758

Aims Ultrasonography (USG) guided tissue acquisition has been the modality of choice for diagnosis of focal liver lesions. EUS-TA has now become the mainstay for tissue diagnosis of various intraabdominal mass lesions. EUS guided liver biopsy is also slowly gaining acceptance. But, the safety and efficacy of EUS-TA for focal liver lesion is largely unknown. In this study we looked at safety and efficacy of this modality and also compared the diagnostic accuracy of EUS-FNAC and EUS-FNB.

Methods In this prospective observational study, we included patients with focal liver lesions who underwent EUS-TA. Size of the lesion and number of passes taken were recorded. EUS guided FNAC followed by EUS guided FNB was done back-to-back during the same endoscopic session. The safety, sample adequacy, technical success and diagnostic yield of both FNA and FNB specimens was calculated based on the final diagnosis and compared.

Results Of the 40 patients included, 42.5% of patients were females with a mean age of 57.5 ± 12.84 years. 9 adenocarcinoma (22.5%), 4 hepatocellular carcinoma (10%), 4 poorly differentiated carcinoma (10%), 4 regenerating nodule (10%), 3 liver abscess (7.5%), 2 small cell carcinoma (5%), 3 squamous cell carcinoma (7.5%), 3 non-hodgkins lymphoma (7.5%), 2 inflammatory granuloma (5%), 2 high grade carcinoma (5%), 1 adenosquamous carcinoma (2.5%), 1 cholangiocarcinoma (2.5%), 1 NET was diagnosed (2.5%). 3 samples in EUS-FNA group and 1 sample in EUS-FNB was reported inconclusive. It was possible to obtain tissue from lesions in all patients, technical success 100%. Number of passes were significantly more in the EUS-FNA group compared to EUS-FNB. The diagnostic yield of EUS-FNB was 97.5% as compared to 92.5%. Although diagnostic yield of EUS-FNB was higher than that of EUS-FNA, the difference was not statistically significant.

Conclusions EUS-TA is safe and has a high diagnostic yield in focal liver lesions. In resource constraint settings, either EUS-FNA or EUS-FNB alone may be sufficient for diagnosis, with EUS-FNB being done judiciously when maintained tissue architecture is required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP432 EUS guided drainage versus ERCP in Malignant Distal Biliary Obstruction: A Single-Center Retrospective Study

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DOI 10.1055/s-0046-1821759

Aims Endoscopic ultrasound (EUS)-guided biliary drainage is an alternative technique for biliary decompression when ERCP fails. This study aims to compare the efficacy, safety, and clinical outcomes of EUS-guided biliary drainage versus ERCP in patients with distal malignant biliary obstructions (MBO).

Methods A single-center retrospective study was conducted on patients undergoing biliary drainage for MBO via EUS or ERCP between 2018 and 2024. Outcomes included technical success, clinical success (symptom resolution or bilirubin reduction $\geq 50\%$ at 14 days/ $\geq 75\%$ at 28 days), adverse events (AEs), reintervention rates, and long-term outcomes (survival, oncology treatment access). Continuous variables were compared using the Student's t-test, while categorical variables were analyzed using the Chi-square or Fisher's exact test. Survival rates were estimated using the Kaplan-Meier method. A p-value < 0.05 was considered statistically significant.

Results A total of 84 patients were enrolled in the study (31 EUS-group and 53 ERCP-group), with a combined total of 93 procedures (34 EUS and 59 ERCP). Technical success was achieved in 100% of EUS-BD and 94.9% of ERCP cases ($p = 0.181$), with clinical success rates of 92.9% and 94.1%, respectively ($p = 0.816$). No significant differences were found in total hospital stay (7.3 vs 6.6 days, $p = 0.484$) or post-procedural stay (4.6 vs 3.4 days, $p = 0.094$). Peri-procedural adverse events occurred in 11.8% (EUS) vs 5.1% (ERCP) ($p = 0.207$), while post-procedural complications were recorded in 5.9% vs 11.9% ($p = 0.642$). Regarding long-term outcomes, mortality during follow-up was significantly lower in the EUS group (64.5% vs 73.6%, $p = 0.008$), although mean survival time did not differ significantly (189 vs 285 days, $p = 0.205$). Access to chemotherapy was similar between groups (39.1% vs 55.8%, $p = 0.196$).

Conclusions Both methods proved effective, with a slight but not statistically significant advantage for EUS-BD in technical success and for ERCP in clinical success. Both EUS-BD and ERCP are effective options for biliary drainage in patients with malignant biliary obstructions. The choice of procedure may depend on the patient's clinical profile and the availability of experienced operators, considering individual characteristics and the specific risks associated with each technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP433 EUS-guided choledochoduodenostomy using LAMS with or without double pigtail stents for malignant biliary obstruction. A meta-analysis

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DOI 10.1055/s-0046-1821760

Aims In patients with distal malignant biliary obstruction (MBO) and failed endoscopic retrograde cholangiopancreatography, the American Society for Gastrointestinal Endoscopy and European Society of Gastrointestinal Endoscopy recommend endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) EUS-guided hepaticogastrostomy. [1, 2] Retrospective studies report technical and clinical success rates as high as 96% for EUS-CDS by transduodenal placement of a lumen-apposing metal stent (LAMS) into an extrahe-

patic bile duct. [3] Placement of double pigtail plastic stents (DPPS) has been described to reduce LAMS dysfunction. We conducted a meta-analysis of the efficacy and safety of EUS-CDS using a LAMS without or with DPPS to reduce stent dysfunction in the treatment of MBO.

Methods An expert librarian conducted searches of Embase and the MEDLINE full file (via Ovid) to identify studies published in English between January 1, 2011, and January 1, 2025. Clinical studies of EUS-CDS using the AXIOS LAMS (Boston Scientific Corporation, Marlborough, Massachusetts, USA) including more than 10 patients were eligible. Efficacy and safety outcomes were assessed using a random-effects meta-analysis to estimate the proportion of patients with the outcome. Efficacy outcomes were technical success, clinical success, and reinterventions. The safety outcome was the proportion of patients with ≥ 1 serious adverse event (SAE).

Results Eighteen eligible studies (96.7% retrospective, 54.5% male patients with mean or median age ≥ 68 years if reported) were conducted at 89 centers in 12 countries (US 1, APAC 3, Europe 8). Analyses included "cold" or "hot" (electrocautery-enhanced) LAMS without (15 studies, N = 905 patients) or with (4 studies, N = 141) concomitant placement of DPPS at the initial procedure. The estimated pooled proportions of patients with technical success and clinical success of EUS-CDS using the LAMS were 97.4% (95% CI 95.1–99.0%) and 94.2% (95% CI 91.4–96.5%), respectively. Reinterventions were performed in 11.3% (95% CI 7.0–16.4%) of patients. The estimated pooled proportion of patients with ≥ 1 SAE during the study period was 12.6% (95% CI 8.0–18.0%). Estimates were similar for EUS-CDS using LAMS with DPPS, including 96.4% (95% CI 88.0–99.9%) clinical success, 98.6% (95% CI 94.1–100%) technical success, 13.7% (8.0–20.5%) reinterventions, 15.7% (9.5–23.2%) patients with ≥ 1 SAE.

Conclusions EUS-CDS using a LAMS without or with DPPS had similarly high technical and clinical success and comparable safety to treat MBO in adults.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fugazza A, Khalaf K, Spadaccini M et al. Outcomes predictors in endoscopic ultrasound-guided choledochoduodenostomy with lumen-apposing metal stent: Systematic review and meta-analysis. *Endosc Int Open* 2024; 12: E456–E462
- [2] van der Merwe SW, van Wanrooij RLJ, Bronswijk M et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal. *Endoscopy (ESGE) Guideline. Endoscopy* 2022; 54: 185–205
- [3] Committee ASOPpawa S, Marya NB et al. American Society for Gastrointestinal Endoscopy guideline on the role of therapeutic EUS in the management of biliary tract disorders: summary and recommendations. *Gastrointest Endosc* 2024; 100: 967–979

eP434 Bovine Esophagus as an In Vitro Animal Model for Endoscopic Submucosal Dissection Training: Feasibility and Performance Improvement in 20 Procedures

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DOI 10.1055/s-0046-1821761

Aims The ESGE guideline, published in 2019, does not recommend performing the procedure directly on humans. It recommends performing procedures on at least 20 animal models before starting ESD procedures on humans, and performing en bloc resection without perforation in eight of the last ten procedures. Most animal models used today use pig organs due to their similarity to human organs. However, due to legal restrictions on pig production and slaughter in our country, access to pig models is difficult compared to other countries. Therefore, an animal model from the bovine esophagus, which is much more readily available in our country, was used as the first step of endoscopic submucosal dissection training. Twenty ESD procedures on the model were evaluated in terms of procedure time and muscle layer damage. Furthermore the first procedures performed by the endoscopist on humans were also

evaluated, considering that they could provide insight into the effects of these procedures on humans.

Methods The bovine esophagus, which was first 6 hours post-slaughter, was cleaned with tap water and 10% acetic acid (white vinegar) and placed in the prepared apparatus with a shoe box, 5-liter plastic bottle adjusted by cutting, 10 milliliter injection syringe, and gloves. An endoscopist who has not performed ESD before marked approximately 2-cm-diameter area with a Fujinon 530W gastroscope using a flexknife. The marked area was lifted with methylene blue and saline solution. Submucosal dissection was performed using the flexknife using the ERBE 300 cautery device, using the cut mode: effect 2 and watt 40, and the Swift coagulation mode: effect 4 and watt 40. In 20 procedures, the procedure time from the beginning of the marking to the completion of the dissection was assessed. After the procedure, the esophagus was dissected lengthwise to assess the presence of muscle damage at the procedure site. The presence of muscular damage in 20 ESD procedures performed on humans by the endoscopist were assessed retrospectively.

Results In the bovine esophageal ESD animal model, the first dissection lasted 63 minutes, and two punctate superficial muscle damage was present. The mean time of the procedure was 30.15 ± 14.8 min. After 10 procedures, a dissection of the same size took 23 minutes, and no muscle damage was detected. No muscular damage was detected in the 15 procedures following the 6th procedure. By the 20th procedure, dissection time had decreased to 14 minutes. In all procedures, the planned dissection area was extracted en-bloc. In the first 20 ESD procedures performed on humans by the endoscopist, who had used the bovine model 20 times, no complications were noted in 18 procedures. The mean diameter of the lesions was 25.1 ± 12.6 mm and the time of the procedures (range 22–275 min) were variable according to the size, localization and fibrotic amount of tissue. Muscular damage of 3 mm and 7 mm in diameter occurred in two patients. The damaged areas were closed with hemoclips.

Conclusions In vitro and in vivo animal models constitute the first step in ESD training. The fact that the procedure time was reduced by two-thirds after 10 procedures and nearly 50 minutes after 20 procedures in the study suggests that it may be particularly useful for developing muscle memory with the use of the endoscope for mucosal incision and submucosal dissection. The in-vitro nature of the model and the absence of bleeding risk clearly played a role in this. While the presence of only one endoscopist in the study suggests that this model is not sufficient to determine its usefulness, similar findings have been obtained in in vitro porcine models.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP435 Glycemic Control as a Predictor of Advanced Colorectal Neoplasia

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Aims Colorectal cancer (CRC) remains a major global health burden, and its rising incidence in younger adults underscores the limitations of age-based screening alone. Increasing evidence suggests that metabolic exposures, particularly diabetes and chronic hyperglycemia, may contribute to earlier and more aggressive colorectal neoplasia. This reinforces the need for metabolic risk-based stratification to identify high-risk individuals. This study aimed to assess the association between glycemic control and the presence of colorectal adenomas or cancers, and to develop a simple combined risk score [1].

Methods We conducted a single-center retrospective study at Hôtel-Dieu de France in Beirut, including 462 patients who underwent colonoscopy between 2020 and 2025 and had available HbA1c measurements. Demographic, cardiovascular, and metabolic data (age, sex, BMI, hypertension, diabetes, dyslipi-

demia) were extracted from medical records. The closest HbA1c to colonoscopy and the highest recorded HbA1c were collected. All lesions and cancers were confirmed histologically. Advanced neoplasia was defined as lesions ≥ 10 mm, villous histology, or high-grade dysplasia or invasive cancer. Statistical analysis included χ^2 testing, logistic regression (OR, 95% CI), ROC curve analysis for HbA1c discrimination, and Youden-based optimal threshold selection. A multivariable risk score was built using the strongest predictors (age, sex, BMI, diabetes, HbA1cMax).

Results Among the 462 patients, colorectal lesions were present in 80.7%, and advanced neoplasia in 7.4%. ROC analysis identified an optimal HbA1c cut-off of 5.9% (AUC 0.62, $p < 0.05$). Advanced colorectal lesions were more frequent in patients with HbA1c $\geq 5.9\%$ for both the closest HbA1c (12.2% vs 5.7%; OR 2.31, 95% CI 1.13–4.71) and HbA1cMax (11.1% vs 5.3%; OR 2.22, 95% CI 1.10–4.48). The final score was: $0.35 \times (\text{Age}) + 0.071 \times (\text{Male sex}) + 0.042 \times (\text{BMI} \geq 30) + 0.054 \times (\text{Diabetes}) + 0.488 \times (\text{HbA1cMax})$. Model performance was satisfactory (AUC 0.708, 95% CI 0.629–0.786). Sensitivity was 88.2% and specificity was 47.2%. A score ≥ 25 identified high-risk patients (OR 6.70, 95% CI 2.32–19.36, $p < 0.001$).

Conclusions In this cohort, HbA1c $\geq 5.9\%$ was associated with approximately double the risk of advanced neoplasia or colorectal cancer. Simple metabolic markers, particularly HbA1c, may improve pre-colonoscopy risk stratification and guide personalized screening intervals. Prospective multicentric studies are needed to validate this metabolic-based risk score.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Wang SY, Zhang WS, Jiang CQ et al. Association of measures of glucose metabolism with colorectal cancer risk in older Chinese: a 13-year follow-up of the Guangzhou Biobank Cohort Study-Cardiovascular Disease Substudy and meta-analysis. *Diabetes Metab J* 2024; 48 (1): 134–145. doi:10.4093/dmj.2022.0383

eP436 Clinical Characteristics of Superficial Esophageal Cancer Detected After Gastrectomy

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DOI 10.1055/s-0046-1821763

Aims After gastrectomy, endoscopic evaluation of superficial esophageal cancer can be challenging due to refluxed digestive fluids and changed background mucosa, making diagnosis of tumor margin difficult. To clarify factors associated with unclear tumor margin in endoscopic resection (ER) for superficial esophageal cancer after gastrectomy by classifying cases into clear (C) and unclear (U) groups.

Methods A total of 130 patients who underwent ER for superficial esophageal cancer after gastrectomy were retrospectively analyzed. 73 patients were classified into the C group and 57 into the U group. The U group was defined by at least one of the following: requirement of repeat preoperative endoscopy, horizontal margin classified as HMx or HM1 after ER, or piecemeal resection. Clinical variables were compared between groups.

Results In univariate analysis, the U group showed a significantly lower one-piece complete resection rate (82.5%, $p < 0.001$). The background mucosa with multiple Lugol-voiding lesions (referred to as LVLs Grade C) ($p = 0.010$), type of gastrectomy ($p = 0.033$), and reconstruction method ($p = 0.012$) were identified as factors associated with unclear tumor margin. In multivariate analysis, LVLs Grade C ($p = 0.026$) was identified as an independent factor, and the frequency of unclear tumor margin was lower with gastro-gastro anastomosis compared with Billroth-I reconstruction ($p = 0.005$) as well as with pylorus-preserving gastrectomy (PPG) compared with distal gastrectomy (DG) ($p = 0.039$).

Conclusions In superficial esophageal cancer after gastrectomy, the changed background mucosa and gastrectomy procedure and the type of reconstruction may influence tumor margin diagnosis during endoscopic evaluation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP437 Jejunal Lymphangioma: An Extremely Rare Cause of Obscure Gastrointestinal Bleeding – A Two-Case Series from a Resource-Limited Setting

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Aims To describe two rare cases of jejunal lymphangioma presenting as obscure gastrointestinal (GI) bleeding and to highlight the diagnostic challenges of small bowel vascular-lymphatic lesions in patients with persistent anemia and negative conventional endoscopy.

Methods We report two adult patients with recurrent melena and severe iron-deficiency anemia who underwent extensive evaluation for obscure GI bleeding. Both had nondiagnostic esophagogastroduodenoscopy and colonoscopy. The first patient, a 45-year-old male Jehovah's Witness, had a 2-year history of melena and was initially managed conservatively due to refusal of blood transfusion. Capsule endoscopy demonstrated an ill-defined bleeding lesion in the small bowel, prompting surgical exploration. The second patient, a 71-year-old female with transfusion-dependent anemia and recurrent melena, underwent repeated endoscopic and radiologic investigations including CT angiography and mesenteric angiogram, which were non-diagnostic. Due to limited access to capsule endoscopy, she underwent exploratory laparotomy with intraoperative enteroscopy [1].

Results Surgical exploration in both cases revealed actively bleeding jejunal masses. In the first patient, a 3 × 5 cm mass located approximately 120 cm from the ligament of Treitz was resected with primary anastomosis. In the second patient, an actively bleeding nodular jejunal lesion was similarly resected. Histopathologic examination confirmed jejunal lymphangioma in both cases, with one specimen showing associated Brunner gland adenomatous changes. Complete surgical excision resulted in resolution of overt bleeding and correction of anemia, with no recurrence on follow-up. These cases illustrate that jejunal lymphangioma is an exceptionally rare cause of obscure GI bleeding and can remain undetected despite exhaustive standard investigations.

Conclusions Jejunal lymphangioma is an extremely rare but important cause of obscure gastrointestinal bleeding. In patients with persistent or transfusion-dependent anemia and negative upper and lower endoscopy, rare small bowel lymphatic lesions should be considered. Diagnostic delays are common, particularly in resource-limited settings where capsule endoscopy and device-assisted enteroscopy may be unavailable. Surgical resection remains definitive and curative. Increased awareness of this entity is critical to prevent misdiagnosis and reduce morbidity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Soontornmanokul T, Angsuwatcharakorn P, Viriyautsahakul V, Rerknimitr R, Pantongrag-Brown L, Wisedopas N. Jejunal lymphangioma: rare case of GI bleeding. *Gastrointest Endosc* 2012; 76 (2): 442–443. doi:10.1016/j.gie.2012.06.001 PMID: 22867445

eP438 Comparison Between Endoscopic Retrograde Cholangiopancreatography Guided Brush Cytology(Ercp-Bc) And Single Operator Cholangioscopy (Soc) Guided Biopsy In Diagnosis Of Indeterminate Hilar Biliary Strictures

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DOI 10.1055/s-0046-1821765

Aims Indeterminate biliary strictures pose a diagnostic challenge. The main reason for this has been the inability to obtain adequate tissue from the site of the biliary stricture. ERCP along with brush cytology has been the traditional method of obtaining cytology specimens, but has been found to have poor sensitivity. Cholangioscopy provides the ability to obtain biopsies under direct

visualisation from these strictures. We aimed to compare the diagnostic utility of ERCP and brush cytology with cholangioscopy and biopsy. We also correlated visual findings on cholangioscopy with benign and malignant strictures

Methods In this prospective observational study, we included patients with indeterminate biliary strictures who underwent ERCP from April 2020 to April 2021. Indeterminate biliary stricture was defined as absence of diagnosis following cross sectional imaging and MRCP. Patients underwent back-to-back ERCP with brush cytology followed by cholangioscopy with biopsy during the same session. Data regarding biochemical, imaging, ERCP-BC and SOC guided biopsy were recorded. The appearance of the stricture on cholangioscopy was recorded. The final diagnosis of malignancy vs benign stricture was ascertained on positive pathology or on follow up for 3 months. The diagnostic accuracy of each modality was then calculated.

Results A total of 25 patients with indeterminate biliary strictures were included in the study, with a median age of 58.84 ± 15.69 years with 36 % being females. The sensitivity, specificity, positive predictive value, negative predictive value and accuracy of ERCP-BC and SOC guided biopsy was 55.6 %, 100 %, 100 %, 80 %, 84 % (p-value = 0.002) and 77.8 %, 100 %, 100 %, 88.8 %, 92 % (p-value < 0.001) respectively. Nodularity, presence of mass like appearance and irregular dilated vessels seen on cholangioscopy best predicted malignancy. Adverse events were similar in both groups

Conclusions SOC guided biopsy had better sensitivity and diagnostic accuracy when compared to brush cytology in diagnosis of malignancy in indeterminate hilar biliary strictures. SOC had an added advantage of direct visualisation of the stricture for features of malignancy

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP439 Endoscopic Detorsion of Sigmoid Volvulus: Outcomes, Predictive Factors, and Surgical Implications

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Aims Sigmoid volvulus (SV) is an abdominal emergency for which the optimal management strategy remains debated. Endoscopic detorsion (ED) offers an effective alternative to immediate surgery, allowing decompression and improving operative conditions. This study aimed to assess the outcomes of ED, identify predictors of its success, and evaluate its impact on surgical strategy and postoperative results.

Methods This retrospective study spanned 15 years (2005–2020) and included patients presenting with uncomplicated SV who underwent an attempt of ED. Successful detorsion was followed by elective resection, whereas emergency surgery was performed in cases of ED failure or complicated recurrence. Clinical, radiological, and operative data were analyzed. Predictive factors for ED success were assessed using statistical analysis (SPSS, Chi-square test, p < 0.05).

Results Thirty patients were included (mean age 64.3 ± 11 years), with a male predominance (70 %). All presented with signs of distal bowel obstruction, including abdominal distension (100 %), diffuse abdominal pain (90 %), and cessation of stool and gas passage (87 %). Diagnosis was confirmed by imaging in all cases.

ED successfully relieved obstruction in 75 % of patients (n = 23). The mean interval before elective surgery was 22 days. Among these patients, 90 % underwent scheduled sigmoidectomy with single-stage primary anastomosis, performed under optimal conditions and associated with low morbidity and no mortality.

Conversely, 7 patients (25 %) required emergency surgery due to initial ED failure or complicated recurrence. Most underwent resection with stoma forma-

tion (Bouilly-Volkman in 88 %, Hartmann's procedure in 12 %). This group showed higher postoperative morbidity (30 %) and included one death. Predictive factors of ED success included consultation delay < 72 hours, endoscopic intervention < 77 hours, caecal diameter < 10 cm, typical radiographic appearance, and history of subocclusive episodes ($p < 0.001$). Conversely, prior abdominal surgery, caecal diameter > 10 cm, and delayed management (> 77 hours) were significantly associated with ED failure. Successful ED significantly increased the likelihood of single-stage surgery with primary anastomosis ($p = 0.025$).

Conclusions Endoscopic detorsion represents a key step in the management of uncomplicated SV. It enhances operative conditions, reduces the need for emergency surgery, and facilitates elective resection with primary anastomosis, ultimately improving prognosis. Early identification of patients at high risk of ED failure is essential to guide optimal therapeutic strategy and reduce morbidity and mortality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP440 Combined ligation-assisted and underwater endoscopic mucosal resection for gastric and duodenal neuroendocrine tumours in a single session

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Abstract Text

Endoscopic resection of upper gastrointestinal neuroendocrine tumours (NETs) remains challenging, particularly in the duodenum, where positive vertical margins are frequent with conventional snare resection. Ligation-assisted endoscopic mucosal resection (EMR-L) and underwater EMR (UEMR) have emerged as valuable techniques to improve R0 resection rates and to manage recurrent lesions [1–4].

Here we describe the first reported case of simultaneous use of EMR-L and UEMR for multiple gastric and duodenal NETs during the same endoscopic procedure.

A 60-year-old woman with dyspepsia and obesity was referred to our unit after endoscopic resection of a duodenal NET performed elsewhere with positive lateral margins. Repeat oesophagogastroduodenoscopy in our center revealed intense gastric body atrophy, three reddish sessile polyps (3–6 mm) in the gastric body, and two 6-mm sessile lesions in the posterior wall of the duodenal bulb (one corresponding to the previously resected recurrent lesion).

All three gastric NETs and the non-recurrent duodenal lesion were removed *en bloc* using EMR-L. The recurrent duodenal NET was resected using the UEMR after complete immersion of the duodenal bulb. Prophylactic clips were placed on all resection sites. No immediate or delayed adverse events occurred.

Histopathological examination confirmed well-differentiated G1 NETs in all five lesions, all with negative lateral and vertical margins (R0 resection).

The combined application of EMR-L and UEMR in the same session proved safe and effective for achieving complete resection of multiple upper NETs, including a recurrent duodenal lesion. This is, to our knowledge, the first reported case employing both techniques simultaneously in a single procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sato Y, Hashimoto S, Mizuno K, Takeuchi M, Terai S. Management of gastric and duodenal neuroendocrine tumors. *World J Gastroenterol*. 2016; 14 22 (30): 6817–28. doi:10.3748/wjg.v22.i30.6817 PMID: 27570419 PMID: PMC4974581
- [2] Coutinho LMA, Lenz L, Kawaguti FS, Martins BC, Baba E, Gusmon C, Andrade G, Simas M, Safatle-Ribeiro A, Maluf-Filho F, Rodrigues R, Ribeiro U Jr. Underwater Endoscopic Mucosal Resection For Small Rectal Neuroendocrine

Tumors. *Arq Gastroenterol* 2021; 58 (2): 210–213. doi:10.1590/S0004-2803.202100000-37 PMID: 34133614

[3] do Espirito Santo PA, de Souza MHG, Silva IKGSE, Kawaguti FS, Maluf-Filho F, Lenz L. Underwater Resection of Neuroendocrine Tumors of the Gastrointestinal Tract: A Systematic Review. *J Transl Gastroenterol* 2023; 1 (1): 13–21. doi:10.14218/JTG.2023.00031

[4] Park SB, Kang DH, Choi CW, Kim HW, Kim SJ. Clinical outcomes of ligation-assisted endoscopic resection for duodenal neuroendocrine tumors. *Medicine (Baltimore)*. 2018; 97 (18): e0533. doi:10.1097/MD.00000000000010533 PMID: 29718844 PMID: PMC6393000

eP441 Evaluation of a Novel Through-the-Scope Full-Thickness Suturing Device for Endoscopic Sleeve Gastropasty: An Animal Feasibility Study

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DOI 10.1055/s-0046-1821768

Aims Endoscopic full-thickness suturing has multiple therapeutic applications, including bariatric interventions and gastrointestinal (GI) wall defect closure. However, currently available suturing devices are often complex, difficult to use, or lack robust efficacy data. This study aimed to evaluate the feasibility and performance of a newly developed through-the-scope full-thickness suturing device compatible with a standard 3.2-mm working channel.

Methods A total of six animal experiments were performed to assess the device's utility for endoscopic sleeve gastropasty (ESG). All procedures were conducted using a conventional endoscope equipped with the novel suturing system. Procedural success, technical performance, and post-procedural recovery were monitored. Two animals were maintained for 28 days for survival and histologic assessment.

Results All six ESG procedures were successfully completed using the new device. Animals demonstrated favorable clinical recovery during the observation period. Histologic examination of the two long-term survival animals confirmed the formation of durable full-thickness sutures.

Conclusions This novel through-the-scope suturing device enables effective full-thickness suture placement and supports successful performance of ESG in an animal model. These results suggest potential utility for bariatric and therapeutic endoscopic applications. Further evaluation in human clinical trials is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP442 Effective prevention of post-ERCP pancreatitis by selective 4-Fr prophylactic pancreatic stent insertion

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DOI 10.1055/s-0046-1821769

Aims Post-endoscopic retrograde cholangiopancreatography pancreatitis (PEP) remains the most common adverse event associated with ERCP and is particularly frequent in high-risk patients. Unintentional guidewire insertion into the pancreatic duct is recognized as a major procedure-related risk factor for PEP. Although prophylactic pancreatic stent (PPS) placement has been shown to reduce the incidence of PEP, identifying appropriate candidates before ERCP is often difficult, and unnecessary PPS insertion may introduce technical challenges or stent-related complications. Since January 2017, our institution has performed immediate insertion of a 4-Fr PPS in patients who experienced unintentional pancreatic duct guidewire insertion. The present study aimed to evaluate the effectiveness of this selective PPS strategy.

Methods This retrospective single-center cohort study included consecutive patients who underwent ERCP for biliary indications between January 2015 and December 2023. Eligible patients had intact papillae and experienced unintentional pancreatic duct guidewire insertion during the procedure. Patients with surgically altered anatomy, acute pancreatitis, main pancreatic duct obstruction, or intraductal papillary mucinous neoplasm were excluded.

At our institution, immediate placement of a prophylactic pancreatic stent is actively attempted whenever possible in patients with unintentional pancreatic duct guidewire insertion.

Accordingly, patients were categorized into two groups based on whether a stent was actually placed. The PPS group consisted of patients in whom a 4-Fr, 3-cm pigtail pancreatic stent (Advanix, Boston Scientific) was successfully inserted immediately after biliary cannulation, whereas the non-PPS group consisted of patients in whom PPS placement was not performed despite unintentional pancreatic duct guidewire insertion.

The primary endpoint was the incidence of post-ERCP pancreatitis (PEP). Secondary endpoints included PEP severity, serum amylase concentrations measured the day after ERCP, ERCP-related adverse events, and identification of independent risk factors for PEP using multivariate logistic regression analysis. PEP and its severity were defined according to established consensus criteria.

Results Of the 2,930 ERCP procedures performed during the study period, 366 patients met the eligibility criteria and were included in the final analysis (PPS group, $n = 206$; non-PPS group, $n = 160$). Although no major differences were observed in baseline characteristics, the frequencies of endoscopic sphincterotomy (EST), endoscopic biliary drainage (EBD), and biliary biopsy were higher in the PPS group. In contrast, there were no significant differences between the groups in the time required to achieve successful biliary cannulation or in the total procedure time.

Serum amylase levels measured on the day after ERCP were significantly lower in the PPS group. The incidence of post-ERCP pancreatitis was significantly lower in the PPS group than in the non-PPS group (14.8% vs. 29.4%, $p < 0.001$). The incidence of moderate or severe PEP was also significantly reduced in the PPS group (3.4% vs. 10.6%, $p = 0.009$).

Furthermore, univariate and multivariate logistic regression analyses demonstrated that PPS insertion ($p = 0.008$) and a history of cholangitis ($p = 0.008$) were independent protective factors associated with a reduced risk of PEP.

Conclusions Immediate insertion of a 4-Fr prophylactic pancreatic stent following unintentional pancreatic duct guidewire insertion significantly reduced both the incidence and severity of PEP. This selective strategy demonstrated a high technical success rate and was not associated with increased procedure time or additional adverse events. These findings indicate that selective prophylactic pancreatic stenting may be a practical and effective approach to reducing the risk of PEP in patients who experience unintentional pancreatic duct guidewire insertion during ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP443 From Detection to Decision: Impact of Guideline-Guided Reasoning on the Performance of AI Models in Upper GI Endoscopy

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DOI 10.1055/s-0046-1821770

Aims Artificial intelligence (AI) is increasingly used in upper gastrointestinal endoscopy (UGIE), particularly for early detection of esophageal and gastric neoplasia. However, its ability to integrate clinical reasoning and generate management recommendations has not been formally evaluated. Recent work suggests that next-generation AI should move beyond visual detection toward contextual interpretation supported by hybrid architectures combining computer vision with large language models (LLMs) aligned with evidence-based

guidelines. This study aimed to evaluate the capacity of ChatGPT and DeepSeek to interpret UGIE reports and issue follow-up or treatment recommendations before and after the structured integration of international guideline frameworks [1].

Methods A comparative analysis was conducted at Hôtel-Dieu de France in Beirut using ninety-five UGIE reports and corresponding pathology results. Both ChatGPT 5.0 and DeepSeek interpreted each report under two independent conditions: (1) without guidelines, and (2) after structured integration of AGA, ACG, ASGE, and ESGE recommendations. Interpretation accuracy and completeness were assessed using a binary scoring system (1 = correct, 0 = incorrect). Statistical analysis was performed in R using McNemar's test with continuity correction, with significance set at $p < 0.05$.

Results Before guideline integration, both models demonstrated identical accuracy (57.9%), while completeness reached 41.1% for ChatGPT and 46.3% for DeepSeek ($p < 0.05$). Recurrent errors involved inappropriate surveillance recommendations, particularly for sporadic non-dysplastic fundic gland polyps and focal antral intestinal metaplasia, potentially exposing patients to unnecessary procedures. After guideline integration, performance improved significantly for both models ($p < 0.001$): ChatGPT reached 97.9% accuracy and 95.8% completeness, while DeepSeek achieved 81.1% accuracy and 72.6% completeness. ChatGPT remained significantly superior across all parameters ($p < 0.001$), and most initial systematic errors were corrected after guideline incorporation.

Conclusions Without guideline guidance, AI models show major limitations and tend to over-recommend surveillance, failing to account for procedure-related risks. The initially similar performances of DeepSeek (free) and ChatGPT 5.0 (paid) indicate that commercial access alone does not ensure reliability without validated guideline integration, illustrating the bias that may arise when patients interpret their own reports using unguided AI. Integrating evidence-based recommendations dramatically improves accuracy and consistency, with ChatGPT showing clear post-guidance superiority. This approach may support clinicians in standardizing decisions and enhancing safety and quality throughout the endoscopic care pathway.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ebigo A, Messmann H, Lee SH. Artificial Intelligence Applications in Image-Based Diagnosis of Early Esophageal and Gastric Neoplasms. *Gastroenterology* 2025; 169 (3): 396–415.e2

eP444 Endoscopic Intermuscular Dissection – A Case Series

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DOI 10.1055/s-0046-1821771

Aims To explore the feasibility and outcomes of endoscopic intermuscular dissection (EID), a new endoscopic approach, we present a case series of EID in patients with suspected deep submucosal invasive T1 rectal cancers based on pre-interventional assessment. This series aims to describe the potential role of EID in risk-adapted treatment strategies for early rectal cancers.

Methods EID was performed in sixteen patients at the endoscopy departments of the University Hospitals Augsburg and Bochum. Procedures were carried out using the Olympus CZ-1500 gastroscope and the Olympus EVIS X1 system. En bloc resection of the lesion was achieved in all cases. In six patients, the resection site was closed using the Olympus SutuArt hand-suturing device.

Results Sixteen patients underwent EID. In all cases, the lesions were removed without significant complications. Histopathological examination confirmed low-grade adenocarcinomas with deep submucosal invasion, low tumor budding, and no lymphovascular invasion in six cases and low-grade adenocarcinoma with superficial submucosal invasion, low tumor budding and no lymphovascular invasion in one case. In one case the adenocarcinoma was

previously treated with TNT. Histology showed a low grade T1 carcinoma with intermediate tumor budding and histological evidence of perineural invasion. In one case histology confirmed a T2 carcinoma with poor differentiation (G3). The other cases showed tubular adenoma with high-grade dysplasia in three cases and low-grade dysplasia in another two cases. Furthermore, there was one neuroendocrine tumor and one vascular malformation removed with EID. Fourteen of the sixteen resections achieved clear margins. In one patient with confirmed deep-submucosal invasive cancer (D-SMIC), an R1 resection had to be presumed at the deep margin due to a specimen tear. This patient subsequently underwent a surgical transanal full-thickness resection. Histopathological analysis of the surgical specimen revealed no residual tumor cells. In the specimen of the rectal carcinoma previously treated with total neoadjuvant therapy, histological examination identified infiltration of smooth muscle fibers. Consequently, an R1 resection had to be assumed.

Conclusions This case series demonstrates that endoscopic intermuscular dissection is a promising approach for the management of rectal D-SMIC. The technique allowed for successful resection in all cases, with no significant complications.

Recognizing the potential of EID as an alternative to radical surgery, we are actively engaged in collecting and structuring additional data to strengthen the evidence base for its use. Ongoing analysis will aim to assess its outcomes in larger patient cohorts and refine patient selection criteria to maximize safety and effectiveness.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP445 The efficacy of multiple stenting from minor papilla in achieving sustained remission of recurrent acute pancreatitis

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Aims Pancreas divisum (PD) is one of the causes of recurrent acute pancreatitis (RAP). Its diagnosis may be missed that would result with chronic pancreatitis and even ductal adenocarcinoma in a rare case. Treatment aims to provide a sustained dilation of minor papillary orifice. We aimed to assess the efficacy of multiple plastic stenting of main pancreatic duct through minor papilla in PD cases.

Methods We evaluated the data of 24 PD patients with RAP treated between 2011 and 2023, with multiple plastic stenting with at least 24 months of follow up.

Results There were 11 females and 13 males with median age of 44 (Range:17-65). The patients underwent pancreatic sphincterotomy with plastic stents 7-10 F. After 6 months we either increased the size of the stent or increased the number of stents according to the size of the main pancreatic duct. We continued 6 monthly intervals until a satisfactory calibration is obtained. Median number of plastic stents were two (1-3). Median number of sessions was 4 (3-6). We did balloon dilation with 4-8 mm balloons for some patients as well. The maximal size of stents was two 10 F plus one 7 F. After retrieval of the stents, while no RAP happened in 19 patients, RAP happened with stricture of minor papillary orifice in 5 patients who required further endoscopic treatment. All recurrences happened in the second year follow up: median 17 months (range 15-23). No serious side-effect happened.

Conclusions Management of pancreas divisum with multiple stenting is safe and has long-term benefit in 79.1 % (19/24) of patients. However in longer term follow up more recurrences may be expected. Recently we treated some patients with SEMS and data arising from small numbers are encouraging with less sessions (Unpublished observation).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP446 Prophylactic Pancreatic Duct Stenting as the Most Effective Strategy for Preventing Post-ERCP Pancreatitis

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DOI 10.1055/s-0046-1821773

Aims To evaluate the clinical effectiveness of prophylactic pancreatic duct stenting in reducing the incidence and severity of post-ERCP pancreatitis in patients undergoing high-risk endoscopic retrograde interventions.

Methods From January 2020 to August 2023, a total of 1034 retrograde endoscopic interventions were performed at City Clinical Hospital No. 4 (Sochi). Prophylactic PD stenting was applied in 42 patients (4.1 %). Plastic 5Fr stents (3–5 cm) were used. Main indications included: repeated guidewire passage into the pancreatic duct (> 2 times) and contrast reflux into the duct. The majority of patients had obstructive jaundice caused primarily by choledocholithiasis (64.3 %). All planned interventions were successfully completed [1–4].

Results Among the 42 stented patients, PEP developed in 6 (14.3 %), including 4 mild (9.5 %) and 2 severe cases (3.75 %); asymptomatic hyperamylasemia occurred in 3 patients (7.1 %) /Severe cases demonstrated transient marked hyperamylasemia (> 1000 mg/L) and ultrasound-confirmed pancreatic changes; all responded to conservative therapy. One death occurred due to unrelated advanced rectal cancer, without signs of pancreatitis. Pain relief and decrease of amylase levels were observed within 24–48 hours in most cases.

Conclusions PEP prevention remains essential due to high morbidity and frequent occurrence after technically challenging ERCPs.

Prophylactic PD stenting is effective in high-risk situations such as repeated pancreatic duct access or contrast reflux.

In our cohort, stenting contributed to limiting the severity of PEP, with rapid clinical recovery in most cases.

Combined with other preventive measures, prophylactic PD stenting remains the most reliable and evidence-based strategy for PEP prevention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Chandrasekhara V, Khashab MA, Muthusamy VR et al. Adverse events associated with ERCP. ASGE Clinical Guideline. *Gastrointest Endosc* 2017; 85 (1): 32–47
- [2] Choudhary A, Bechtold ML, Arif M et al. Pancreatic stents for prophylaxis against post-ERCP pancreatitis: a meta-analysis and systematic review. *Gastrointest Endosc* 2011; 73 (2): 275–282
- [3] Elmunzer BJ, Scheiman JM, Lehman GA et al. A randomized trial of rectal indomethacin to prevent post-ERCP pancreatitis. *N Engl J Med* 2012; 366 (15): 1414–1422
- [4] Dumonceau J-M, Andriulli A, Elmunzer BJ et al. Prophylaxis of post-ERCP pancreatitis: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – updated June 2014. *Endoscopy*. 2014; 46 (9): 799–815

eP447 Rate and Predictors of Endoscopic Mucosal Healing in Inflammatory Bowel Disease Patients on Non-Biologic Therapy: Evidence from a Resource-Limited Setting

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► **Table 1** Key baseline characteristics and multivariable predictors of endoscopic healing in IBD patients on non-biologic therapy

Variable	Healed (n=35)	Non-healed (n=71)	AOR (95 % CI)	P value
Age at diagnosis (years)	31 (17–59)	25 (13–56)	1.322 (1.005–1.739)	0.046 *
Duration before diagnosis (months)	24 (0–300)	18 (0–144)	0.991 (0.963–1.021)	0.567
Montreal Classification (CD)				
B1	14(40)	16(22.5)	4.678 (0.176–124)	0.17
B2	5(14.3)	30(42.3) 15(21.1)		
B3	7(20)			
ESR (mm/hr)	30 (2–110)	48 (2–170)	0.946 (0.898–0.997)	0.040 *

Values shown as median (range) or n (%); CD: Crohn's disease; AOR: Adjusted Odds Ratio; *P<0.05

Aims The aims of this cross-sectional study are to determine the rate and predictors of endoscopic mucosal healing among IBD patients on non-biologic therapy in a resource-limited setting. We hypothesize that specific clinical and treatment-related factors are associated with the likelihood of achieving endoscopic mucosal healing in patients with IBD, and that clinical remission correlates poorly with endoscopic mucosal healing [1–27].

Methods A cross-sectional study was carried out at Tikur Anbesa Specialized Hospital in Addis Ababa, Ethiopia, from January 2023 to September 2023. The study included all consecutive IBD patients on treatment for at least 6 months who attended follow-up at the GI clinic during the study period, were willing to give consent, and agreed to undergo follow-up colonoscopy. Data was collected using a structured, pre-tested questionnaire directly from patients and from electronic medical records. Endoscopic mucosal healing was evaluated with SES-CD for Crohn's disease and the Mayo endoscopic sub-score for ulcerative colitis (► **Table 1**).

Results Out of the 106 patients included in this study, 69 (65.1 %) were in clinical remission. Thirty-five IBD patients (33 %) achieved endoscopic mucosal healing. More patients with ulcerative colitis achieved endoscopic mucosal healing compared to those with Crohn's disease (47 % vs. 29 %). Ten out of 32 (31.25 %) CD patients with a history of bowel resection achieved endoscopic healing. Of the 69 patients in clinical remission, only 27 achieved endoscopic mucosal healing (39.1 %). Higher ESR values (P=0.040, AOR 0.946 with 95 % CI 0.898–0.997) and younger age at diagnosis (P=0.046, AOR 1.322 with 95 % CI 1.005–1.739) predicted the absence of endoscopic mucosal healing.

Conclusions Clinical remission did not consistently indicate endoscopic mucosal healing in this cohort: only 39 % of patients in clinical remission showed mucosal healing, whereas 21.6 % of those not in clinical remission achieved mucosal healing. These results reinforce the evidence that relying solely on clinical assessment to evaluate disease control among inflammatory bowel disease patients has limitations; therefore, including follow-up colonoscopy in routine care—even in resource-limited setting, will improve treatment decisions and may lead to better patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Leung CM, Tang W, Kyaw M, Niamul G, Aniwan S, Limsrivilai J et al. Endoscopic and histological mucosal healing in ulcerative colitis in the first year of diagnosis: Results from a population-based inception cohort from Six Countries in Asia. 2017; 11: 1440–8
- [2] Shin SY, Park SJ, Kim Y, Im JP, Kim HJ, Lee KM et al. Clinical outcomes and predictors of response for adalimumab in patients with moderately to severely active ulcerative colitis: A KASID prospective multicenter cohort study. 2022; 20: 350–60
- [3] Rutgeerts P, Sandborn WJ, Feagan BG, Reinisch W, Olson A, Johanns J et al. editors. Infliximab for induction and maintenance therapy for ulcerative colitis. 2005;

- [4] Basaranoglu M, Ertan A. Rate and predictors of endoscopic mucosal healing in biologic-naïve patients with inflammatory bowel disease treated with azathioprine: a real-world, 10-year experience from a single center in Turkey. 2016; 6
- [5] Armuzzi A, Felice C, Papa A, Marzo M, Pugliese D, Andrisani G et al. Prevention of postoperative recurrence with azathioprine or infliximab in patients with Crohn's disease: an open-label pilot study. 2013; 7
- [6] Azzam N, Alruthia Y, Al Thaher A, Almadi M, Alharbi O, Altuwaijri M et al. Rate and risk factors of postoperative endoscopic recurrence in moderate-to-high risk Crohn's disease patients-A real-world experience from a Middle Eastern cohort. 2022; 28: 201–8
- [7] Domènech E, Mañosa M, Bernal I, Garcia-Planella E, Cabré E, Piñol M et al. Impact of azathioprine on preventing postoperative Crohn's disease recurrence: Results of a prospective, observational, long-term follow-up study. 2008; 14: 508–13
- [8] Haens GD, Geboes K, Rutgeerts P. Endoscopic and histologic healing of Crohn's (ileo-)colitis with azathioprine. 1999;
- [9] Rutgeerts P, Van Assche G, Sandborn WJ, Wolf DC, Geboes K, Colombel JF et al. Adalimumab induces and maintains mucosal healing in patients with Crohn's disease: Data from the EXTEND trial. Gastroenterology. 2012; 142:
- [10] Frédéric Colombel J, Sandborn WJ, Reinisch W, Mantzaris GJ, Kornbluth A, Rachmilewitz D et al. editors. Infliximab, Azathioprine, or Combination Therapy for Crohn's Disease NEJM. 2010;
- [11] Lémann M, Mary JY, Colombel JF, Duclos B, Soule JC, Lerebours E et al. A randomized, double-blind, controlled withdrawal trial in Crohn's disease patients in long-term remission on azathioprine. Gastroenterology. 2005; 128: 1812–8
- [12] Mantzaris GJ, Christidou A, Sfakianakis M, Roussos A, Koilakou S, Petraki K et al. Azathioprine is more effective than budesonide in achieving and maintaining mucosal healing and histologic remission in steroid-dependent Crohn's disease. Inflammatory Bowel Diseases 2009; 15: 375–82
- [13] Kiss LS, Szamosi T, Molnar T, Miheller P, Lakatos L, Vincze A et al. Early clinical remission and normalisation of CRP are the strongest predictors of efficacy, mucosal healing, and dose escalation during the first year of adalimumab therapy in Crohn's disease. 2011; 34: 911–22
- [14] Jones J, Loftus EV, Panaccione R, Chen LS, Peterson S, McConnell J et al. Relationships between disease activity and serum and fecal biomarkers in patients with Crohn's disease. 2008; 6: 1218–24
- [15] Sipponen T, Savilahti E, Kärkkäinen P, Kolho KL, Nuutinen H, Turunen U et al. Fecal calprotectin, lactoferrin, and endoscopic disease activity in monitoring anti-TNF-alpha therapy for Crohn's disease. 2008; 14: 1392–8
- [16] Rutgeerts P, Geboes K, Vantrappen G, Beyls J, Kerremans R, Hiele M. Predictability of the postoperative course in Crohn's disease. 1990; 99: 956–63
- [17] Efthymiou A, Viazis N, Mantzaris G, Papadimitriou N, Tzourmakiotis D, Raptis S et al. Does clinical response correlate with mucosal healing in patients with Crohn's disease of the small bowel? A prospective case-series study using wireless capsule endoscopy 2008; 14: 1542–7

- [18] D'Haens G, Sandborn WJ, Feagan BG et al. A review of activity indices and efficacy end points for clinical trials of medical therapy in adults with ulcerative colitis. 2007; 132: 763–86
- [19] Bitoun A, Bianchi A, Contou JF et al. Development and validation of an endoscopic severity index for Crohn's disease: a prospective multicenter study. *Groupe d'Etudes Thérapeutiques des Affections Inflammatoires du Tube Digestif (GETAID)* 1989; 30: 983–9
- [20] Daperno M., D'Haens G., Van Assche G. et al. Development and validation of a new, simplified endoscopic activity score for Crohn's disease: the SES-CD. 2004; 60 (5): 505–12
- [21] Bouguen G, Levesque BG, Feagan BG, Kavanaugh A, Peyrin-Biroulet L, Colombel JF et al. Treat to target: a proposed new paradigm for the management of Crohn's disease. 2015; 13: 1042–50
- [22] Peyrin-Biroulet L, Sandborn W, Sands BE, Reinisch W, Bemelman W, Bryant RV et al. Selecting Therapeutic Targets in Inflammatory Bowel Disease (STRIDE): Determining Therapeutic Goals for Treat-to-Target. *American Journal of Gastroenterology* 2015; 110: 1324
- [23] Lahiff C, Safaie P, Awais A et al. The Crohn's disease activity index (CDAI) is similarly elevated in patients with Crohn's disease and in patients with irritable bowel syndrome. 2013; 37: 786–94
- [24] Schnitzler F, Fidler H, Ferrante M, Noman M, Arijis I, Van Assche G et al. Mucosal healing predicts long-term outcomes of maintenance therapy with infliximab in Crohn's disease. 2009; 15: 1295–1301
- [25] Allez M, Lemann M, Bonnet J et al. Long-term outcome of patients with active Crohn's disease exhibiting extensive and deep ulcerations at colonoscopy. 2002; 97: 947–953
- [26] Vaughn BP, Shah S, Cheifetz AS. The Role of Mucosal Healing in the Treatment of Patients with Inflammatory Bowel Disease. *Current Treatment Options in Gastroenterology* 2014; 12: 103–17
- [27] Fiocchi C. Editor Special Reports and Reviews on Inflammatory Bowel Disease: Etiology and Pathogenesis. *Gastroenterology*. 1998;

eP448 Relevance and Applicability of EPAGE (European Panel on the Appropriateness of Gastrointestinal Endoscopy) Criteria in the Prescription of Upper Gastrointestinal Endoscopy

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DOI 10.1055/s-0046-1821775

Aims The prescription of esophagogastroduodenoscopy (EGD) has been steadily increasing over the years. However, some indications may be excessive, highlighting the need to rationalize its use. The EPAGE criteria, developed by a panel of European experts, provide a validated tool for assessing the appropriateness of indications for upper gastrointestinal endoscopy.

The aim of this study was to evaluate these criteria in validating indications for upper gastrointestinal endoscopy and to examine the correlation between the appropriateness of the indication and endoscopic findings.

Methods We conducted a retrospective descriptive study including all patients who underwent EGD in the digestive endoscopy unit of our Department: Hepato-Gastroenterology and Proctology "Medicine B" at Ibn Sina Hospital, Rabat between January 2023 and October 2025.

The appropriateness of the EGD indication was assessed according to the EPAGE criteria and classified as necessary and appropriate, appropriate, uncertain, inappropriate, or not applicable, using the software available at <http://www.epage.ch>.

EGDs with indications not covered by the EPAGE criteria were excluded from the analysis.

Results A total of 410 upper gastrointestinal endoscopies were performed during the study period, of which 88 (21.4%) were excluded. Overall, 352 patients were included, with a mean age of 48.6 years (16–92 years). There was a marked female predominance, with a F/M ratio of 1.6.

The most frequent indications for EGD were: persistent epigastric pain despite adequate medical therapy in 106 patients (32.9%), upper gastrointestinal bleeding in 80 patients (24.8%), iron-deficiency anemia in 52 patients (16.14%). According to the EPAGE criteria, the indication was classified as necessary and appropriate in 152 patients (47.2%), appropriate in 73 patients (22.6%), inappropriate in 33 patients (10.2%), and uncertain in 64 patients (19.87%). In 21.46% of cases, the EPAGE criteria were not applicable.

A significant endoscopic lesion was identified in 165 patients (73.3%) when the indication was deemed necessary and appropriate/appropriate.

There was a statistically significant association between the appropriateness of the indication and the presence of significant endoscopic findings ($p < 0.001$). When the indication was considered inappropriate/uncertain, a significant lesion was detected in 17.5% of cases, including 9 cases of gastric or duodenal ulcers and 4 cases of neoplastic lesions.

Conclusions In our study, 73% of upper gastrointestinal endoscopies were judged to have an appropriate indication. However, 17.5% of EGDs performed for inappropriate or uncertain indications revealed significant findings. These results underscore the need to update and refine the EPAGE criteria to better guide clinical decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP449 Liver biopsy guided by endoscopic ultrasound: is the number of passes and the punctured lobe relevant?

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DOI 10.1055/s-0046-1821776

Aims Liver biopsy guided by endoscopic ultrasound (EUS-LB) is an effective and safe technique for the study of liver diseases. However, there is limited scientific evidence regarding the technique (number of passes) and the difference in biopsy between the two lobes. Objective: To compare: 1) diagnostic yield, histological quality, and safety based on the number of passes, and 2) histological quality between the right liver lobe (RLL) and left liver lobe (LLL).

Methods This is a retrospective, single-center study based on a prospective cohort of patients who underwent EUS-LB with a 19G-FNB needle between October 2020 and March 2025. For Objective 1, patients were divided into two groups: 3–4 passes (Group A) vs 2 passes (Group B). All patients were analyzed for the second objective [1–3].

Results A total of 168 patients were included (113 in Group A and 55 in Group B), with a median age of 57 years (range 45.25–66), and 109 women (64.9%). The overall diagnostic yield was 97.6%, with a median number of portal tracts (NPT) of 16.5 (range 10–24) and a median specimen length (SL) of 10 mm (range 10–15). The overall adverse events rate was 6.5%. No differences were observed in diagnostic yield or adverse events between Group A and B: (98.2% vs. 96.4%) and (6.2% vs. 7.3%), respectively. Regarding histological quality, no differences were found between the two groups in terms of total NPT, total SL, or NPT in the RLL/LLL. However, SL in the LLL was significantly shorter in Group B (median 10 (range 7.25–15) vs 7 (range 5–10) in group A; $p = 0.014$). No histological differences were found between the two lobes; NPT/SL in the RLL: 7 (range 5–12)/10 (range 7–13) vs NPT/SL in the LLL: 8 (range 5–12)/10 (range 7–12.5).

Conclusions Performing 2 passes by EUS-LB would be enough to achieve a high diagnostic yield. In cases of difficulty and/or technical impossibility, puncturing a single lobe would not affect the histological quality of the sample.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sharma M et al. EUS-guided left lobe liver biopsy: Safer modality with similar diagnostic yield as right lobe: A pilot study. *Endosc Int Open* 2022; 11 (2): . doi:10.1055/a-1978-6652

[2] Rai P et al. Endoscopic ultrasound-guided liver biopsy using a single-pass, slow-pull technique with a 19-G Franseen tip fine-needle biopsy needle: A prospective study. *Indian J Gastroenterol* 2023; 42 (3): 418–424. doi:10.1007/s12664-023-01339-7

[3] Gadour E et al. Diagnostic and therapeutic role of endoscopic ultrasound in liver diseases: A systematic review and meta-analysis. *World J Gastroenterol* 2024; 30 (7): 742–758. doi:10.3748/wjg.v30.i7.742

eP450 Interest of Argon Plasma Coagulation (APC) in Digestive Angiodysplastic Lesions

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Aims Digestive angiodysplasia is an acquired superficial vascular malformation developing in the mucosa or submucosa of the gastrointestinal tract. It may present with overt gastrointestinal bleeding or chronic anemia. An effective therapeutic intervention is required to improve symptoms and limit long-term complications. Argon plasma coagulation (APC) is considered the reference technique, providing a simple, rapid, precise, and reliable treatment option with minimal adverse effects and complications. The aim of this study was to evaluate the efficacy of APC in the management of digestive angiodysplastic lesions

Methods We conducted a retrospective study including 29 patients with digestive angiodysplasias treated with APC in the Department of Hepato-Gastroenterology and Proctology "Medicine B" at Ibn Sina Hospital, Rabat, between 2020 and November 2025.

Results A total of 29 cases were collected. All patients were admitted with either overt gastrointestinal bleeding or chronic anemia. A complete endoscopic evaluation was performed for each patient to determine the source of bleeding. Among the patients, 19 (65.5%) were male and 10 (34.5%) female, with an sex ratio F/M: 1.9. The mean age at diagnosis was 69 years (range 31–90). Most patients had at least one associated comorbidity, mainly cardiovascular disease in 14 cases (48.3%) and end-stage chronic kidney disease requiring hemodialysis in 2 cases (6.7%). The most common clinical presentation was overt bleeding in 26 patients (89.6%): melena in 13 cases (44.8%), hematemesis associated with melena in 5 cases (17.2%), and rectorrhagia in 8 cases (27.5%). Only 3 cases (10.3%) were diagnosed during evaluation for anemia. Lesions were located in the stomach in 8 cases (27.5%), small bowel in 4 cases (13.7%), colon in 16 cases (55.2%), and duodenum in 1 case (3.4%). Treatment consisted of argon plasma coagulation in all cases (100%). A favorable clinical and biological response after a single session was observed in 75.8% of patients. Recurrence occurred in 7 patients (24.2%), who required additional APC sessions (2 sessions), without the need for surgery.

Conclusions Digestive angiodysplasias are a condition with increasing incidence and can be life-threatening due to gastrointestinal bleeding. Argon plasma coagulation is an effective treatment option, with a success rate of up to 95% after one or two sessions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP451 Esophageal stent placement: a single-center experience

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DOI 10.1055/s-0046-1821778

Aims Esophageal stent placement is a widely used endoscopic option for the management of both malignant and benign esophageal diseases. We aimed to evaluate the efficacy and safety of esophageal stent placement at a tertiary referral center.

Methods We retrospectively included all consecutive patients who underwent esophageal stenting between 05/2023 and 05/2025 at our hospital. Data on indications, stent type, use of fixation techniques, technical success, complications and outcomes were collected [1].

Results Overall, 32 patients were included [women: 36%, age: 64 (58–72) years]. The indication was malignancy in 20 (64%) patients [esophageal cancer (EC): 14 (69%), non-EC extrinsic malignant compression: 4 (19%), EC anastomotic recurrence: 2 (12%)], and benign in 12 (36%) [anastomotic leak: 4 (34%), post-radiation stricture: 3 (22%), postoperative anastomotic stricture: 1 (11%), caustic injury: 1 (11%), variceal bleeding: 1 (11%), intubation-related esophageal perforation: 1 (11%)]. All patients received a self-expandable metal stent (partially or fully covered), placed endoscopically only, without any need for X-ray. Technical success with uneventful stent deployment was 100%. Stent fixation (through-the-scope clips or StentFix OTSC) was used in 9 patients. Stent migration occurred in 3 patients, all without prior fixation, and was managed by restenting (n = 2) or with stent-in-stent placement (n = 1). Elective stent removal at 6–8 weeks was successfully performed in 8 patients with benign strictures or anastomotic leaks. During a mean follow-up of 110 ± 76 days, 18 patients with malignant indications died, with a mean survival of approximately 3.5 months (106 ± 21 days) after stenting.

Conclusions Esophageal stenting is a safe and effective therapeutic option for a broad spectrum of malignant and benign esophageal diseases. The use of fixation techniques appears to reduce the risk of stent migration and should be considered, especially in high-risk scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Spaander MCW, van der Bogt RD, Baron TH et al. Esophageal stenting for benign and malignant disease: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021. *Endoscopy* 2021; 53 (7): 751–762. doi:10.1055/a-1475-0063

eP452 Acute Cholangitis: A Retrospective Evaluation Based on International Guidelines

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Aims Acute cholangitis is a common diagnostic and therapeutic emergency resulting from biliary tract infection, most often secondary to obstruction. The Tokyo Guidelines 2018 (TG18) were established to provide standardized recommendations for the diagnosis, treatment, and management of acute cholangitis. However, few studies have assessed the extent to which these guidelines are implemented in real-world clinical practice. The aim of this study was to conduct a retrospective evaluation of the management of acute cholangitis by comparing therapeutic approaches with the recommendations of the Tokyo Guidelines 2018.

Methods This retrospective descriptive study was conducted in the Department of Hepato-Gastroenterology and Proctology. The study included all patients diagnosed with acute cholangitis between 2021 and 2025. Diagnostic criteria were based on three components: signs of inflammation, cholestasis, and imaging findings. Collected data included demographic characteristics (age, sex), clinical presentation, laboratory results, and both medical and endoscopic therapeutic interventions. Compliance with the guidelines was assessed based on diagnostic criteria, time to biliary drainage, antibiotic adaptation, and the use of drainage techniques.

Results A total of 160 cases of acute cholangitis were recorded. The mean age of the patients was 63 years (range: 17–88), with a predominance of males (M/F ratio 1.25). Diagnosis was established according to the Tokyo criteria: among the 160 patients, 142 (89%) presented with systemic inflammatory signs, including fever and/or chills. All patients (100%) had biological evidence of infection and cholestasis, with a mean CRP of 114.50 mg/L, a mean white blood cell count of 14,084/mm³, and a mean total bilirubin level of 101 mg/L. Etiologies were distributed as follows: lithiasis in 98 patients (61.25%), neoplastic obstruction in 55 patients (34.38%), and other causes including ruptured hydatid cyst or ampullary tumors in 7 patients (4.38%). Severity assessment showed that 38 patients (23.75%) had grade I cholangitis, 72 patients (45%) grade II, and 50 patients (31.25%) grade III according to the Tokyo Guidelines classification.

Therapeutic management consisted of early biliary drainage and systemic antibiotic therapy. Broad-spectrum intravenous antibiotics, including third-generation cephalosporins and metronidazole, were administered to 158 patients (98.75%) upon admission. Antibiotic regimens were adjusted in 90 patients (56%) based on blood or bile culture results. Endoscopic management was performed as the first-line treatment in 156 patients (97.5%). Two patients (1.25%) required surgical intervention, and none required radiologic drainage. Regarding compliance with drainage timing: among the 50 grade III patients, 27 (54%) underwent biliary decompression within the recommended 24 hours. For grade II patients, 43 (60%) received drainage within 72 hours, and 21 grade I patients (56%) underwent drainage within the same timeframe. The rate of early complications following endoscopic intervention was 12.5% (n = 20), including recurrent infections and post-Endoscopic Retrograde Cholangiopancreatography pancreatitis. Complications correlated with the severity of cholangitis: patients with grade III disease exhibited the highest complication rate (20%, n = 10), followed by grade II (11%, n = 8), while grade I patients had a complication rate of 5.3% (n = 2).

Conclusions Acute cholangitis remains a severe condition requiring rapid management in accordance with the Tokyo Guidelines. Strict adherence to these recommendations is essential to optimize clinical outcomes, reduce complications, and improve patient survival. Continuous updating of institutional protocols and strengthened monitoring of guideline compliance are necessary to ensure optimal management of acute cholangitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP453 Extra-Anatomical Biliary Drainage: Results

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DOI 10.1055/s-0046-1821780

Aims Extra-anatomical biliary drainage is an effective alternative to relieve biliary obstruction in cases of failed ERCP. Two endoscopic access routes are currently used: hepatogastric drainage and choledochoduodenal drainage. The aim of our study is to evaluate the indications, techniques used, and outcomes of extra-anatomical drainage in our center.

Methods This is a retrospective, descriptive, monocentric study conducted in the Medicine B Department of the Ibn Sina University Hospital in Rabat, between January 2019 and November 2025. All patients presenting with malignant biliary obstruction and who underwent extra-anatomical biliary drainage after failed ERCP were included.

The collected data included demographic, clinical, biological, radiological, and endoscopic parameters. Two techniques were used:

- Choledochoduodenal drainage (placement of a stent between the common bile duct and the duodenal bulb).
 - Hepatogastric drainage (placement of a stent between a left intrahepatic bile duct and the stomach). Post-drainage follow-up included clinical and biological monitoring at day 0, day 2, day 7, and one month.
- Results** 10

patients were included. The median age was 53.6 ± 17 years, mostly between 45 and 75 years. The sex ratio M/F = 1. Half of the patients (5 cases, 50%) had no comorbidities. Type 2 diabetes was present in 3 patients (30%), arterial hypertension in 2 patients (20%), and heart disease in 1 patient (10%). The most frequent etiologies were pancreatic cancer in 7 patients (70%), followed by hilar cholangiocarcinoma in 2 cases (10%), and ampullary carcinoma in 1 case (10%). The main cause of ERCP failure was tumoral infiltration of the papilla, found in more than half of the cases (n = 6, 60%). Other causes included anatomical abnormalities of the papilla (n = 2, 20%), duodenal stenosis (n = 1, 10%), and failure of intrahepatic bile duct cannulation (n = 1, 10%). The main indication for drainage was cholangitis, found in half of the patients, followed by drainage for chemotherapy preparation (2 patients, 20%). The remaining patients (n = 3, 30%) presented with cholestatic jaundice with severe pruritus or general deterioration. Two techniques were performed:

- Choledochoduodenal drainage in 6 patients (60%), using a fully covered metal stent.
- Hepatogastric drainage in 4 patients (40%), using a “dumbbell-type” stent in 2 cases (20%) and a partially covered metal stent in the remaining 2 cases (20%). Initial evaluations showed a median total bilirubin level of 274 mg/L (predominantly conjugated), an average CRP of 52 mg/L, and an average prothrombin rate of 57%. Regarding technical performance, hepatogastric drainage achieved 100% technical and clinical success. Choledochoduodenal drainage also had 100% technical success, but one case of biliary leak causing peritonitis reduced its clinical success to 83%. Biological outcomes showed a clear and progressive improvement after the procedure:
- Bilirubin: 274 mg/L before drainage → 180 mg/L at 48 h → 121 mg/L at day 7 → 50.5 mg/L at one month.
- CRP: 52 mg/L before drainage → 27 mg/L at day 7 → 11 mg/L at one month.
- Prothrombin rate: 57% before drainage → 62% at 48 h → 69% at day 7 → 88% at one month.

Regarding follow-up, 4 patients (40%) died in a context of terminal tumor progression, with a mean post-procedure survival of 6 months. Four patients (40%) are still being followed in oncology palliative care, and 2 patients (20%) were lost to follow-up after discharge.

Conclusions Extra-anatomical biliary drainage is an effective alternative after failed ERCP, particularly in cases of altered anatomy or tumoral involvement. Hepatogastric and choledochoduodenal techniques showed excellent technical success rates and significant biological improvement. The choice of method depends on patient characteristics, the etiology of the obstruction, and the expertise of the center.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP454 Relevance of Colonoscopy Indications According to EPAGE II Criteria

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DOI 10.1055/s-0046-1821781

Aims In recent years, the indications for diagnostic colonoscopy have increased considerably; however, their prescription must be adjusted by considering the benefit–risk ratio. The EPAGE II criteria (European Panel on the Appropriateness of Gastrointestinal Endoscopy) provide an objective tool to assess the appropriateness of these indications.

The aim of our study was to evaluate the application of these criteria in clinical practice and to identify any potential correlation between the appropriateness of the indication and the endoscopic findings.

Methods This is a retrospective analytical study conducted over a 14 months, from September 2024 to November 2025, within the Department of Hepato-Gastroenterology and Proctology "Medicine B". It included all patients who underwent colonoscopy with or without intubation of the terminal ileum. Patients with incomplete colonoscopy or indications not listed in the EPAGE II criteria were excluded.

Collected data included age, sex, medical history, indication, endoscopic findings, and the EPAGE score obtained through the official software (available at <http://www.epage.ch>).

Statistical analysis was performed using Jamovi software, with a significance threshold of <0.05 . For a more relevant analysis, the categories "appropriate" and "appropriate and necessary" were combined.

Results A total of 205 patients were included, all of whom underwent a complete ileocolonoscopy. The cohort comprised 112 women (54.6%) and 93 men (45.4%), with a female-to-male ratio of 1.2. The mean age was 51 ± 16.5 years, with 114 patients (55.6%) older than 50 years and 91 patients (44.3%) aged 50 years or younger.

More than half of the patients, 112 (54.6%), had no medical history. 37 patients (18%) had inflammatory bowel disease (including 23 Crohn's disease [11.2%] and 14 ulcerative colitis [6.8%]), and 14 patients (6.8%) had cardiac disease. The most frequent indications for colonoscopy were chronic diarrhea in 41 patients (20%), rectal bleeding in 36 patients (17.6%), constipation in 33 patients (16.1%), therapeutic assessment in 25 patients (12.1%), screening in 20 patients (9.8%), iron-deficiency anemia in 19 patients (9.3%), and abdominal pain in 16 patients (7.8%).

According to the EPAGE score, indications were classified as: appropriate and necessary in 90 cases (43.9%), appropriate in 58 cases (28.2%), uncertain in 40 cases (19.5%), and inappropriate in 17 cases (8.3%).

Endoscopic lesions were detected in 90 patients (43.9%), most commonly colonic polyps (27 cases; 13.2%), neoplastic processes (14 cases; 6.8%), and endoscopic recurrence of IBD (10 cases; 4.9%).

Univariate and multivariate analyses showed that constipation and chronic diarrhea were significantly associated with an appropriate EPAGE indication for colonoscopy, with p -values of 0.019 and $<.001$, respectively.

Age over 50 years was also significantly associated with an appropriate EPAGE II score compared with younger patients (95 [83.3%] vs. 53 [58.2%], $p < .001$).

Conclusions Our study demonstrates that the EPAGE II score is a simple and effective tool for determining the appropriateness of colonoscopy indications. It not only allows for a better classification of patients based on their clinical indication but also contributes to improving the cost-effectiveness of endoscopic procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP455 Cholecysto-duodenal Fistula Complicated with Gallstone Ileus, Liver Abscess, and Common Bile Duct Stones: A Case Report of an Elderly Patient

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DOI 10.1055/s-0046-1821782

Abstract Text

An 87-year-old female with a 10-year history of type 2 diabetes presented with upper abdominal pain, yellow urine, and fever for 5 days. Physical examination showed upper abdominal tenderness without rebound tenderness or muscle guarding. Imaging revealed a liver abscess, distal common bile duct stone, gallbladder stones, and intrahepatic and extrahepatic bile duct dilatation with pneumobilia, suggesting a cholecystoenteric fistula. Ultrasound-guided percutaneous drainage of the liver abscess was performed. Endoscopic examination confirmed a cholecystoduodenal fistula. ERCP revealed common bile duct stones, which were removed via ERC + EST + EPBD + stone retrieval + ENBD. Two days post-procedure, the patient experienced intermittent vomiting of bile-like fluid. Repeat abdominal CT suggested gallstone ileus due to gallstone migration

into the small intestine. Surgical removal of the stones was performed due to poor response to conservative treatment. Given her advanced age and poor physical condition, no further treatment was pursued for the cholecystoduodenal fistula. The patient was monitored in the ICU postoperatively and later transferred to a general ward, eventually improving and being discharged. Cholecystoduodenal fistula is an internal fistula between the gallbladder and duodenum. Gallstone ileus, a rare cause of mechanical intestinal obstruction (0.3–0.5% of cases), occurs when gallstones block the intestine after passing through a cholecystoenteric fistula. It is more common in elderly females. Treatment is primarily surgical, including enterotomy for stone removal or combined with cholecystectomy and fistula repair. However, there are few reported cases of gallbladder internal fistula complicating with hepatic abscess. In this case, the patient's type 2 diabetes likely facilitated retrograde bacterial infection, leading to hepatic abscess formation after the gallbladder internal fistula developed. This case report documents the complete clinical course of a patient who developed gallstone ileus caused by the spontaneous passage of stones through a cholecystoduodenal fistula during hospitalization [1–3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Costi R., Randone B., Violi V., Scatton O., Sarli L., Soubrane O., Dousset B., Montariol T. Cholecystocolonic fistula: facts and myths. A review of the 231 published cases. *J Hepatobiliary Pancreat Surg* 2009; 16: 8–18. doi:10.1007/s00534-008-0014-1
- [2] Huang S.F., Han Y.H., Chen J., Zhang J., Huang H. Surgical Management of Cholecystoenteric Fistula in Patients With and Without Gallstone Ileus: An Experience of 29 Cases. *Front Surg* 2022; 9: 950292. doi:10.3389/fsurg.2022.950292
- [3] Pichardo J., Zapata J., Echavarria R., Ubinas R., Baez P., Gomez A. Gallstone Ileus With Cholecystoenteric Fistula in an Elderly Female: A Case Report. *Cureus* 2023; 15: e37077. doi:10.7759/cureus.37077

eP456 Analysis of gastroscopy quality indicators during examinations with and without the participation of a trainee

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DOI 10.1055/s-0046-1821783

Aims Esophagogastroduodenoscopy is crucial for early detection of upper gastrointestinal neoplasms (UGN) and preneoplastic lesions. With growing demand, training new endoscopists is essential. We aimed to evaluate the impact of trainee involvement in gastroscopy on key quality indicators and the detection of upper gastrointestinal abnormalities, and to assess how endoscopic training settings may influence diagnostic performance.

Methods We retrospectively analyzed 6,540 gastroscopies performed between January 2019 and December 2021 at two academic centers (663 with trainee participation). Quality indicators included Endoscopist Biopsy Rate (EBR), Composite Detection Rate (CDR), and UGN. Group comparisons used Mann–Whitney, χ^2 , or Fisher's exact tests. Logistic regression identified factors associated with upper GI pathology and EBR, UGN, and CDR; variables with $p < 0.1$ entered multivariate models. Analyses used IBM SPSS Statistics.

Results Overall, 57.89% of procedures were outpatient, the median patient age was 61 years (IQR 23), and 54.86% of patients were female. A high-definition (HD) endoscope was used in 62.92% of all procedures. The presence of a trainee did not significantly affect UGN (OR = 1.24; 95% CI: 0.90–1.72; $p = 0.192$), EBR (OR = 1.05; 95% CI: 0.88–1.25; $p = 0.614$), or CDR (OR = 1.01; 95% CI: 0.85–1.21; $p = 0.872$). Similarly, no significant differences were ob-

served in the detection rates of cancers ($p = 0.53$), dysplasia ($p = 0.198$), and gastric precancerous conditions ($p = 0.234$) between procedures with and without trainee involvement. In the multivariate analysis, the factors associated with higher odds of UGN included age (OR = 1.02; 95 % CI: 1.01-1.02; $p < 0.001$), use of an HD endoscope (OR = 1.62; 95 % CI: 1.09-2.55; $p = 0.017$), sedation (OR = 1.22; 95 % CI: 0.80-1.87; $p < 0.001$), alarm symptoms (OR = 3.66; 95 % CI: 2.90-4.62; $p < 0.001$), and outpatient setting (OR = 1.57; 95 % CI: 1.41-1.75; $p < 0.001$), while female sex was associated with a lower risk of UGN (OR = 0.70; 95 % CI: 0.57-0.87; $p = 0.001$). Regarding EBR, multivariate regression analysis demonstrated that age (OR = 1.00; 95 % CI: 1.00-1.01; $p < 0.001$), female sex (OR = 1.20; 95 % CI: 1.08-1.34; $p < 0.001$), use of an HD endoscope (OR = 2.86; 95 % CI: 2.28-3.58; $p < 0.001$), and outpatient setting (OR = 1.44; 95 % CI: 1.28-1.61; $p < 0.001$) were associated with higher odds of EBR, while sedation was associated with lower (OR = 0.78; 95 % CI: 0.63-0.98; $p = 0.033$). For CDR, multivariate regression analysis indicated that age (OR = 1.02; 95 % CI: 1.01-1.02; $p < 0.001$), female sex (OR = 1.29; 95 % CI: 1.16-1.44; $p < 0.001$), use of an HD endoscope (OR = 1.57; 95 % CI: 1.23-2.00; $p < 0.001$), sedation (OR = 1.69; 95 % CI: 1.32-2.16; $p < 0.001$), and outpatient setting (OR = 1.44; 95 % CI: 1.28-1.61; $p < 0.001$) were significantly associated with higher CDR, whereas the presence of alarm symptoms was significantly associated with lower CDR (OR = 0.74; 95 % CI: 0.63-0.87; $p < 0.001$).

Conclusions These results indicate that trainee involvement does not compromise the quality of gastroscopy, supporting the safe integration of training into routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP457 Predictors of Biliary Cannulation Failure

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DOI 10.1055/s-0046-1821784

Aims Biliary cannulation is an important step in the management of biliary disorders. Despite being a widely performed procedure, cannulation failure remains a significant clinical challenge. Identifying predictive risk factors for failed biliary cannulation is therefore crucial for optimizing endoscopic strategies, improving success rates, and minimizing procedure-related complications. This study aims to evaluate the clinical, biological, anatomical, and technical determinants associated with biliary cannulation failure.

Methods This retrospective, descriptive, single-center study was conducted in our department between November 2020 and November 2025. A total of 74 patients were included, divided into two groups: 37 patients with failed biliary cannulation and 37 patients with successful cannulation.

Statistical analysis was performed using Jamovi. Univariate analysis was based on the χ^2 test, and multivariate analysis was conducted using a logistic regression model.

Results A total of 74 patients were included. The mean age was 65.5 ± 12.7 years (range: 27–85), with a slight female predominance (female-to-male ratio: 1.3). The leading indication for ERCP was acute cholangitis (36 patients, 48.6%), followed by cholestatic jaundice (23 patients, 31.1%).

Univariate analysis identified several predictors of biliary cannulation failure, including: cholestatic jaundice as the primary indication for ERCP ($p = 0.007$); history of hepatobiliary surgery ($p = 0.012$); bilirubin ≥ 250 mg/L ($p = 0.009$); leukocytosis $\geq 15,000/\text{mm}^3$ ($p = 0.006$); moderate-to-severe cholangitis ($p < 0.001$); presence of a main bile duct stricture ($p = 0.004$); malignant etiology of the stricture ($p = 0.010$); tumor type—particularly cholangiocarcinoma and pancreatic malignancies ($p = 0.028$); and papillary abnormalities, especially peri-diverticular papillae ($p = 0.038$).

In multivariate analysis, two factors remained independently associated with cannulation failure: history of hepatobiliary surgery (OR = 8.97; $p = 0.033$) and papillary abnormalities (OR = 31.68; $p = 0.009$).

Among the 37 patients with failed biliary cannulation, 28 (75.7%) underwent second-line intraprocedural salvage techniques, primarily infundibulotomy (25 patients, 67.6%) and, less frequently, precut sphincterotomy (3 patients, 8.1%). These rescue techniques were successful in 75 % of cases (21 patients).

Conclusions Biliary cannulation failure is influenced by a combination of anatomical, biological, and disease-related factors. Early identification of these risk factors may help tailor endoscopic strategies, improve cannulation success rates, and reduce procedure-related complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP458 High-Grade Dysplasia Predicts Recurrence After Piecemeal EMR of Large Colorectal Lesions: Real-Life Data from an Italian Non-Tertiary Centre

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DOI 10.1055/s-0046-1821785

Aims Recurrence after piecemeal endoscopic mucosal resection (pEMR) of large colorectal lesions remains a significant clinical concern. Several lesion-related factors, including morphology, high-grade dysplasia (HGD), lesion size and use of snare-tip soft coagulation (STSC) have been proposed as potential predictors [1, 2].

Methods We conducted a retrospective study including 84 consecutive patients undergoing piecemeal EMR for colorectal lesions ≥ 20 mm at an Italian non-tertiary centre. Demographic, endoscopic and histological variables were collected. Time-to-recurrence was assessed using Kaplan–Meier curves and the log-rank test. Independent predictors were evaluated using multivariate Cox regression ($p < 0.05$).

Results Eighty-four lesions were analysed. Recurrence was significantly higher in lesions with HGD ($p = 0.00091$) and in those ≥ 25 mm ($p = 0.022$). No significant differences were observed between lesions treated with STSC and those without STSC ($p = 0.057$), between granular and non-granular LSTs ($p = 0.84$), or between serrated and non-serrated lesions ($p = 0.48$). In multivariate Cox regression, HGD was the only independent predictor of recurrence (HR 3.5; 95 % CI 1.19–10.5; $p = 0.023$). Lesion size ≥ 25 mm showed no statistically significant association with recurrence (HR 3.5; 95 % CI 0.78–16.1; $p = 0.102$). STSC was also not independently associated with recurrence (HR 1.6; 95 % CI 0.39–6.3; $p = 0.522$), a result likely reflecting its selective use in larger, higher-risk lesions.

Conclusions High-grade dysplasia was the strongest predictor of recurrence. Lesion size and STSC were not independently associated with relapse. Interpretation of the effect of STSC is limited by the small number of treated cases and their concentration in higher-risk lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tate DJ, Desomer L, Klein A, Brown G, Hourigan LF, Lee EY, Moss A, Ormonde D, Raftopoulos S, Singh R, Williams SJ, Zanati S, Byth K, Bourke MJ. Adenoma recurrence after piecemeal colonic EMR is predictable: the Sydney EMR recurrence tool. *Gastrointest Endosc* 2017; 85 (3): 647–656.e6
- [2] Amir Klein, David J Tate, Vanoo Jayasekaran, Luke Hourigan, Rajvinder Singh, Gregor Brown, Farzan F Bahin, Nicholas Burgess, Stephen J Williams, Eric Lee, Mayenaz Sidhu, Karen Byth, Michael J Bourke Thermal Ablation of Mucosal Defect Margins Reduces Adenoma Recurrence After Colonic Endoscopic Mucosal Resection. *Gastroenterology*. 2019; 156 (3): 604–613.e3

eP459 Endoscopic and histological aspects of colorectal lesions in IBD

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DOI 10.1055/s-0046-1821786

Aims Endoscopy has an essential role in the diagnosis, assessment of inflammatory activity, and follow-up of IBD. It allows direct visualization of mucosal lesions, which can range from simple erosions to deep ulcerations, inflammatory pseudopolyps, or strictures.

In addition, histological examination, which complements endoscopy, is crucial for confirming the diagnosis and differentiating IBD from other inflammatory or neoplastic diseases of the colon.

The aim of this study is to analyze the endoscopic and histological aspects of colorectal lesions observed in patients with IBD.

Methods This is a retrospective descriptive study conducted between January 2023 and January 2025 in the Hepatology, Gastroenterology, and Proctology Department (Medicine B) at Ibn Sina Hospital – Ibn Sina University Hospital. We included all patients aged over 16 years old who were being treated for chronic inflammatory bowel diseases, namely Crohn's disease and ulcerative colitis, and who had undergone ileocolonoscopy with staged colorectal biopsies.

Patients with incomplete data or normal colonoscopies were excluded from our study.

Results We included 75 cases of IBD collected over a period of 2 years, including 40 cases of Crohn's disease and 35 cases of ulcerative colitis.

Among patients with Crohn's disease, the average age was 38.5 years, ranging from 18 to 72 years, and the sex ratio (M/F) was 0.4.

Ulcerations were found in 40 % of cases (including aphthoid ulcerations in 53 % of cases, superficial linear ulcerations in 35 % of cases, and deep ulcerations in 12 % of cases), pseudopolyps in 21 % of cases, a sessile polyp in 14 % of cases, a pedunculated polyp in 4 % of cases, stenosis in 16.5 % of patients, and colonic erythema in 4.5 % of cases.

Histological examination revealed: nonspecific interstitial colitis in 48.5 % of cases, subacute colitis in 35 % of cases, granuloma without caseous necrosis in 5.5 % of cases, subacute proctitis in 5.5 %, and interstitial proctitis in 5.5 %.

Among patients with UC, the average age is 45 years and the sex ratio (M/F) is 0.54.

Ulcerations were found in 20 % of cases, pseudopolyps in 42.5 % of cases, a sessile polyp in 20 % of cases, a pedunculated polyp in 5.5 % of cases, colic erythema in 6 % of patients, and erosions in 6 % of cases. In addition, the vascular pattern disappeared in 16 cases, partially disappeared in 5 cases, and remained intact in 4 cases.

Histological examination revealed: nonspecific interstitial colitis in 57 % of cases, subacute colitis in 20 % of cases, subacute proctitis in 23 % (of which 70 % was ulcerative proctitis and 30 % was non-ulcerative).

Conclusions Ulcerations are the most common lesions in Crohn's disease, while pseudopolyps and polyps are more common in ulcerative colitis. Thus, there is a predominance of nonspecific interstitial colitis and subacute colitis in both diseases.

Our study highlights the distinct endoscopic and histological features of CD and UC, which are essential for the diagnosis and follow-up of patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP460 Patient Satisfaction Survey in the Endoscopy Unit

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DOI 10.1055/s-0046-1821787

Aims Digestive endoscopy (DE) is an essential diagnostic and therapeutic procedure. Patient satisfaction is an important measure of performance standards and a key indicator of the quality of DE. Measuring the satisfaction index is a crucial component for improving the quality of care and optimizing medical practices.

The objective of this study is to determine the level of patient satisfaction in our endoscopy unit and to identify the factors associated with this satisfaction.

Methods This is a prospective, descriptive, and analytical study conducted over a period of 5 months from 01/10/2023 to 01/03/2024 within the Department of Hepato-Gastroenterology and Proctology "Medicine B," including patients who underwent DE.

Patient satisfaction was assessed using the Likert scale.

The studied parameters included sex, age, previous endoscopic examination, type of endoscopic procedure, and indication.

Data analysis was performed using Jamovi software version 2.2.5.

Results A total of 220 patients were included in our study, including 113 men (51.4 %) and 107 women (48.6 %), with a male/female ratio of 1.05. The mean age was 48.4 ± 15.8 years. Regarding endoscopic procedures: an upper GI endoscopy (EGD) was performed in 147 patients (66.8 %), a total ileocolonoscopy in 113 patients (51.4 %), and a rectosigmoidoscopy in 6 patients (2.7 %).

A total of 164 patients (74.6 %) underwent a single examination, while 56 patients (25.5 %) underwent two simultaneous procedures.

These examinations were performed for the following indications: abdominal pain in 39 cases (17.7 %), IBD in 30 cases (13.6 %), bowel habit disorder in 24 cases (10.9 %), portal hypertension in 22 cases (10 %), and gastrointestinal bleeding in 21 cases (9.5 %).

The distribution of satisfaction levels was as follows : very satisfied 55 (25 %), satisfied 53 (24.1 %), neither satisfied nor dissatisfied 73 (33.2 %), slightly satisfied 26 (11.8 %), very dissatisfied 13 (5.9 %).

For statistical analysis, levels 1: very satisfied and 2: satisfied were combined.

Patient age and the presence of music in the room were the only factors associated with high satisfaction on both univariate and multivariate analysis, with p-values of 0.005 and <.001 respectively.

Total ileocolonoscopy was also found to be a factor of patient dissatisfaction with a p-value of 0.019.

Conclusions Satisfied patients are more likely to regularly adhere to screening and endoscopic surveillance programs.

In our study, age and the auditory environment appear to play a significant role as predictors of satisfaction.

Assessing satisfaction helps identify patient needs and guide necessary improvements to optimize their care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP461 Biliary aspiration in ERCP: clinical relevance and impact on antibiotic therapy

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DOI 10.1055/s-0046-1821788

Aims Cholangitis is a potentially serious infection of the bile ducts, the treatment of which relies on appropriate antibiotic therapy and rapid biliary decompression, primarily achieved by endoscopic retrograde cholangiopancreatography (ERCP). Among the possible complementary procedures during ERCP, bile aspiration for bacteriological analysis can be performed. However, this procedure remains underutilized and is not always systematically included in international guidelines due to a lack of robust data on its clinical impact. The objective of this study is to evaluate the clinical benefit of bile aspiration performed during ERCP in the treatment of cholangitis.

Methods This retrospective, descriptive, single-center study was conducted within the Hepatology and Gastroenterology Department "Medicine B" of the Ibn Sina University Hospital in Rabat, covering a period of 2 years and 10 months, from January 2023 to October 2025. The medical records of patients treated by ERCP with biliary aspiration for acute cholangitis in the interventional endoscopy unit were collected and analyzed. Demographic, clinical, para-clinical, therapeutic, and outcome data were collected and analyzed.

Results A total of 90 patients who underwent ERCP with biliary aspiration for cholangitis were included. The mean age was 52 years [22–82], with a slight female predominance (56.7%). Twelve patients (13.3%) had previously undergone ERCP, and 10 patients (11.1%) had a biliary stent. The severity of cholangitis, assessed using the Tokyo score, was distributed as follows: grade I in 20 cases (22.2%), grade II in 53 cases (58.9%), and grade III in 17 cases (18.9%). The mean total bilirubin level was 172.1 mg/L before ERCP and decreased to 95.4 mg/L 48 hours after the procedure. The indications for ERCP were distributed as follows: neoplastic causes in 42 cases (46.7%), lithiasis in 37 cases (41.1%), and other etiologies in 11 cases (12.2%). Empirical antibiotic therapy was primarily based on a combination of third-generation cephalosporins and metronidazole, prescribed in 80 cases (88.8%). Biliary aspiration revealed a positive culture in 53 cases (58.9%) (► **Table 1**), with *Escherichia coli* and *Pseudomonas spp.* as the predominant pathogens (► **Table 2**), identified in 13 cases (24.5%) and 12 cases (22.6%), respectively. Among the positive samples, the bacteria were susceptible to empirical antibiotic therapy in 30 cases (56.6%). In cases of resistance, a change of antibiotic was necessary in 18 patients (33.9%), while 5 (9.4%) progressed favorably without any change in treatment. The average length of hospital stay was 11.0 days. The 30-day recurrence rate was 4.5%, and the mortality rate was 4.5%.

► **Table 1** Biliary culture N=90

Biliary culture	N (%)
Positive	53 (58.9%)
Negative	30 (33.3%)
Polymicrobial	7 (7.8%)

► **Table 2** Main pathogens N=53

Main pathogens	N (%)
<i>Escherichia coli</i>	13 (24.5%)
<i>Pseudomonas spp</i>	12 (22.6%)
<i>Enterococcus spp.</i>	8 (15.1%)
<i>Enterobacter spp</i>	6 (11.3%)
<i>Klebsiella Pneumoniae</i>	7 (13.2%)
<i>Streptococcus spp.</i>	2 (3.8%)
Others	5 (9.4%)

Conclusions Biliary aspiration during ERCP is a valuable tool for identifying pathogens and tailoring antibiotic therapy, particularly in the context of increasing antibiotic resistance. This study highlights its clinical value in optimizing microbiological management and improving therapeutic outcomes for patients with cholangitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP462 Evaluation of the SPART-App application dedicated to recording endoscopic procedures and assess improvement of hepatogastroenterology interns

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DOI 10.1055/s-0046-1821789

Aims Monitoring the technical progress of endoscopy trainees is essential to ensure the quality of care in hepatology and gastroenterology. The cumulative sum learning curve (LC-CUSUM) method allows for dynamic assessment of skill acquisition. Launched in 2022, the SPARTApp application, promoted by the University of Montpellier and supported by the SFED, aims to improve the collection of procedures, performance monitoring and access to educational tools (Figure A). This study evaluates its use, limitations, and the impact of LC-CUSUM on the perception and monitoring of interns' technical progress in endoscopy.

Methods A national survey was conducted between March and June 2025 among French interns registered on the SPART-App application. They were contacted by email via an emailing list extracted from the application's database. The questionnaire focused on the use of SPART-App, its comprehensiveness, obstacles encountered, suggestions for improvement, and perceptions of the integrated LC-CUSUM progression curve. Participation was voluntary and anonymous.

Results Of the 307 interns contacted, 102 responded in 20 university towns (Figure B). Almost all of them were familiar with the application (98%) and 92.2% reported using it to record their endoscopic procedures. The completeness of the data collection was rated as high to perfect by 43.6% of users, and average to perfect by 63.8% (Figure C). In centres where data collection was considered mandatory, these figures rose to 67.7% and 83.9% respectively (Figure C). The main obstacles reported were forgetting to enter data (67.7%), lack of time (39.4%), technical malfunctions (34.3%) and the absence of institutional requirements (32.3%). Among the 55 interns who suggested improvements, the majority of suggestions concerned offline operation, the user interface and educational enrichment. Finally, 63.7% (65/102) used the LCCUSUM feature to track their technical progress, and 55.8% (48/86) considered the curve to be consistent with their own perception of learning.

Conclusions SPART-App is widely and satisfactorily adopted among French interns. However, data collection is still uneven due to various organisational, technical and practical obstacles. This survey suggests that the LCCUSUM assessment is relevant for tracking technical progress in endoscopy, offering real-time monitoring of skills.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP463 Innovative Education Strategies: Non-physician medical staff facilitating the education of undergraduate medical students through practicable experiences

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DOI 10.1055/s-0046-1821790

Aims There are 10,000 undergraduate medical student places filled in the UK yearly (Bolton, 2024), the practical education of which is typically assigned to consultants, general practitioners and other physicians. This can be difficult, as these professions are often already under pressure from long patient lists, attending emergency situations, completing appropriate charting and other patient care responsibilities. This study explores facilitating undergrad learning with other high quality options, such as postgraduate nurses that have experience in the consultant's department.

Methods A convenience sample of 3rd year medical students was utilised to obtain feedback to an anonymised survey regarding knowledge attainment. These surveys follow 3rd year UK medical students' attendance at 1 hour in-person modules directed by a postgrad Endoscopy nurse. The topics of this module were cirrhosis, oesophageal varices, and Variceal Band Ligation endoscopic treatment and included up to 10 medical students each. These classes occurred for 28 weeks (September 2024 to May 2025) and included a hands on introduction to the gastroscope and the mechanics of variceal band ligation [1–3].

Results Out of 240 potential students, 110 responded to the anonymised link that was provided via email upon their completion of the training. Of these, 6 were removed for only responding to demographic questions, leaving 104 students who completed the survey in its entirety (43 % response rate). 72 % of respondents chose 'Strongly Agree' and 26 % 'Somewhat Agree' (total: 98 %) that the lecture was useful; 69 % chose 'strongly agree' and 27 % 'somewhat agree' (total: 96 %) in response to the statement 'I feel more confident that before the class in my knowledge on oesophageal varices'; and 78 % chose 'strongly agree' and 21 % chose 'somewhat agree' with the statement 'I feel more confident than before the class on the role of endoscopy in cirrhosis patients'.

Conclusions The education of the next generation of medical professionals can be problematic for physicians who are already under strain. One of the tools that could be considered going forward to address these barriers, is the utilisation of RNs with postgraduate degrees as ad-hoc educators. This case study demonstrates that when done successfully, undergraduate medical students can access knowledge of diseases and procedures without requiring physicians to be further overburdened. Educating the next generation of medical providers can emerge from numerous sources and it may be time we look to those to ensure that there are enough physicians to meet the medical demand that the future requires.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bolton P, Lewis J. 2024; Medical, dental and healthcare students: UK numbers and student support arrangements. House of Commons library, retrieved on 6 June 2025 at <https://researchbriefings.files.parliament.uk/documents/CBP-9734/CBP-9734.pdf>
- [2] Bolton P, Lewis J. 2024; Medical, dental and healthcare students: UK numbers and student support arrangements,' House of Commons library, retrieved on 6 June 2025 at <https://researchbriefings.files.parliament.uk/documents/CBP-9734/CBP-9734.pdf>
- [3] Harris I et al. Factors affecting consultant attitudes to undertaking undergraduate medical student teaching in the UK: a systematic review. *British Medical Journal* (Open). 2020; retrieved on 6 June 2025 at <https://bmjopen.bmj.com/content/bmjopen/11/1/e042653.full.pdf>

eP464 Outcomes of Endoscopic Mucosal Resection of Large Colorectal Polyps Referred to a Single Tertiary Centre

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DOI 10.1055/s-0046-1821791

Aims Endoscopic mucosal resection (EMR) is widely used for removing large colorectal polyps (≥ 20 mm). The goal is complete resection with minimal adverse events and a low adenoma recurrence rate (ARR). Optimal initial evalua-

tion of the polyps and subsequent resection by a therapeutic endoscopist is of crucial importance to achieve good outcomes.

The study aims to evaluate the accuracy of the initial evaluation of large polyps referred for EMR to a tertiary center. Subsequently, we analyzed EMR technical success, complications, recurrence rate, final histology, appropriate follow-up, and the need for surgery in patients referred for EMR of large colonic polyps.

Methods This was a retrospective review of prospectively collected data of patients referred for EMR of colorectal polyps ≥ 20 mm between 2017 and 2024. The procedures were performed by two therapeutic endoscopists.

Results A total of 170 patients (median age 66; 52.3 % female) with 187 polyps (median size 30mm) were included. Among referred polyps, 89 (48 %) had accurate descriptions; 50 (27 %) underestimated size, 41 (22 %) overestimated size, 16 (8.6 %) misclassified Paris type, and the location description was not accurate in 9 (5 %). Initial manipulation of polyps at the first endoscopy was done in 58 % of polyps; this included biopsies of the polyp (6.4 %), tattooing nearby (8.4 %), lifting (7.5 %), and attempted resection in 15.7 %. Median time to first EMR was 30 days. Median polyp size was 30 mm (range 20–80 mm). After EMR, high-grade dysplasia (HGD) was reported in 28 polyps (15 %) and invasive carcinoma in 7 (3.7 %). EMR could not be completed in 2 cases (1.1 %) due to suspicion of submucosal invasion. Complications included mild intra-procedural bleeding in 37 patients (20 %), post-polypectomy bleeding in 3 (1.7 %), perforation in 1 (0.5 %), which was managed conservatively and one case of post-polypectomy syndrome. Average time to follow-up was 7 months. Residual adenomatous tissue was present in 33 cases (18 %), with HGD in 9 (5 %). ARR increased according to polyp size (11.5 % for 20–29mm, 13.5 % for 30–39mm, and 29.0 % for ≥ 40 mm).

Conclusions Initial polyp description was inaccurate in around 50 % of cases before referral for EMR, and around 58 % of polyps had some form of previous endoscopic manipulation as well. EMR is a safe and effective treatment for large colorectal polyps when performed by expert endoscopists. Subsequent follow-up met recommended guidelines, and ARR correlated significantly with polyp size.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP465 Quality of Life in Patients with Anal Stenosis in Crohn's Disease Following Dilatation Procedures

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DOI 10.1055/s-0046-1821792

Aims Anal stenosis is a frequent complication of Crohn's disease and is associated with a significant impairment in patients' quality of life. Endoscopic, manual, or surgical anal dilatations are commonly employed as therapeutic interventions; however, their impact on quality of life remains insufficiently explored. The aim of this study was to assess the improvement in quality of life among patients with Crohn's disease-related anal stenosis following dilatation, based on clinical symptomatology and Inflammatory Bowel Disease Questionnaire (IBDQ) score before and after the procedures.

Methods We conducted a retrospective descriptive study between 2018 and 2025 in the Department of Hepato-Gastroenterology and Proctology. All adult patients (aged > 16 years) with anal stenosis secondary to Crohn's disease who underwent dilatation (manual, endoscopic, or surgical) were included. Patients who received other therapeutic modalities for stenosis or who had incomplete medical files were excluded. Quality of life was assessed using the IBDQ before and after the procedure. Clinical data were collected regarding stenosis progression, type of dilatation, average number of sessions, success and failure rates, and recurrence.

Results Among the 33 patients with Crohn's disease related anal stenosis, 15 (45.45 %) underwent a dilatation procedure. The male-to-female ratio was 1.14

(8 men, 7 women), with a mean age of 47 years (range: 24–74). The mean interval between Crohn's disease diagnosis and the need for dilatation was 11 years. Five patients (33.3 %) underwent endoscopic dilatation, ten (66.7 %) manual dilatation, and four (26.7 %) surgical intervention.

Before dilatation, clinical symptoms included: spontaneous proctalgia in 4 patients (12.1 %), defecation induced proctalgia in 7 patients (21.2 %), and fecal incontinence in 6 patients (18.2 %). One patient (3 %) was asymptomatic, while 7 patients (21.2 %) reported a sensation of incomplete evacuation.

Among the 15 patients, 13 (86.67 %) expressed satisfaction and reported a significant improvement in quality of life after dilatation, along with reduction of symptoms. Analysis of IBDQ score showed an overall mean improvement of 33 points following dilatation. A Student's t-test confirmed that this difference was highly statistically significant ($p < 0.001$). When comparing dilatation techniques, endoscopic dilatation resulted in a mean IBDQ increase of 47 points ($p = 0.003$), whereas manual dilatation showed a mean increase of 20 points, which did not reach statistical significance ($p = 0.102$).

Disease progression after dilatation was marked by recurrence of stenosis in 13 patients (86.67 %), with a mean recurrence interval of 129 days. Recurrence was particularly frequent among those who underwent manual dilatation, accounting for 80 % of cases.

Conclusions According to our study, dilatation of anal stenosis in Crohn's disease leads to a significant short-term improvement in patients' quality of life. However, recurrence management remains challenging. Prospective multicenter studies with long-term follow-up are needed to better elucidate the sustained effects of this procedure and refine therapeutic strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP466 Which myotomy procedure should be used to treat refractory gastroparesis by endoscopic pylorotomy (G-POEM): Single? Double? Or resection?

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DOI 10.1055/s-0046-1821793

Aims Endoscopic pylorotomy (G-POEM) is a recent technique that has already proven its effectiveness in the management of gastroparesis refractory to medical treatment. However, the procedure differs from one center to another, particularly with regard to whether a single, double or myectomy myotomy is performed. Furthermore, to date, no study has compared the different techniques in terms of efficacy and, above all, recurrence. The aim of this multicenter study is to compare these different methods in order to standardize the procedure in favor of the most effective one.

Methods This is a retrospective multicenter study conducted in two expert centers in France, including patients treated with G-POEM for refractory gastroparesis between September 2015 and April 2025, with a comparison of three techniques: simple myotomy (SM), double myotomy (DM), or loop myectomy (LM).

The main objective was to evaluate clinical success according to the techniques used, defined by a one-point decrease in the Gastroparesis Cardinal Symptom Index (GCSI) score.

The primary objective was to evaluate clinical success according to the techniques used, defined by a decrease in the GCSI (Gastroparesis Cardinal Symptom Index) score of one point associated with a 50 % decrease in one of the three subscores at 6 months.

The secondary objectives included clinical success at 12 and 24 months, improvement in the severity stage of gastroparesis assessed by scintigraphy, and the rate of recurrence of gastroparesis.

Secondary objectives included clinical success at 12 and 24 months, improvement in the severity of gastroparesis as assessed by gastric emptying scintigraphy, the rate of symptomatic recurrence, and adverse events in each group.

Results A total of 122 patients were included, of whom 31 (25.4 %) were treated with simple myotomy (SM), 73 (59.8 %) with double myotomy (DM) and 18 (14.8 %) with myectomy (MC).

The groups were comparable in terms of demographics, etiology and disease severity (preoperative GCSI). Clinical success at 6 months was not significantly different in the 3 groups, despite a trend in favor of myectomy: 46 % for SM, 50 % for DM and 77 % for MC. However, the mean GCSI was significantly higher in the MS group (2.28 ± 1.14) compared to the other groups (1.79 ± 1.12 for MD and 1.46 ± 0.872 ; $p < 0.026$).

Importantly, the recurrence rate (not evaluated in the MC group) was significantly higher in the MS group, where it was 71 % compared to 12 % in the MD group ($p < 0.005$).

The improvement in gastric emptying, of at least 1 grade of scintigraphic severity, was similar in the 3 groups, ranging from 40 to 66 %. Finally, the complication rate was not different in the 3 groups, ranging from 0.5 to 5 %, mostly minor to moderate.

Conclusions G-POEM remains an effective and safe technique for the management of refractory gastroparesis. No significant difference in clinical success was observed between the three myotomy approaches, but myectomy tends to offer better symptomatic results at 6 months. Double myotomy appears to significantly reduce the risk of recurrence compared to single myotomy, without increasing the complication rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP467 Striking out on your own: Clinical and technical outcomes of EUS-Guided Hepatico-gastrotomy (EUS-HGS) for Malignant Biliary Obstruction (MBO) performed by a single operator with limited access to expert supervision

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DOI 10.1055/s-0046-1821794

Aims EUS-HGS has become an established technique either as a primary or salvage treatment modality for MBO. However, it remains a technically challenging procedure associated with a high risk of procedure related morbidity and mortality in a frail patient population. Current guideline recommendations recommend a gradual approach to performing EUS-guided therapy, suggesting that an endoscopist undertaking this new technique should perform a minimum of 25 procedures under expert supervision [1]. However, real life data about learning curves and upskilling in EUS-guided therapy are lacking. Furthermore, there are significant limitations in access to expert supervision for such advanced techniques as EUS-HGS. We aimed to assess the clinical and technical outcomes of the initial series of EUS-HGS performed by an experienced bilio-pancreatic endoscopist with limited access to expert supervision.

Methods We performed a retrospective analysis of a prospectively updated endoscopy database at a tertiary referral center where this technique was recently introduced. All consecutive patients who underwent EUS-HGS for malignant biliary obstruction either as a primary or as a rescue drainage procedure between June 2024 and November 2025 were included in the analysis. The primary outcome was technical success, defined as placement of a metal stent between the intrahepatic bile ducts and the stomach. Secondary outcomes included clinical success, defined as a decrease of > 25 % in bilirubin levels at 14 days after the procedure and procedure-related adverse events (AEs). EUS-HGS was performed using an Olympus linear scope. Access to the intrahepatic bile ducts was obtained with a 19G FNA needle and a hydrophilic guidewire (0.025 or 0.035i) was used for deep access after obtaining a cholangiogram. Tract dilation was performed with a 6Fr cystotome. Finally, an 8cm FC or PC SEMS (Boston Wallflex) was deployed into the stomach from the left intrahepatic

ducts to achieve adequate biliary drainage, which was confirmed through endoscopy and fluoroscopy.

Results Seventeen patients (64.7 % male; median age 69 years) underwent EUS-HGS during the study period. Underlying malignancies included duodenal and pancreatic cancers (4 each), cholangiocarcinoma, gastric and colonic cancers (2 each) and other tumor types (3). Indications for EUS-HGS were duodenal obstruction in 9/17 (52.9 %), failed ERCP in 5/17 (29.4 %), and altered anatomy in 3/17 (17.6 %) cases. Technical failure occurred in 5/17 (29.4 %). The causes included an unfavourable puncture window in surgically altered anatomy (1 patient), loss of echoendoscope position after adequate puncture in the bile ducts with subsequent loss of wire access (2 patients), inability to advance the guidewire despite adequate injection of ducts (2 patients). 4 out of these 5 patients underwent alternative drainage: one via EUS-guided choledochoduodenostomy and three through external percutaneous biliary drainage. In one case, no further endoscopic drainage was feasible and the patient was referred for palliative end of life care. We recorded a total of 5 procedure-related adverse events (2 early – 1 self-limited intraprocedural bleeding and 1 biloma treated by percutaneous drainage and 3 late AEs – stent dysfunction with cholangitis).

Conclusions Our findings suggest that EUS-HGS can be safely attempted as an alternative drainage procedure by experienced bilio-pancreatic endoscopists proficient in both EUS and ERCP, even if no expert supervision is available. Further studies are required to better define the learning curves and milestones required for achieving efficient and safe independent practice of advanced EUS procedures, but autonomous upskilling seems to be feasible in certain scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Johnson G, Webster G, Boškoski I et al. Curriculum for ERCP and endoscopic ultrasound training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2021; 53 (10): 1071–1087. doi:10.1055/a-1537-8999 Epub 2021 Jul 26 PMID: 34311472

eP468 Complete Endoscopic Healing: A New Therapeutic Target in Crohn's Disease?

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DOI 10.1055/s-0046-1821795

Aims Crohn's disease is a chronic inflammatory bowel disorder characterized by an unpredictable clinical course. For many years, the therapeutic target was limited to achieving clinical remission associated with normalization of inflammatory biomarkers. To improve long-term outcomes, the STRIDE II recommendations introduced endoscopic healing as a therapeutic target, defined by an SES-CD < 3 (Simple Endoscopic Score for Crohn's Disease) or a CDEIS < 3 (Crohn's Disease Endoscopic Index of Severity).

Today, the concept of complete endoscopic healing is emerging as a potentially more relevant therapeutic goal.

The aim of the present study is to determine whether complete endoscopic healing is associated with improved long-term outcomes.

Methods This observational, cross-sectional, retrospective, monocentric study was conducted in our department between 2021 and 2025. We included patients with Crohn's disease who demonstrated endoscopic healing with a CDEIS ≤ 3 on their most recent assessment colonoscopy. Patients with a CDEIS ≥ 4, those lost to follow-up, or those without an evaluation colonoscopy were excluded.

Complete endoscopic healing was defined as a CDEIS score of 0, and partial endoscopic healing as a CDEIS score of 1–3. Relapse was defined as the occurrence of a clinical flare.

Statistical analysis was performed using the Jamovi software, and associations between variables were assessed using the χ^2 test.

Results A total of 60 patients in endoscopic remission were included, equally divided into 30 with complete healing and 30 with partial healing. The mean age was 45.7 ± 13.5 years (range: 18–78), with a marked female predominance (female-to-male ratio: 2.75).

According to the Montreal classification, phenotype distribution was as follows: 34 patients in A2 (56.7 %), 21 in A3 (35 %), and 5 in A1 (8.3 %). Disease location was predominantly L3 (43 patients, 71.7 %), followed by L2 (13 patients, 21.7 %) and L1 (4 patients, 6.7 %). The B2 phenotype was most frequent (25 patients, 41.7 %), followed by B1 (20 patients, 33.3 %). Perianal disease was present in 27 patients (45 %).

Regarding treatment, 41 patients were initially treated with immunosuppressants (68.3 %), while 19 received biologics (31.7 %), including 18 on infliximab (30 %) and 1 on adalimumab (1.7 %).

The mean follow-up duration was 30.2 ± 10.4 months. Disease evolution was marked by relapse in 2 patients with CDEIS = 0 (6.7 %) versus 16 patients with CDEIS 1–3 (53.3 %) ($p < 0.001$). Therapeutic adjustment was required in 16 patients with CDEIS = 0 (53.3 %) and in 25 patients with CDEIS 1–3 (83.3 %) ($p = 0.012$).

A reassessment colonoscopy was performed in 13 patients (21.7 %): 6 with complete healing and 7 with partial healing. All patients with initial complete healing maintained a CDEIS = 0, whereas among those with partial healing, 4 patients (57.1 %) had a follow-up CDEIS of 4, 2 patients (28.6 %) had a score of 3, and 1 patient (14.3 %) had a score of 1 ($p = 0.005$).

Therapeutic strategy differed significantly between the two groups. De-escalation therapy was undertaken in 13 patients with initial complete healing (81.3 %), whereas a step-up approach was applied in 15 patients with partial healing (60 %) and treatment optimization in 4 patients (16 %) ($p < 0.001$).

Hospitalization was required for none of the patients with complete healing (0 %), compared with 8 patients with partial healing (26.7 %) ($p = 0.002$).

Similarly, no surgical intervention was required for patients with complete healing (0 %), while 6 patients (20 %) with partial healing underwent surgery ($p = 0.010$).

Conclusions Complete endoscopic healing was associated with more favorable outcomes compared with partial healing. It correlated with a significantly reduced risk of relapse, hospitalization, and surgical complications, while also allowing for therapeutic de-escalation. These findings highlight the relevance of adopting a stricter definition of endoscopic healing, paving the way for a re-evaluation of current therapeutic targets.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP469 Sessile serrated lesion with dysplasia – we see, we predict, we remove!

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DOI 10.1055/s-0046-1821796

Aim. identify and study endoscopic signs of dysplasia in sessile serrated lesions with dysplasia (SSLd).

Materials and methods. A total of 199 patients were examined, in whom 260 SSL were detected, polyps were removed, examined histologically, in 45 cases dysplasia was detected in 41 patients – 11/41 (26.8 %) men and 30/41 (72.2 %) women aged 25 to 75 years (mean age 54.2 ± 3.4). We used acetochromoscopy with a 1.5 % acetic acid solution in all cases to enhance visualization and the presence of a positive and mixed acetowhite reaction in SSLd. Endoscopic and histological signs of SSLd were compared and summarized.

Results: SSLd were located in the right part of the colon – 42/45 (93.3 %). The size of SSLd was 2–25 mm, of which the majority, 24/45 (53.4 %) – 10–19 mm; by color pale 12/45 (26.7 %), pale pink 15/45 (33.3 %), with a red tint 18/45 (40.0 %). The surface is heterogeneous 22/45 (47.8 %), with the presence of a

nodular component or double elevation 12/45 (26.7%), with serrated margin 42/45 (93.9%), in 5/45 (9.8%) the edges are raised with a central depression. According to the Paris classification, all formations corresponded to type 0-IIa – 36/45 (80.0%), less common were 0-Is 9/45 (20.0%); According to the JNET classification: type 1 was 23/45 (51.1%), with 2A and 2B equally distributed at 12/45 (26.7%). The pit pattern according to the Kudo type 2, was shown by 18/45 (40.0%), with a specific sign for SSLD according to Kimura 2-O – 13/45 (28.9%), III 13/45 (28.9%), IV 1/45 (2.2%); capillary pattern type 1 according to Y.Sano 23/45 (51.1%), 2 – 21/45 (46.7%), 3 – 1/45 (2.2%). The formations were removed by cold snare resection 34/45 (75.6%) and EMR 11/45 (24.4%); 34/45 (75.6%) were removed en – bloc, 11/45 (24.4%) in fragments, with the radicality of removal R0 32/45 (71.1%), R1 1/45 (2.2%) – with cold snare removal, Rx 12/45 (26.7%) – fragmentation of material during extraction.

Conclusions: Verification of dysplasia in SSL during colonoscopy helps to determine the optimal tactics for removing the lesion, thereby reducing the risk of developing CRC, and also to determine the timing of subsequent observation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP470 Effectiveness of Different Split-Dose Bowel Preparation Regimens in Patients Treated with Glucagon-Like Peptide-1 Receptor Agonists: preliminary results of The GLPreparation Study

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DOI 10.1055/s-0046-1821797

Aims A potential negative effect of glucagon-like peptide 1 (GLP-1) receptor agonists on bowel cleanliness in colonoscopy has been reported in literature. However, most of the evidence comes from retrospective studies.

The main aim of this study is to prospectively compare bowel preparation quality and overall tolerability of bowel preparation among diabetic patients treated with GLP-1 receptor agonists and not. Secondary outcomes included comparison of the number of polyps detected, cecal intubation rate, procedure duration and procedure-related complications among the two groups.

Methods This prospective observational study has been conducted across 6 Italian Gastroenterology and Digestive Endoscopy units, which consecutively enrolled diabetic patients undergoing colonoscopy for any indication, both those treated with GLP-1 receptor agonists and those not. All patients received a low-volume, split-dose bowel preparation regimen. The Boston Bowel Preparation Scale (BBPS) was used to assess bowel cleansing quality, and the validated Lawrence score was employed to evaluate preparation tolerability in the two groups. Preliminary results are presented.

Results A total of 111 diabetic patients were enrolled, 36 (32.4%) in the GLP-1 group and 75 (67.6%) in the non-GLP-1 group. Two groups were comparable for age (70.6 ± 8.5 vs 70.4 ± 6.7 years, $p = 0.90$), sex distribution ($p = 0.94$), smoking status ($p = 0.12$), and diabetes-related complications ($p = 0.75$), body mass index (BMI, 25.9 ± 3.7 kg/m² vs 27.0 ± 4.6 kg/m², $p = 0.16$), diabetes duration (12.6 ± 7.9 vs 11.1 ± 6.9 years, $p = 0.34$).

No significant difference in bowel cleansing was found among the two groups (BBPS ≥ 6 in 83.3% of the GLP-1 group and 76.0% of the non-GLP-1 group, $p = 0.53$). Tolerability was also comparable between groups: 20 (26.7%) pa-

tients in the non-GLP-1 group and 12 (33.3%) in the GLP-1 group reported no difficulty; 34 (45.3%) and 11 (30.5%) reported mild difficulty; 19 (25.3%) and 13 (36.1%) reported moderate difficulty; 2 (2.7%) and 0 reported severe difficulty, respectively ($p = 0.30$). Cecal intubation rates were likewise similar (GLP-1: 88.9% vs non-GLP-1: 86.7%, $p = 0.98$). No significant difference in polyp per colonoscopy and colonoscopy duration were found. No colonoscopy-related complications occurred in either group.

Conclusions This preliminary results did not reveal any significant difference in bowel cleansing quality and tolerability of preparation among diabetic patients taking GLP-1 receptors agonists or not as well as other key colonoscopy quality indicators.

Initial data in our cohort suggest a lower impact of GLP-1 receptor agonist on bowel preparation compared with what is currently reported in the literature and that diabetes itself is the main cause of inadequate bowel preparation

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP471 Technical Feasibility Of Transoral Incisionless Fundoplication With Laparoscopic Hiatal Hernia Repair (C-Tif) And Concomitant Sleeve Gastrectomy For The Treatment Of Gerd And Obesity: A Preliminary Experience

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DOI 10.1055/s-0046-1821798

Aims Gastroesophageal reflux disease (GERD) is frequently associated with obesity. The onset or worsening of GERD after sleeve gastrectomy (SG) remains a matter of debate in metabolic and bariatric surgery (MBS). Concomitant hiatal hernia repair (HHR) is increasingly performed, and SG combined with fundoplication has emerged as a potential bariatric option, although current evidence is conflicting and the learning curve can lead to a considerable rate of reinterventions. Transoral Incisionless Fundoplication (TIF) is a minimally invasive endoscopic approach that reconstructs the gastroesophageal valve and provides a 270° fundoplication. To date, only one case report has described TIF performed simultaneously with SG without HHR, demonstrating the basic feasibility of this combined strategy [1–7].

AIMS. To evaluate the feasibility of concomitant TIF with laparoscopic HHR and SG (C-TIF + SG) and to assess the postoperative evolution of GERD symptoms in obese patients with confirmed preoperative GERD.

Methods Four obese patients with typical GERD symptoms were prospectively enrolled. Symptom severity and frequency were assessed using the GERD-HRQL questionnaire. All patients underwent preoperative endoscopy, 24-hour pH-impedance monitoring, and high-resolution manometry (HRM). GERD was diagnosed following the Lyon Classification 2.0 criteria. Under general anesthesia, five laparoscopic trocars were placed, followed by posterior cruroplasty after dissection of the diaphragmatic crura and abdominalization of the distal esophagus. The EsophyX device was then inserted transorally, retroflexed, and used to create a 270° gastroesophageal valve under laparoscopic control. The procedure was performed jointly by two experienced endoscopists. A standard laparoscopic sleeve gastrectomy followed. Clinical follow-up was scheduled at 1, 3, 6, and 12 months.

Results The mean preoperative BMI was 35.4 kg/m² (SD ± 3.99). All patients were taking daily standard-dose PPIs. The mean preoperative GERD-HRQL score was 40.5 (SD ± 11). Hiatal hernia was present in all patients (mean size 2.1 ± 0.6 cm), along with Grade A esophagitis (Los Angeles Classification). pH-monitoring confirmed pathological reflux, while HRM demonstrated hiatal hernia with an IRP < 15 mmHg. Mean follow-up was 10.5 months (range 8–13). Total body

weight loss at 6 months was 25.3%. GERD symptoms significantly improved at last follow-up ($p < 0.01$), with a mean postoperative GERD-HRQL score of 2.25. All patients discontinued PPI therapy within one month. Follow-up endoscopy at 6 months showed no recurrence of hiatal hernia or esophagitis. No complications were observed.

Conclusions In this preliminary experience, C-TIF with concomitant SG appears safe, technically feasible, and associated with favorable mid-term outcomes in terms of both weight loss and GERD symptom resolution. Larger studies with longer follow-up are needed to validate the combined approach for the simultaneous management of obesity and GERD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Canto MI, Diehl DL, Parker B, Abu-Dayyeh BK, Kolb JM, Murray M, Sharaiha RZ, Brewer Gutierrez OI, Sohagia A, Khara HS, Janu P, Chang K. Outcomes of transoral incisionless fundoplication (TIF 2.0): a prospective multicenter cohort study in academic and community gastroenterology and surgery practices (with video). *Gastrointest Endosc* 2025; 101 (1): 90–102.e1. doi:10.1016/j.gie.2024.08.016
- [2] ASGE Standards of Practice Committee; Desai MRuan W, Thosani NC, Amaris M, Scott JS, Saeed A, Abu Dayyeh B, Canto MI, Abidi W, Alipour O, Amateau SK, Cosgrove N, Elhanafi SE, Forbes N, Kohli DR, Kwon RS, Fujii-Lau LL, Machicado JD, Marya NB, Ngamruengphong S, Pawa S, Sheth SG, Thiruvengadam NR, Qumseya BJ ASGE Standards of Practice Co American Society for Gastrointestinal Endoscopy guideline on the diagnosis and management of GERD: summary and recommendations. *Gastrointest Endosc* 2025; 101 (2): 267–284. doi:10.1016/j.gie.2024.10.008
- [3] Al Trabulsi H, Muassess T, Guraya SY. Single-stage transoral incisionless fundoplication and laparoscopic sleeve gastrectomy for the management of GERD and obesity. *Int J Surg Case Rep* 2023; 105: 108059. doi:10.1016/j.ijscr.2023.108059
- [4] Gyawali CP, Yadlapati R, Fass R, Katzka D, Pandolfino J, Savarino E, Sifrim D, Spechler S, Zeribib F, Fox MR, Bhatia S, de Bortoli N, Cho YK, Cisternas D, Chen CL, Cock C, Hani A, Remes Troche JM, Xiao Y, Vaezi MF, Roman S. Updates to the modern diagnosis of GERD: Lyon consensus 2.0. *Gut* 2024; 73 (2): 361–371. doi:10.1136/gutjnl-2023-330616
- [5] Nocca D, Skalli EM, Boulay E, Nedelcu M, Michel Fabre J, Loureiro M. Nissen Sleeve (N-Sleeve) operation: preliminary results of a pilot study. *Surg Obes Relat Dis* 2016; 12 (10): 1832–1837
- [6] Genco A, Soricelli E, Casella G, Maselli R, Castagneto-Gissey L, Di Lorenzo N, Basso N. Gastroesophageal reflux disease and Barrett's esophagus after laparoscopic sleeve gastrectomy: a possible, underestimated long-term complication. *Surg Obes Relat Dis* 2017; 13 (4): 568–574
- [7] Angrisani L, Santonicola A, Hasani A, Noso G, Capaldo B, Iovino P. Five-year results of laparoscopic sleeve gastrectomy: effects on gastroesophageal reflux disease symptoms and co-morbidities. *Surg Obes Relat Dis*. 2016; 12 (5): 960–968. doi:10.1016/j.soard.2015.09.014 Epub 2015 Sep 26 PMID: 26775051

eP472 Is it possible to predict hemorrhage after endoscopic papillectomy?

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DOI 10.1055/s-0046-1821799

Aims Endoscopic papillectomy (EP) is an efficacious intervention for the management of papillary adenomas. It may also be considered for carcinoma without S2 invasion and neuroendocrine tumors. However post-papillectomy bleeding (PPB) requiring reintervention is not rare. We aimed to study several parameters to predict post-papillectomy bleeding.

Methods Over a fifteen year period, we performed EP for 132 patients. There were 68 males and 64 females. Median age was 46 (range: 32–76). For resection Endocut Q current (ERBE, VIO 300 S electrosurgical unit with APC; Germany) was used.

Results Bleeding requiring re-intervention or blood transfusion happened in 14 patients (10%). In another 7, bleeding manifested with melena and drop in hemoglobin, expectant management was suffice (Total 15.9%). Bleeding manifested with a median time of 12 hours (1–42). Management by re-intervention included; clips, argon plasma coagulation (APC), ancaferd spray, and metallic stent inserion into common bile duct. None required surgery, death did not happen. We compared these 21 against 111 who did not bleed in reference to age, gender, coagulation parameters, use of anti-platelet or anti-coagulant agents (that were stopped before a certain time of the procedure), size and histology of the resected papilla, administration of APC after papillectomy and no significant difference was found. In five of 21 patients (23%), bleeding happened after 24 hours and all had been discharged before bleeding manifested.

Conclusions Bleeding after EP seems to be an unpredictable event. However keeping the patients in-hospital and withholding antiplatelet and anticoagulant agents for 48 hours after procedure, if possible, may be a safer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP473 EUS-guided treatment in patients with gallstone disease who are unsuitable for ERCP, have failed ERCP, or cannot undergo cholecystectomy: A retrospective cohort with long-term follow-up

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DOI 10.1055/s-0046-1821800

Aims Treatment of gallstone disease involves cholecystectomy for cholelithiasis and ERCP for choledocholithiasis. However, cholecystectomy may be risky elderly patients and those with significant comorbidities. In surgically altered patients, ERCP can not be possible for choledocholithiasis, and in patients with preserved gastrointestinal anatomy, ERCP may also fail. The long-term outcomes of EUS-guided treatment performed between 2011 and 2022 in a group of such patients were evaluated.

Methods The study included 23 patients. In the bile duct group, 16 patients consisted of 13 males and 3 females. In the gallbladder group, 6 were female and 1 was male. The mean age was 62 ± 18.6 (range: 28–86) in the bile duct group and 73 ± 11.7 (51–83) in the gallbladder group. In the bile duct group, one patient had a hepaticojejunostomy without tract surgery, 12 had gastroenterostomy (including one with Billroth II and nine with Roux-en-Y anastomosis), and one had a total gastrectomy with esophagojejunostomy. In two patients, the anatomy was physiological, but ERCP had failed. All patients in the gallbladder group had recurrent cholecystitis and had high surgical risk. Under EUS guidance, 13 patients underwent hepaticogastrostomy, one underwent hepatoesophagostomy, two underwent choledochoduodenostomy, five underwent cholecystogastrostomy, and two underwent cholecystoduodenostomy. In the bile duct patients with normal anatomy, choledochoduodenostomy was preferred. After fistula formation, the stones were mostly treated with antegrade laser lithotripsy under cholangioscopic guidance.

Results Technical success was achieved in all patients. However, seven of those with bile duct stones continued to experience episodes of cholangitis. In all of these patients, the diameter of the common bile duct or main hepatic duct was greater than 20 mm. In the other six patients, the duct diameter was 15 mm or less, and no further episodes of cholangitis occurred. In patients who underwent the procedure for gallbladder stones, clinical success was 100%.

Conclusions EUS-guided treatment is a safe and highly effective option for managing bile duct stones in which ERCP is not feasible and gallbladder stones in patients at high risk for cholecystectomy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP474 ERCP treatment of recurrent gallstones in patients who have undergone cholecystectomy: What are the profiles?

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DOI 10.1055/s-0046-1821801

Aims Cholecystectomy is recommended in patients with gallstones after endoscopic extraction of bile duct stones to prevent cholecystitis or recurrent gallstones.

However, recurrence of common bile duct (CBD) stones is still observed in a considerable number of patients after cholecystectomy.

The standard treatment is endoscopic retrograde cholangiopancreatography (ERCP).

The aim of this study is to determine the profiles of these patients.

Methods The endoscopic retrograde cholangiopancreatography (ERCP) database of our hepatology-gastroenterology department was retrospectively reviewed between January 2020 and October 2025. All patients with a history of cholecystectomy and presenting with stones in the common bile duct were included in the study.

Results Twenty-eight patients were included in the study. The mean age of our patients was 66 ± 14.1 years, with a female predominance of 78 % ($n = 21$) and a female-to-male ratio of 3.5.

The median interval between cholecystectomy and the occurrence of common bile duct stones was 10 years.

The medical histories of our patients were as follows: diabetes in 7 cases (25 %), oral contraceptive use in 9 cases (33 %), dyslipidemia in 9 cases (33 %), obesity in 8 cases (29 %), LPAC syndrome in 1 case (3 %), sickle cell disease in 1 case (3 %), and 3 patients (10 %) had no medical history.

The clinical presentation was dominated by biliary colic in 13 cases (48 %), acute cholangitis in 10 cases (37 %), acute pancreatitis in 3 cases (11 %), cholecystitis in 2 cases (7 %), and a sickle cell crisis in 1 case (3 %).

All patients underwent imaging, which showed dilation of the biliary ducts upstream of lithiasic obstruction.

The mean CBD diameter was 15 mm, ranging from 9 mm to 22 mm.

The number and size of stones within the CBD varied:

- Macro-stone in 10 cases (36 %) with a mean diameter of 14.4 mm.
- Two stones in 4 cases (14 %) with a mean diameter of 17 mm.
- Multiple stones (choledocholithiasis impaction) in 14 cases (50 %)

Conclusions The recurrence of common bile duct stones is considered an unresolved problem after cholecystectomy. These patients present multiple risk factors, particularly metabolic syndrome, and a more frequent follow-up evaluation is suggested for the early detection of recurrent CBD stones.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP475 Predictive Factors of Colorectal Degeneration in Familial Adenomatous Polyposis

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DOI 10.1055/s-0046-1821802

Aims Familial adenomatous polyposis (FAP) is a hereditary disorder that, in the absence of appropriate therapeutic management, invariably progresses to colorectal adenocarcinoma. It represents the most common form of colorectal polyposis and the second leading cause of hereditary colorectal cancer, after lynch syndrome. The aim of this study was to identify prognostic factors associated with malignant degeneration.

Methods We conducted a retrospective, descriptive study in the Departments of Gastroenterology and General Surgery at Mohamed Tahar Maamouri University Hospital. A total of 33 patients managed for FAP over a 16-year period (January 2005 to December 2024) were included.

Results During the study period, 33 patients were included: 16 women and 17 men, with a sex ratio of 1.06. The mean age was 48.2 years [18–78]. FAP was diagnosed after the age of 40 in 21 patients. Fifteen patients were smokers and four were chronic alcohol consumers. A family history of FAP or colorectal cancer in first-degree relatives was documented in 15 patients (45.5 %). At diagnosis, the number of polyps exceeded 100 in 4 patients (12 %). Colorectal cancer occurred in 15 patients. The mean age at cancer diagnosis was 59 years. Thirteen patients (86 %) underwent elective surgery, while two required emergency surgery for bowel obstruction. Seven patients underwent total proctocolectomy with ileal pouch–anal anastomosis. Two underwent subtotal colectomy with ileocolic anastomosis, and six had total colectomy with ileorectal anastomosis.

In univariate analysis, the risk of degeneration was associated with age > 40 years at the time of FAP diagnosis ($p = 0.02$). A polyp count > 100 at diagnosis—observed in 12 % of patients—was correlated with the subsequent development of colorectal adenocarcinoma ($p = 0.042$). Polyps measuring > 5 mm, with or without high-grade dysplasia on histology and present in 26 patients (78 %), also constituted a poor prognostic factor predictive of malignant transformation ($p = 0.036$). Among the 33 included patients, 23 were diagnosed through colonoscopy performed for gastrointestinal symptoms; this group showed a higher risk of developing colorectal cancer ($p = 0.015$). Finally, the presence of at least one extracolonic manifestation—documented in 16 patients—was associated with an increased risk of colorectal cancer ($p = 0.025$).

Conclusions Our study demonstrated a positive correlation between age at FAP diagnosis, polyp size and number, and the risk of colorectal cancer. It also highlighted the increased risk of colorectal cancer in the presence of extracolonic manifestations and emphasized the importance of diagnosing FAP at the presymptomatic stage to reduce the likelihood of malignant degeneration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP476 EUS-guided tissue acquisition with and without on-site evaluation: a single-center experience from the Hungarian Institute of Pancreatic Diseases

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DOI 10.1055/s-0046-1821803

Aims Pancreatic cancer is the third leading cause of cancer related mortality, and early diagnosis remains essential to enable potentially curative resection. Although histopathology is the diagnostic standard, endoscopic ultrasound-guided fine-needle biopsy (EUS-FNB) has emerged as the preferred method for tissue acquisition. Our aim was to evaluate whether on-site assessment techniques, specifically rapid on-site evaluation (ROSE) and macroscopic on-site evaluation (MOSE), can enhance sample adequacy and reduce the need for repeat biopsy during EUS-guided tissue acquisition.

Methods We performed a retrospective analysis of 95 consecutive patients undergoing EUS-guided tissue acquisition at the institute of Pancreatic Diseases, Semmelweis University, between September and December 2024. Outcomes assessed included technical success, the impact on ROSE and MOSE on tissue adequacy, re-biopsy rates, and procedure-related adverse events.

Results Among 95 patients (55 % male, 45 % female), the technical success rate was 97.25 %. ROSE was performed in 69 cases, yielding 100 % diagnostic positivity with a mean of 2.15 needle passes. MOSE was used in 73 cases. Re-bi-

opsy rates were 13.4% for ROSE and 17.7% when both techniques were applied. MOSE alone demonstrated a re-biopsy rate of 14.3%. The overall adverse event was 2.78%.

Conclusions In our single-center experience, MOSE demonstrated performance comparable to ROSE and appears to be a reliable option in settings where ROSE availability is limited.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP477 Is gastric ptosis a predictor of response to endoscopic treatments for gastroparesis?

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DOI 10.1055/s-0046-1821804

Aims When conservative treatments fail, the treatment of gastroparesis relies on endoscopic strategies, but the predictors of success for these treatments remain poorly identified. Gastric ptosis is an anatomic-clinical entity whose links with gastroparesis remain poorly understood. The main objective of our study was to investigate the influence of gastric ptosis on the response to pyloric endoscopic treatments in patients with clinical gastroparesis.

Methods In this retrospective, single-centre study, all patients who underwent endoscopic treatment and TOGD between September 2012 and January 2025 were eligible. The primary objective was to evaluate the relationship between ptosis and treatment success (improvement in GCSI ≥ 1 after 3 months). Secondary objectives included identifying other factors predictive of treatment efficacy.

Results Forty-four patients with a median age of 52 years (36.9–61.4) were included. Gastric ptosis was significantly associated with a lower success rate of endoscopic treatment (5.56% vs. 48%, $p = 0.003$). Among the other criteria analysed, longer symptom duration and the presence of oesophageal motor disorder were significant predictors of failure ($p = 0.025$ and $p = 0.001$, respectively), while diabetic aetiology was associated with a higher success rate ($p = 0.019$).

Conclusions Our study is the first to identify gastric ptosis as a predictive factor for failure of pyloric treatments for gastroparesis. The inclusion of an upper gastrointestinal endoscopy in the pre-treatment assessment could be particularly relevant before proposing endoscopic pyloric treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP478 Endoscopic Ultrasound-guided Fine Needle Biopsy of an extremely rare mesenchymal pancreatic tumor: a case report

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DOI 10.1055/s-0046-1821805

Abstract Text

A 51-year-old male presented to the emergency department with acute back pain, suspicious for renal colic. An abdominal CT scan incidentally revealed a 30 mm hypodense lesion in the pancreatic uncinate process with central calcifications. An endoscopic ultrasound (EUS) demonstrated a hypoechoic, heterogeneous mass in the uncinate process, with irregular margins and a huge posterior acoustic shadowing. No signs of vascular or ductal involvement were noted. Therefore, EUS-guided fine needle biopsy (FNB) with a 22-G Franseen-tip needle was performed via transduodenal and transgastric approaches, obtaining an adequate histological sample after macroscopic on-site examination (MOSE). Histological analysis revealed spindle cells positive for CD34, BCL2, STAT6, and CD99, and negative for KIT, DOG1, desmin, actin, S100, and cytokeratins, with Ki-67 index $> 5\%$, suggesting for solitary fibrous tumor (SFT)

of the pancreas. Immunohistochemical confirmation was obtained at a tertiary referral pathology laboratory. A multidisciplinary tumor board advised conservative follow-up based on the benign histology and absence of local invasion. **Conclusion:** Pancreatic SFTs are extremely rare, with only 34 cases reported to date [2]. They are more frequently located in the pancreatic head and are slightly more common in females [2]. Most are discovered incidentally [2]. This case highlights the critical diagnostic value of EUS-FNB, which enabled accurate tissue acquisition for advanced immunohistochemical analysis, informing a nonsurgical, surveillance-based approach. Because of the non-specific clinical presentation and radiological features of pancreatic SFTs, diagnosis is particularly challenging using preoperative imaging and laboratory tests alone [1, 2]. Therefore, histopathological and immunohistochemical evaluation is essential for definitive diagnosis [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang WW, Zhou SP, Wu X, Wang LL, Ruan Y, Lu J, Li HL, Ni XL, Qiu LL, Zhou XH. Imaging, pathology, and diagnosis of solitary fibrous tumor of the pancreas: A case report and review of literature. *World Journal of Clinical Cases* 2024; 12 (5): 995–1003
- [2] Ronchi A et al. Solitary fibrous tumors: an update on diagnosis and management. *Pathol Oncol Res* 2020; 26 (2): 597–605

eP479 Development of standards for an endohepatology fellowship training program: Survey of international experts using a modified RAND/UCLA approach

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DOI 10.1055/s-0046-1821806

Aims Over the past decade, advances in therapeutic EUS have expanded the interface between hepatology and endoscopy, giving rise to the emerging field of endohepatology. Despite increasing clinical adoption and evidence supporting these procedures, no standardized training framework currently exists. This project seeks to inform the development of consensus-driven standards for an Endohepatology Fellowship by identifying the essential hepatology and endoscopic competencies required for safe and effective practice.

Methods We conducted a cross-sectional electronic survey of international experts in hepatology, advanced endoscopy, and endohepatology to assess essential standards for endohepatology fellowship development. A steering committee of recognized leaders designed the survey, drawing on published literature, existing training curricula, and expert experience to generate statements across key training domains. Participants were asked to rate a total of 74 statements on the following topics: 1) basic framework for a proposed endohepatology fellowship program; 2) candidate selection; 3) training environment; 4) supervisor qualification; 5) clinical exposure; 6) endoscopic exposure; 7) interventional radiology exposure; 8) evaluation of training; 9) support from learned societies; and 10) maintenance of competence after training. Statements were rated on a 9-point Likert scale (1 = strongly disagree, 9 = strongly agree) with the possibility to add free-text comments. Consensus was defined using a modified RAND/UCLA approach. Agreement or disagreement was determined based on median panel scores (7–9 = agreement; 1–3 = disagreement), and statistical disagreement was assessed using the IPRAS method (► Fig. 1–3).

Results Forty-four (83%) out of 53 invited experts completed the survey (21 (48%) advanced endoscopists; 18 (41%) hepatologists; 5 (11%) endohepatologists). Duration of independent practice was < 5 years in 9 (20%), 5–10 years

in 13 (30), and > 15 years in 22 (50 %). Location of practice was USA in 22 (50 %), Canada in 11 (25 %), Europe in 7 (16 %; Belgium, Italy, Spain, UK), KSA in 1 (2 %), and 3 did not say. In total, all panelists reached a consensus on 55 (74 %) statements. An additional 8 (11 %) statements reached consensus in only a subgroup of participants. All statements reaching consensus are highlighted in Figure 1 and 2. These statements belong to all topics covered. More than half of survey responders thought that the minimum number of cases needed to evaluate competency were at least 25 cases for EUS-liver palpation, 50 cases for EUS-guided non-liver biopsy, 25 cases for EUS-guided liver biopsy, 25 cases for EUS-portal pressure gradient measurement, 25 cases for EUS-shear wave elastography, 25 cases for variceal gluing, and 10 cases for variceal gluing and coiling.

Conclusions Our survey identifies multiple statements and establishes key standards that should be used to develop an endohepatology fellowship training program. Further work is needed to refine these standards.

Conflicts of Interest Amine Benmassaoud is a speaker for CookYen-I Chen is a consultant for Boston Scientific, has received research funding from Boston Scientific and is the co-founder of Chess Medical Inc.

eP480 Various types of familiar sessile serrated lesions without dysplasia

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DOI 10.1055/s-0046-1821807

Aim. to identify and study endoscopic various diagnostic criterias of sessile serrated lesions (SSLs) without dysplasia.

Materials. We included 158 patients 44 (27.8 %) men and 114 (72.2 %) women aged 17 to 81 (mean age 52.1 ± 3.4), in whom 215 SSLs were detected. All lesions were endoscopically removed and pathological examination.

Results. The SSLs were located in the right colon – 177/215 (82.3 %), in the left colon – 38/215 (17.7 %). The size was 2-25 mm, the majority (165/215 (76.7 %)) were 6-15 mm; the color of the SSLs was white – 107/215 (49.7 %) or similar to the surrounding mucosa – 104/215 (48.4 %), rarely red – 4/215 (1.9 %). The surface was most often smooth – 103/215 (47.8 %), less often cloud-like 58/215 (27.0 %); the borders of the SSLs were distributed equally – serrated 202/215 (93.9 %); more often there were irregular shaped SSLs – 139/215 (64.8 %), to a lesser extent oval (61/215 (28.3 %) and round shape 15/215 (6.9 %); a «mucinous cap» on the surface was in 190/215 (88.4 %), which was washed off well in 134/215 (62.3 %), and in 25/215 (11.6 %) cases it was absent. According to the Paris classification SSLs were the type 0-IIa – 192/215 (89.3 %), less common were type 0-Is 20/215 (9.5 %), type 0-Is + IIc 3/215 (1.2 %), type 0-IIb 1/215 (0.4 %), type 0-IIa + IIc 3/215 (1.2 %); according to the NICE and JNET classifications in all cases SSLs were type 1 – 215/215 (100 %). According to the Kudo classification was type II – 158/215 (73.6 %), with specific sign according to Kimura type II-O – 48/215 (22.0 %), in rare cases according to Kimura type III 9/215 (4.4 %) were presented; capillary pattern in all 215/215 (100 %) cases is not dilated, regular, type 1 according to Y. Sano.

Conclusion. Sessile serrated lesions (SSLs) without dysplasia can be varied, not only with the usual and well-known features. The use of an extended set of endoscopic criterias contribute accurate verification of SSL during colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP481 Correlation between the Rutgeerts score and clinical recurrence in Crohn's disease

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DOI 10.1055/s-0046-1821808

Aims Surgery is frequently performed in patients with Crohn's disease (CD), with a risk of short bowel syndrome. The aim of our study is to evaluate the correlation between the Rutgeerts score and clinical and endoscopic recurrence during the first year following intestinal resection surgery in patients with CD.

Methods We conducted a retrospective analytical and descriptive study within the Hepatology, Gastroenterology, and Proctology Department of Medicine B, which collected data on all patients with Crohn's disease who underwent ileocecal or right ileocolonic resection between January 2019 and November 2025. Patients who did not undergo postoperative colonoscopy were excluded. Postoperative endoscopic recurrence was defined as a Rutgeerts score ≥ i2.

Results A total of 92 patients were included. The mean age was 41.3 years (20–70 years). There was a female predominance, with a female-to-male ratio of 1.19 (50 women and 42 men). The mean interval between the diagnosis of Crohn's disease and surgery was 2.6 years. Crohn's disease was ileocecal in 50 % of cases (n = 59), ileocolic in 44.5 % (n = 41), isolated ileal in 4.3 % (n = 4), and extensive in 1 % of patients. The disease phenotype was stenosing in 64.1 % (n = 59), fistulizing in 18.4 % (n = 17), combined stenosing and fistulizing in 14.1 % (n = 13), and inflammatory in 2 patients.

Thirty-three patients (35.8 %) had ano-perineal manifestations, including complex fistulas in 29 patients (31.5 %), anal ulcerations in 2 patients (2.1 %), anal stenosis in 1 patient (1 %), and an anal fissure in 1 patient (1 %). The surgical indications were ileal or ileocecal stenosis in 73.9 % of cases (n = 59), internal or external fistulas in 20.6 % (n = 19), and deep abscesses in 2 patients.

Postoperative colonoscopy was performed after a mean interval of 9.2 months (6–11 months) following surgery. Endoscopic recurrence (Rutgeerts score ≥ i2) was observed in 59.7 % of patients (n = 55), including Rutgeerts i2 in 20 patients (21.7 %), i3 in 9 patients (9.7 %), and i4 in 26 patients (28.2 %). Clinical recurrence occurred in 53.2 % of patients (n = 49).

On univariate logistic regression analysis, statistically significant predictors of clinical recurrence were a Rutgeerts score ≥ i2 (p < 0.001) and the presence of LAP (p = 0.042). On multivariate analysis, only a Rutgeerts score ≥ i2 remained statistically significant (p < 0.001).

Conclusions Endoscopic recurrence (ER) of Crohn's disease, assessed using the Rutgeerts score, is strongly correlated with the risk of clinical recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP482 Texture and Color Enhancement Imaging (TXI) versus White Light Imaging (WLI) in Detecting Colorectal Adenomas: A Meta-Analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1821809

Aims Colonoscopy is the gold standard for colorectal cancer screening, but its effectiveness depends on factors like bowel preparation, technique, and strategies to improve detection. Enhancing visualization is key to reducing missed lesions. Texture and Color Enhancement Imaging (TXI) augments texture, brightness, and color which could potentially help identify adenomatous lesions. This meta-analysis evaluates the effectiveness of TXI on adenoma detection rate (ADR) and adenomas per colonoscopy (APC) compared to white light imaging (WLI).

Methods A comprehensive literature search for randomized controlled trials (RCTs) comparing TXI to WLI in patients undergoing colonoscopy was done in PubMed, EMBASE, and Cochrane CENTRAL. Statistical analysis was conducted with RevMan using a random-effects model to compute the risk ratio and mean difference [1–3].

Results This meta-analysis included 3 RCTs. The TXI group comprised 989 patients while the WLI group had 978 patients. Analysis of the outcomes of interest showed a trend favoring TXI vs. WLI, with increased ADR (Risk Ratio: 1.22, 95 % CI: 0.98–1.52) and increased APC (Mean Difference: 0.34, 95 % CI: -0.13–0.81) with no statistical significance. However, there was significant heterogeneity for both outcomes.

Conclusions This meta-analysis of RCTs suggests that TXI, compared to WLI, can improve ADR and APC. The heterogeneity may possibly be explained in the use of older generations of colonoscopes in the WLI arm in the RCTs of Antonelli and Young. In the RCT of Toyoshima, the same latest generation scope was used in both arms. Thus, we recommend that subsequent studies use the same latest generation scope for both arms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Toyoshima N et al. The Efficacy of Texture and Color Enhancement Imaging Observation in the Detection of Colorectal Lesions: A Multicenter, Randomized Controlled Trial (deTXlon Study).". *Gastroenterology* vol. 169: 2 2025; 337–345.e2. doi:10.1053/j.gastro.2025.03.007
- [2] Young E et al. Texture and Color Enhancement Imaging Improves Colonic Adenoma Detection: A Multicenter Randomized Controlled Trial. *Gastroenterology* vol. 166: 2 2024; 338–340.e3. doi:10.1053/j.gastro.2023.10.008
- [3] Antonelli G et al. Texture and color enhancement imaging versus high definition white-light endoscopy for detection of colorectal neoplasia: a randomized trial. *Endoscopy* vol. 55: 12 2023; 1072–1080. doi:10.1055/a-2129-7254

eP483 MELD 3.0 is a more accurate predictor of mortality in decompensated liver cirrhosis than MELD and MELD-Na

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Aims In cirrhosis, several prognostic scores have been developed to predict overall survival. The MELD (Model for End-Stage Liver Disease), MELD-Na and MELD3.0 scores have been proposed as a criteria for allocating organs. The aim of our study was to explore MELD 3.0 score for predicting survival in decompensated Tunisian cirrhotic patients.

Methods We conducted an observational, retrospective study involving all patients with decompensated cirrhosis managed in Gastroenterology department of Taher Maamouri hospital during the period from January 2010 to December 2021. Mortality was assessed using the Kaplan Meier model. The performance of the scores was assessed using the AUROC (Area under the Receiver Operating Characteristic curve).

Results One hundred and fifty-two patients were included with an average age of 62 years. The main causes of chronic liver disease were hepatitis C virus (HCV) infection (30.9%) and hepatitis B virus (HBV) infection (32.2%). The mean value of the MELD, MELD-Na and MELD3.0 scores was 17.78, 17.74 and 19.4, respectively. The mean follow-up time was 17.1 months. The overall mortality at 3-month, 6-month and 1-year was 18.4%, 24.3% and 35.5% respectively. In the prediction of 3-month mortality, the AUROCs of the MELD, MELD-Na and MELD3.0 scores were 0.786; 0.841 and 0.850 respectively. The cut-off value of the MELD3.0 score was 24 (sensitivity 68%, specificity 88%). A statistically significant correlation was noted between the MELD3.0 score $\geq$ 24 and 3-month mortality ($p = 0.04$).

Conclusions Overall, MELD3.0 shows promising value with the highest AUROC in all assessed scoring systems. MELD 3.0 has the best performance for predicting mortality at various time points. Multicenter and long-term studies with larger samples would be helpful for the scoring systems to predict the mortality more precisely in decompensated liver cirrhosis patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP484 Why Are Small Rectal NETs Yellow? A Colorimetric Analysis Linked to Mucosal Invasion Depth

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Aims Aims: Rectal Neuroendocrine Tumors (R-NETs) carry a risk of lymph node metastasis even when smaller than 10 mm, and detecting small R-NETs endoscopically is clinically important. R-NETs are generally recognized as yellowish submucosal tumors; however, the reason why they appear yellow has not been elucidated. In this study, we analyzed R-NETs at our institution to evaluate the diagnostic utility of color characteristics.

Methods Methods: From April 2021 to September 2025, we identified lesions $\leq$ 5 mm that had not undergone pre-treatment biopsy and were observed using the Olympus X-1 system (CF-XZ1200). From stored endoscopic images, we extracted tumor and surrounding mucosal areas and measured color values (RGB) at nine points each to obtain mean color values. **Analysis 1:** We evaluated diagnostic capability based on color differences between tumor and surrounding mucosa. RGB values were converted to the CIE-Lab color space, and color differences (ΔE) were calculated. **Analysis 2:** We assessed diagnostic utility incorporating pathological findings, specifically the depth of tumor extension from the submucosa into the mucosa.

Results Results: A total of 32 patients with 35 lesions were included (16 males, 19 females; mean age 56.3 ± 13.1 years). The mean tumor size was 3.5 ± 0.9 mm. **Analysis 1:** Five endoscopists evaluated whether the color of each tumor could be visually distinguished from the surrounding mucosa. In 16 lesions (46%), differentiation was not possible (non-CD group), whereas in 19 lesions (54%), it was possible (CD group). Although tumor size did not differ between groups, ΔE values showed a significant difference ($P < 0.01$). **Analysis 2:** Pathological invasion depth was classified as follows: no invasion into mucosa (MI-1): 8 lesions (23%), $< 1/3$ mucosal invasion (MI-2): 9 lesions (26%), $\geq 1/3$ mucosal invasion (MI-3): 18 lesions (51%). While tumor size did not differ among MI categories, ΔE was significantly higher in MI-1 vs MI-3 ($P < 0.01$). A nominal logistic regression analysis using color difference as the dependent variable revealed that MI classification was significantly associated with endoscopic color recognition ($p < 0.01$).

Conclusions Conclusions: In small R-NETs, the yellowish appearance is not attributable to tumor size but instead to the reverse invasion of tumor cells from the submucosa into the mucosa.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP485 EUS-Guided Fiducial Placement For GI Malignancies: A Tertiary Hospital's 9-Year Experience

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DOI 10.1055/s-0046-1821812

Aims Fiducial markers are radiopaque implants, typically composed of gold, that aid in the precise and reproducible targeting of tumors. These markers serve as reference points during CT-based planning, including four-dimensional assessment, enabling real-time correction for tumor motion. Initially, fiducial markers were placed intraoperatively or percutaneously under ultrasound (US) or CT guidance. However, endoscopic ultrasound (EUS) offers superior visualization of deep structures in the mediastinum and abdomen while providing a less invasive alternative to surgical placement. EUS-guided fiducial placement has been successfully used for tumors in nearly all gastrointestinal malignancies such as pancreatic, hepatic, esophageal, gastric, and colorectal cancers. Modern fiducials can fit into 22-gauge fine-needle aspiration (FNA) needles and come preloaded in needle carrier devices for easier deployment. Despite in-

creasing evidence supporting the efficacy of EUS-guided fiducial marker placement in gastrointestinal malignancies, there remains a lack of systematic evaluation in large, prospective, randomized trials. Data regarding its feasibility and safety in patients with gastrointestinal cancers undergoing radiation therapy are particularly scarce. Therefore, this study aimed to assess the success rate of EUS-guided fiducial marker placement in these indications within a tertiary hospital setting.

Methods This retrospective, single-center study was conducted at our tertiary hospital and included patients diagnosed with esophageal, rectal, or pancreatic tumors who required fiducial marker placement for image-guided radiation therapy. The study period extended from January 2016 to October 2025. Patients underwent EUS-guided fiducial marker placement using a preloaded 22-gauge EchoTip Ultra Fiducial Needle (Cook Medical, Limerick, Ireland). The primary outcome was the technical success of the procedure, defined as the accurate deployment of fiducial markers at both the proximal and distal margins of the tumor under EUS guidance. Additionally, the occurrence of procedure-related adverse events was assessed. All procedures were performed by experienced endosonographers using standard EUS techniques. Patients were closely monitored post-procedure for potential complications and CT scan and chest xray were used to confirm marker positioning both immediately after placement and at the completion of radiotherapy [1–5].

Results During the study period, a total of 19 patients underwent EUS-guided fiducial marker placement in our endoscopic unit. The mean age was 65.2 ± 9.8 years, and 52 % of the patients were male. Of the participants, two had rectal adenocarcinoma, two had esophageal malignancies, and 15 were diagnosed with pancreatic adenocarcinoma. The overall technical success rate of fiducial marker placement was 94.7 %, with successful deployment achieved in 18 patients. In one case, the presence of an extensive collateral venous network (cavernoma) prevented the safe placement of fiducial markers. On average, 2.6 ± 1.2 fiducial markers were placed per patient. The mean tumor size was 23 ± 7 mm. No procedure-related complications were observed. At the completion of radiation therapy, imaging confirmed the presence of markers in all patients.

Conclusions Our nine-year experience with EUS-guided fiducial marker placement for esophageal, pancreatic, and rectal tumors demonstrates that the procedure is both safe and highly effective, with no reported complications. Fiducial markers remained intact and visible throughout the course of radiation therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cazacu IM, Luz LP, Figueiredo FA et al. Analysis of fiducials implanted during EUS for patients with localized rectal cancer receiving high-dose-rate endorectal brachytherapy. *Gastrointest Endosc* 2015; 81 (3): e1–e2. doi:10.1016/j.gie.2014.11.010
- [2] Van der Valk MJM, van den Bosch L, van Laarhoven HWM et al. Endoscopic ultrasound-guided fiducial marker placement for radiotherapy in rectal cancer: a prospective study. *Endoscopy*. 2019; 51 (10): 930–935. doi:10.1055/a-0958-2148
- [3] Figueiredo FA, Cazacu IM, Luz LP et al. Endoscopic ultrasound-guided fiducial marker placement for stereotactic body radiation therapy in pancreatic cancer: a prospective study. *Endosc Ultrasound* 2021; 10 (6): 414–423. doi:10.4103/eus.eus_102_21 MDPI
- [4] Patel R, Patel S, Shah S et al. Endoscopic ultrasound-guided fiducial marker placement for stereotactic body radiation therapy in pancreatic cancer: a systematic review and meta-analysis. *Clin Endosc* 2021; 54 (6): 783–791. doi:10.5946/ce.2021.102
- [5] Coronel E, Cazacu IM, Bujanda L et al. EUS-guided fiducial placement for GI malignancies: a systematic review and meta-analysis. *Gastrointest Endosc* 2019; 89 (5): 659–670.e18. doi:10.1016/j.gie.2018.12.018

eP486 Self-Assembling Peptide Hydrogel Does Not Reduce Adverse Outcomes After Endoscopic Submucosal Dissection: systematic review Meta-analysis

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DOI 10.1055/s-0046-1821813

Aims To evaluate the efficacy and safety of self-assembling peptide hydrogel (SAP) in endoscopic submucosal dissection (ESD), specifically assessing their impact on delayed bleeding, perforation risk, resection quality, procedure time, and wound healing, through a comprehensive meta-analysis and trial sequential analysis.

Methods I conducted a comprehensive search of PubMed, Scopus, Web of Science, Embase, and Cochrane from their inception to November 2025, focusing on randomized controlled trials (RCTs) evaluating the efficacy and safety of self-assembling peptide hydrogel (SAP) in endoscopic submucosal dissection (ESD). Meta-analyses were performed using a random-effects model. Odds ratios (ORs), hazard ratios (HRs), and mean differences (MDs) were calculated with 95 % confidence intervals (CIs).

Results Across six studies, SAP showed no significant reduction in delayed bleeding compared with no SAP (RR 0.87; $p = 0.47$). However, a significant effect modification by study design ($p = 0.017$) was detected: retrospective studies demonstrated a lower bleeding risk with SAP (RR 0.61; $p = 0.04$), while RCTs showed no benefit (RR 1.53; $p = 0.15$). Subgroup analyses by prophylactic use, lesion location, and sensitivity testing revealed no change to the overall non-significant result, and TSA confirmed insufficient evidence.

Similarly, perforation risk did not differ between SAP and controls (RR 0.74; $p = 0.16$), with subgroup analyses and TSA indicating inconclusive evidence. SAP had no impact on resection outcomes (En bloc: RR 1.00; R0: RR 1.01; both $p > 0.70$) or procedure time ($p > 0.30$). Wound healing rates were also comparable ($p > 0.25$), though limited data prevented definitive conclusions.

Conclusions SAP does not significantly reduce delayed bleeding or perforation following ESD and has no impact on resection quality, procedure time, or wound healing. Although retrospective data suggests a possible reduction in bleeding, RCTs do not support this effect, and TSA confirms that current evidence remains insufficient. Larger high-quality randomized trials are needed to clarify the clinical value of SAP in ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP487 Case series on the use of X-TACK as a closure technique of EMR defects of colorectal lesions

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DOI 10.1055/s-0046-1821814

Aims X-TACK is a through-the-scope system for tissue approximation in endoscopic procedures. The aim of this study is to describe the efficacy and safety of this device for EMR defects of colorectal lesions.

Methods Retrospective study involving all the patients who underwent EMR for colorectal lesions and the use of x-tack as a suturing device in our center. The primary outcome was technical success. The secondary outcomes were adverse events rates and the rate of using double closure technique.

Results 13 patients were included, 77 % male and 23 % female, with a mean age of 62 years. The main location where the x-tack was used was the ascending colon, and the mean size of the defect was 40 mm. Regarding to the time spent applying the x-tack, it was 26 minutes. Technical success rate was 100 % and there were no adverse events. In 77 % of the patients, a double closure technique was needed.

Conclusions X-tack system is an effective and safe option for tissue approximation of resection defects. However, it has a steep learning curve and in most cases a double closure technique is needed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP488 Extracolonic Manifestations in Familial Adenomatous Polyposis

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DOI 10.1055/s-0046-1821815

Aims Familial adenomatous polyposis (FAP) may be associated to several other pathologies involving multiple organs and can significantly influence the disease prognosis. The objective of this study was to determine the frequency of extracolonic manifestations in patients with FAP.

Methods This retrospective, descriptive study was conducted in the Departments of Gastroenterology and General Surgery at Mohamed Tahar Maamouri University Hospital, including 33 patients managed for FAP over a 16-year period (January 2005 to December 2024).

Results During the study period, 33 patients were included. The mean age was 48.2 years [18–78]. A first-degree family history of FAP was present in 45.5 % of patients. Regarding the circumstances of diagnosis, screening colonoscopy led to the diagnosis in 9 patients (28 %). Fifty-five percent of patients presented with colorectal symptoms, including rectal bleeding (13 patients), abdominal pain (11 patients), diarrhea (5 patients), and alternating diarrhea and constipation (3 patients). In three cases, colonoscopy was performed to investigate anemia. One case was diagnosed after examination of the operative specimen from an emergency surgery for a perforated right-colon cancer presenting with peritonitis.

Regarding the assessment of extracolonic manifestations: Upper gastrointestinal endoscopy was performed in 93.3 % of patients and revealed, in 9 % of them, the presence of fundic gland polyps and subcentimetric tubular adenomas of the antrum.

Duodenoscopy was performed in 32 patients and revealed duodenal polyps in 5 cases. In three cases, two polyps smaller than 5 mm were observed, corresponding to low-grade tubular adenomas on histology, with a Spigelman score ≤ 4 . A sessile 8-mm polyp without dysplasia was found in one patient. The fifth case involved a 20-mm pedunculated polyp with low-grade dysplasia and a Spigelman score of 7 (stage III). Resection was performed surgically via transverse duodenotomy during the same operative session as the total proctocolectomy. Histological examination revealed a tubular adenoma with low-grade intraepithelial neoplasia.

Concerning abdominal imaging, abdominal ultrasound was performed in 18 patients and CT scan in 23 patients. A single case of intra-abdominal desmoid tumor was identified. Abdominal imaging was unremarkable in 96.96 % of cases. No pancreatic, gallbladder, or biliary tract tumors were noted.

Ophthalmologic examination including fundoscopy was performed in 31 patients and revealed congenital hypertrophy of the retinal pigment epithelium (CHRPE) in 4 patients, bilateral in two cases and unilateral in the remaining two. Thyroid ultrasound, performed in 91 % of patients, revealed abnormalities in 7 patients (24 %): – A right-lobe nodule suggestive of papillary thyroid carcinoma, confirmed histologically. – Three nodules in another patient, classified as EU-TIRADS 4, with indeterminate cytologic atypia (Bethesda class III), managed with total thyroidectomy. – Other abnormalities consisted of nodules classified as TIRADS 2 and 3, requiring follow-up.

Long-bone radiography was performed in 76 % of patients and showed an osteoma of the left ischiopubic ramus in one case. Skull radiography, performed in 15 patients, revealed osteomas in six cases (40 %): cranial osteomas in three patients, two frontal sinus osteomas in one patient, and one orbital rim osteoma in another.

Dermatologic examination was performed in 30 patients and demonstrated sebaceous cysts on the back in two patients (6 %).

In the absence of neurologic symptoms suggestive of brain tumors, no cerebral CT scan was performed.

Conclusions FAP is a rare and complex disorder. Diagnosis relies on family history assessment, colonoscopy, and confirmation by molecular testing. Sev-

eral extracolonic manifestations may be associated with FAP. Gastroduodenal lesions and desmoid tumors should be investigated as a priority, as they significantly impact prognosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP489 Comparative Evaluation of Swin Transformer V2 for MES Classification, Segment Localization, and Inflamed Area-annotation in Ulcerative Colitis

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DOI 10.1055/s-0046-1821816

Aims Multimodal large language models (MLLMs) demonstrate potential in assessing the mayo endoscopic score (MES) for ulcerative colitis (UC). However, they primarily focus on single tasks and lack the capability for integrated analysis. To address these limitations, we developed a multitask system based on the Swin Transformer V2 architecture, which offers improved accuracy in MRS grading, segment-located capabilities, and inflamed intestinal mucosa area annotation features.

Methods MES classification and colonic segment localization models were trained using the LIMUC datasets (11276 images) and Real-Colon datasets (622 images) respectively, with ten-fold cross-validation based on patient ID. An external validation set (402 images) from wuxi people's hospital was independently annotated by three experienced experts. The MES scores with a unanimous consensus were included as the reference standard (283 images). Trained with AdamW, cosine annealing learning rate, and standard data augmentation, the image net-pretrained Swin Transformer V2 used weighted cross-entropy for MES, and cross-entropy for segment localization. In addition, four contemporary MLLMs (GPT-4o, Gemini-2.5 Pro, Grok-4, Qwen-VL-Max), which demonstrated potential, were incorporated for comparative analysis. Inflamed intestinal mucosa area-annotated ability was shown as a real-time Open CV-based prototype enabled frame-by-frame colonoscopy video prediction, and was evaluated via occlusion-based annotation diagram by the result of three experienced experts on external dataset.

Results The Swin Transformer V2 model achieved better performance on public datasets (accuracy = 0.767; F1 = 0.692), and the best accuracy in four contemporary MLLMs was 0.443 for GPT-4o. The Swin Transformer V2 model also retained good performance on external dataset (accuracy = 0.654; F1 = 0.604), and the best accuracy in four contemporary MLLMs was 0.594 for GPT-4o. For segment localization on external dataset, the Swin Transformer V2 model obtained an accuracy of 0.526 and an F1 score of 0.508, which was better than the best contemporary MLLMs GPT-4o (accuracy = 0.220; F1 = 0.264). It shown obvious consistency between model annotated inflamed intestinal mucosa area and experts-annotated area.

Conclusions The Swin Transformer V2-based multitask system outperformed general-purpose MLLMs in MES classification, segment localization, and inflamed intestinal mucosa area-annotation. This transparent model demonstrates strong potential to enhance UC endoscopic assessment and support clinicians across experience levels.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP490 Endoscopic Papillectomy of a Traditional Serrated Adenoma of the Ampulla of Vater: A Case Report

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DOI 10.1055/s-0046-1821817

Background & Aims Traditional serrated adenomas (TSAs) are a distinct subtype of gastrointestinal polyps with serrated glandular architecture and com-

plex histologic features, predominantly reported in the distal colorectum. TSAs of the duodenum, and particularly the ampulla of Vater, are extremely rare, with fewer than ~40 cases documented. While colorectal TSAs are common, upper gastrointestinal TSAs account for <1 % of small bowel polyps. Despite their scarcity, ampullary TSAs carry significant malignant potential, with up to 28.6 % associated with invasive carcinoma. Histologically, they show serrated architecture and ectopic crypt foci, sometimes with elongated nuclei and eosinophilic cytoplasm. Due to limited cases, evidence on optimal management and outcomes is scarce. We report a periampullary TSA with high-grade dysplasia successfully treated with endoscopic papillectomy.

Methods A 64-year-old woman with obesity and gastroesophageal reflux disease underwent upper endoscopy in an external center, revealing a 2-cm ampullary lesion; biopsies showed adenoma with low-grade dysplasia (LGD). Contrast-enhanced CT confirmed a 2-cm periampullary lesion with mild biliary dilatation, without biliary duct involvement or deep invasion. We repeated endoscopy, revealing an enlarged papilla of Vater, polypoid with a villous surface, suggestive of papillary adenoma. Given the lesion was well-circumscribed, without invasive signs, and showed no alarming characteristics, en bloc endoscopic papillectomy was performed with prophylactic biliary and pancreatic stenting. Histopathology and immunohistochemistry were performed on the resected specimen. Follow-up endoscopies were scheduled at 1, 3, and 12 months.

Results The procedure was completed without complications, and the patient was discharged after 48 hours. Histopathology confirmed a traditional serrated adenoma with high-grade dysplasia and clear margins. Follow-up endoscopies demonstrated complete mucosal healing and no recurrence at 1 year.

Conclusion Ampullary TSAs are exceptionally rare lesions with significant malignant potential. This case demonstrates that endoscopic papillectomy is a safe and effective organ-preserving treatment for well-circumscribed lesions without ductal or deep invasion. High-grade dysplasia underscores the importance of structured long-term endoscopic surveillance. Reporting such cases enhances understanding of periampullary TSAs and supports evidence-based endoscopic management in carefully selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP491 Real-World Endoscopic Outcomes of Risankizumab in Crohn's Disease: A Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1821818

Aims Crohn's disease is characterized by deep, transmural inflammation, making structural healing an essential therapeutic objective. According to STRIDE-II treatment targets for Crohn's disease, achieving objective measures of improvement—including endoscopic response as a key indicator of transmural healing—is essential for long-term disease control. Risankizumab (RISA), an interleukin-23 p19 inhibitor, demonstrated significant endoscopic benefits in clinical trials; however, its real-world performance regarding endoscopic improvement requires further evaluation. The aim of this study is to systematically assess real-world endoscopic outcomes associated with RISA therapy in patients with moderately to severely active Crohn's disease.

Methods A systematic review and meta-analysis of real-world studies reporting endoscopic outcomes following RISA treatment was performed. Pooled rates of endoscopic response and endoscopic remission were calculated using a random-effects model with 95 % confidence intervals.

Results Across included real-world studies, the pooled endoscopic response rate was 69 % at 24 weeks and 58 % at 52 weeks. Endoscopic remission at 52 weeks was achieved in 52 % of patients.

Conclusions Real-world evidence demonstrates that RISA produces substantial and durable endoscopic improvement, supporting its role as a long-term therapeutic option that contributes meaningfully to the pursuit of transmural healing in Crohn's disease.

Conflicts of Interest Speaker fees Abbvie, Johnson&Johnson, Ewopharma, Eli Lilly

eP492 Results of screening aimed at detecting *Helicobacter pylori* infection and precancerous stomach diseases

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DOI 10.1055/s-0046-1821819

Aims To evaluate, using the "GastroPanel", the frequency of detection of *H. pylori* infection and associated gastric diseases among doctors and medical staff of the National Medical Research Radiological Centre of the Ministry of Health of the Russian Federation, Moscow.

Methods Employees of three branches of the National Medical Research Radiological Centre (n = 434, average age – 48.5 ± 0.6 years) were examined using laboratory tests "GastroPanel" (Biohit Oyj, Finland). The test results make it possible to identify infection of the stomach with *H. pylori*, hypo- and hyperacid conditions, as well as atrophic gastritis of the antrum and body of the stomach, as its precancerous conditions. Upper endoscopy for suspected atrophic gastritis was performed with an Olympus GIF-HQ190 video endoscope (Japan) in a narrow-band imaging with close focus (NBI Dual Focus). an) in a narrow-spectrum mode with close focus (NBI Dual Focus)

Results The absence of pathological signs detected by "GastroPanel" was established in 23.3 % of cases; hyperacid state – in 18.4 %, and hypoacid state – in 5.2 %. These disorders are classified as functional. Consequently, the conditional norm as a whole was identified in 46.9 % of observations. An increased level of antibodies to *H. pylori* was found in 43.3 % of those examined. Atrophic gastritis in the body of the stomach according to the results of the GastroPanel was detected in 4.8 % of cases (median age – 59 years), and in the antrum (or increased secretion of hydrochloric acid) – also in 4.8 % of cases (median age – 52 years). Within two months after laboratory diagnostics, upper endoscopy was performed by 10 out of 15 patients examined at the P.A. Hertsen Moscow Oncology Research Institute – branch of the National Medical Research Radiological Centre of the Ministry of Health of the Russian Federation, in whom, based on the results of the "GastroPanel", the presence of atrophic gastritis in the antrum (or increased secretion of hydrochloric acid) is suspected. In 6 out of 10 cases, atrophic gastritis of the antrum was confirmed (in 2 of them, the atrophy extended to the body of the stomach and was assessed as severe). Of the 11 people with the GastroPanel conclusion "Atrophic gastritis of the body of the stomach", an endoscopic examination was carried out in 7 people, and in all these cases the diagnosis was confirmed, and in 2 of them the conclusion was made of severe atrophic pangastritis.

Conclusions "GastroPanel" confirmed its high significance in identifying *H. pylori* infection and precancerous atrophic changes in the gastric mucosa. Considering the occupational risks of infection among medical workers, we consider it advisable to conduct such screening without selecting an asymptomatic population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP493 Age is just a number... but is it in ERCP?

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DOI 10.1055/s-0046-1821820

Aims Choledocholithiasis is the most common indication for endoscopic retrograde cholangiopancreatography (ERCP), particularly in older adults, who often present with multiple comorbidities and may carry a higher risk for procedural complications. As the aging population grows, clinicians frequently face the question of whether ERCP remains equally effective and safe in elderly patients compared with younger individuals. The purpose of the present study was to evaluate outcomes of ERCP in these age groups, focusing on therapeutic success, technical difficulty, and the incidence of intra- and postoperative events. By comparing patients aged <75 years with those ≥75 years, the study sought to provide updated real-world data from a high-volume Greek university hospital.

Methods This case-control study was conducted at the University General Hospital of Ioannina and included ERCP procedures performed between September 2023 and September 2025. A total of 804 patients were analyzed. Based on international age-stratification definitions from the World Health Organization (WHO), participants were divided into two predefined groups: patients <75 years (n = 431) and patients ≥75 years (n = 373). For each patient, demographic information, clinical presentation, endoscopic interventions performed during ERCP, and recorded complications were obtained retrospectively from institutional records. Particular attention was given to stone removal success, cannulation difficulty, duration of the procedure, and the frequency of adverse events. A predefined subgroup analysis was used to examine outcomes specifically in elderly individuals with significant comorbidities, allowing a more detailed assessment of risk and therapeutic benefit in frail patients.

Results When comparing patients ≥75 years with those <75 years, a statistically significant difference was found regarding the rate of complete and partial stone extraction ($\chi^2 = 9.503$, $p = 0.002$). This suggests that although ERCP remains effective in both cohorts, stone removal success patterns differ slightly across age groups. The degree of cannulation difficulty, however, did not differ significantly between the two groups ($\chi^2 = 1.777$, $p = 0.411$). Older patients did not require more attempts or advanced techniques for ductal access. Similarly, procedure duration for ERCP was comparable between younger and older individuals ($b = -0.045$, $p = 0.912$), indicating that advanced age alone did not prolong endoscopic manipulation or therapeutic steps. Regarding safety, elderly patients were not more likely to experience intraoperative or postoperative complications compared with younger patients ($\chi^2 = 0.080$, $p = 0.777$). The overall rate of adverse events—including pancreatitis, bleeding, cholangitis, or cardiopulmonary issues—remained consistent across age categories. In the predefined subgroup of older adults with multiple comorbidities, ERCP continued to demonstrate high therapeutic efficacy. The procedure was also shown to have an acceptable safety profile even in this more fragile subpopulation, supporting its use as a frontline intervention when indicated.

Conclusions The findings of this study indicate that ERCP can be performed with a high degree of effectiveness in elderly patients aged ≥75 years, including those with complex medical histories. Although clinicians often hesitate to refer older adults for invasive procedures, the present data show that both technical success and complication rates are comparable to those observed in younger patients. ERCP should be considered a viable and generally safe option for elderly patients with choledocholithiasis, provided that potential intraoperative and postoperative risks are considered during clinical decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP494 Characteristics, complications, and methods of foreign bodies removal

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DOI 10.1055/s-0046-1821821

Aims The ingestion or inhalation of foreign bodies is a common emergency in gastroenterology. They represent a major clinical challenge. Although often

benign, they can lead to serious complications if not removed quickly and appropriately. Endoscopy, as a non-invasive and relatively safe method, has become the preferred tool for removing these foreign bodies. However, managing these situations requires a good understanding of the characteristics of the objects, the associated risks, and the extraction techniques available.

The purpose of this article is to outline the various types of foreign bodies encountered in endoscopy, the potential complications, and the current methods used for their extraction.

Methods This is a retrospective descriptive study conducted at the Hepatology-Gastroenterology Department “Medicine B” over a period of 36 months (January 2022 to January 2025). All patients who were hospitalized for voluntary or involuntary ingestion of foreign bodies are included. The data collected included age, gender, medical history, type of foreign body, its location, and the method used to extract it.

Results During the study period, 25 patients presented to our emergency department with foreign bodies. The median age was 47 years (range 20-74). The sex ratio was 1.27 (11 women to 14 men). The medical histories noted were hypertension in 3 patients (12 %), chronic smoking in 4 patients (16 %), diabetes in 2 patients (8 %), and a history of caustic ingestion in only 1 patient (4 %). The average time taken to treat patients was 6 hours.

Endoscopy revealed 15 food impactions (60 %) (pieces of meat/chicken with or without bones or cartilage/fish bones), 3 metal keys (12 %), four sharp objects (16 %) (pieces of glass, needles), one nail clipper (4 %), one lighter (4 %), and one plastic denture (4 %). As for the location of these various foreign bodies, 10 (40 %) were between 18 and 25 cm AD, 2 (8 %) were more than 30 cm AD, 7 (28 %) were in the stomach (at the cardia, greater curvature, or fundus), and 6 (24 %) were not found during FOGD.

The different extraction methods used were: 6 (24 %) pushback to the stomach, 4 (16 %) extraction with a polyp snare, 5 (20 %) extraction with foreign body forceps, 2 (8 %) extraction with a basket snare, and 2 (8 %) extraction with rat tooth forceps.

Among the population studied, two cases of failure were reported: the first was treated at a later stage after injection of 60 mg of IV corticosteroids; the second required surgical intervention.

Conclusions Endoscopic removal of foreign bodies is a common but delicate procedure. Successful removal depends on the location, nature, and size of the object, as well as the speed of treatment. Possible complications highlight the importance of rapid and appropriate management to minimize risks.

Endoscopy remains an essential tool in the management of foreign bodies, allowing for rapid and effective intervention while minimizing the risks inherent in complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP495 Quantifying the Bias of Visual Polyp Size Estimation in Colonoscopy: A Prospective Comparison Against Objective Measurement Standards

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DOI 10.1055/s-0046-1821822

Aims Visual estimation of polyp size is imprecise yet still predominantly determines surveillance intervals, resection techniques, and risk stratification. We therefore aimed to quantify its systematic bias against objective measurement standards.

Methods This prospective cohort study (NCT06822816) at the Montreal University Hospital Center included 574 polyps from 289 consecutive patients (mean age 66.3 years, 47.1 % female). Thirteen endoscopists performed visual size

estimations of polyps. Each polyp was also measured using one or more objective methods, and a single objective size was retained as the reference standard according to the order: (1) on-site microscopy (DinoLite models AF4515ZTL and AM8917MZTL) of fresh polypectomy specimens before formalin fixation (169 polyps, 29.4%), (2) virtual scale endoscopy (VSE, *Scale-Eye*, Fujifilm, Tokyo, Japan) (351 polyps, 61.1%), or virtual tape measurement (*AccuMeasure*, VTM Technologies, Haifa, Israel) (54 polyps, 9.4%). The primary outcome was measurement bias, defined as the mean difference between visual and objective measurements. Secondary outcomes included the impact of morphology, lesion size, and histology.

Results Visual estimation demonstrated a significant systematic overestimation with a mean bias of 0.36 mm (95% CI: 0.20–0.52, $P < 0.001$). Bias varied by reference method: 0.82 mm versus on-site microscopy (95% CI: 0.33–1.31, $P = 0.003$), 0.10 mm versus virtual scale endoscopy (95% CI: 0.01–0.19, $P = 0.115$), and 0.60 mm versus virtual tape measurement (95% CI: 0.08–1.12, $P = 0.074$). Overestimation was most pronounced for diminutive polyps (0.37 mm, $P < 0.001$), for polypoid morphology (0.41 mm, $P < 0.001$), and for neoplastic histology (0.47 mm, $P = 0.002$).

Conclusions Visual estimation systematically overestimates colorectal polyp size. Although overestimation appears modest when all objective methods are pooled, it may be attenuated by combining methods of varying accuracy. Indeed, when compared specifically with the most accurate method—on-site microscopy—the systematic visual overestimation is larger. This bias also varied by morphology, among other lesion characteristics, and was more pronounced for polypoid lesions. This consistent bias may influence clinical decisions, including risk stratification, surveillance intervals, and appropriate resection techniques, particularly for polyps near critical size thresholds. Routine implementation of objective measurement tools should be considered.

Conflicts of Interest Daniel von Renteln received speaker honoraria or consultant fees from ERBE Elektromedizin GmbH, Boston Scientific Inc., and Pendopharm. He also received research grants from Fujifilm, ERBE Elektromedizin GmbH, Pendopharm, Ventage, and Pentax. All other authors report no conflicts of interest.

eP496 ERCP outcomes from a Greek University Hospital

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DOI 10.1055/s-0046-1821823

Aims The purpose of this study was to review the indications, technical success, complications, and overall outcomes of ERCP procedures performed at our center.

Methods A total of 864 patients were initially considered for inclusion, of whom 58 were excluded because ERCP could not be completed (technical inability, patient instability, or early termination). Ultimately, 806 patients who underwent ERCP between January 2024 and September 2025 were included in the analysis.

Results The age range of the 806 patients was 18–100 years, with a mean age of 71.26 years. Among women, the mean age was 71.42 years (range 18–97), while among men it was 71.99 years (range 20–100). The cohort consisted of 390 women (48.4%) and 416 men (51.6%).

ERCP indications included: confirmed or suspected common bile duct stones (CBDs), biliary strictures, sepsis/cholangitis, pancreatic mass with jaundice, scheduled follow-up after previous ERCP, cholangiocarcinoma, acute pancreatitis, suspected postoperative bile leak, stent dysfunction, liver mass with jaundice, ampullary mass with jaundice, sclerosing cholangitis, and papillary narrowing suggestive of sphincteritis. Cannulation of the common bile duct (CBD) was successful in 799 patients (99.13%), while pancreatic duct cannulation was achieved in 127 patients (15.75%). Both ducts were cannulated in 122

patients (15.13%); two patients could not be cannulated. Among the 127 pancreatic duct cannulations, 88 (69.29%) were successful on the first attempt, 27 (21.26%) on the second attempt, and 12 (9.45%) required more than three attempts. Regarding cannulation techniques, 714 patients (88.8%) underwent wire-guided cannulation, 26 (3.2%) underwent pre-cut access, and 64 (8%) underwent transpancreatic sphincterotomy. Prior sphincterotomy was present in 246 patients (30.6%), while conventional sphincterotomy was performed in 468 (58.2%), transpancreatic sphincterotomy in 64 (8%), and pre-cut in 26 (3.2%). Among the 799 patients with successful biliary cannulation, 508 (63.18%) had CBD stones, 52 (6.46%) had biliary sludge, 232 (28.85%) had ductal dilation, 210 (26.11%) had strictures, 11 (1.37%) showed bile leakage, and 7 (8.70%) had purulent bile. In 36 cases (4.47%), no CBD pathology was detected. Additional findings included one patient with sphincter of Oddi dysfunction (ODS), one with stent migration, one with a cholecystoenteric fistula. Benign strictures were identified as follows: 15 (7.14%) in the common hepatic duct, 37 (17.61%) in the CBD, 12 (5.71%) at the ampulla, 4 (1.9%) at the hepatic hilum, and one in the left hepatic duct. Malignant strictures included: 19 (9.04%) in the common hepatic duct, 39 (18.57%) in the CBD, 7 (3.33%) at the ampulla, 11 (5.2%) at the hilum, two in the left hepatic duct, and one in the right hepatic duct. Ductal dilation was documented in 80 patients (34.48%) in the common hepatic duct, 186 (80.17%) in the CBD, 54 (23.27%) at the hilum, 52 (22.4%) in the left hepatic duct, 49 (21.12%) in the right duct, and 2 at the ampulla. Patients with CBD stones underwent stone extraction and/or placement of a plastic biliary stent. Stents were also placed in patients with pancreatic head tumors, CBD tumors, bile leaks, and CBD strictures. Endoscopic biopsy was performed in all patients with suspected ampullary tumors. Procedure duration ranged from 15 to 48 minutes. The overall complication rate was 7.9%. After ERCP, 14 patients (1.7%) developed severe cholangitis and 19 (2.4%) developed severe acute pancreatitis. Bleeding requiring endoscopic therapy occurred in 6 patients (0.7%), while 7 patients (0.8%) had minor bleeding (hemoglobin drop < 3 g/dL without transfusion). Moderate bleeding requiring transfusion (≤ 4 units) occurred in 3 patients (0.3%). Perforation occurred in 2 patients (0.9%).

Conclusions ERCP is a complex endoscopic intervention requiring specialized expertise and equipment. Optimizing patient selection and identifying risk factors are essential for minimizing complications. Unnecessary diagnostic ERCP should be avoided, especially in patients with low likelihood of biliary stones or strictures, normal bilirubin, or absence of clinical signs of biliary disease. The use of non-invasive imaging modalities whenever possible can significantly reduce ERCP-related adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP497 Contribution of echoendoscopy to the diagnosis of acute pancreatitis

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DOI 10.1055/s-0046-1821824

Aims Acute pancreatitis is an inflammatory condition with multiple causes, which can be classified as biliary, metabolic, toxic, infectious, or traumatic. Its diagnosis is based on a combination of clinical, biological, and imaging data, aimed at determining its etiology and guiding treatment. In this context, endoscopic ultrasound offers superior resolution compared to other imaging techniques and allows for detailed exploration of pancreatic and biliary structures.

The aim of this study is to highlight the role and contributions of endoscopic ultrasound in the diagnosis of acute pancreatitis.

Methods This is a retrospective descriptive study conducted in the endoscopy unit of the Hepatology and Gastroenterology Department over a period of 43

months (January 2022 to August 2025). It includes all patients who were hospitalized for AP and underwent EUS.

The data collected include age, gender, medical history, stage of pancreatitis on CT scan, and etiologies revealed by EUS.

The data collected included age, sex, medical history, stage of pancreatitis on CT scan, and etiologies revealed by EUS.

Results During the study period, 124 patients were hospitalized in our department for

acute pancreatitis. In 24 patients (19%), the initial etiological assessment did not reveal any obvious cause.

The average age of this population was 49.4 years (19–73). The sex ratio was 1.3 (13 women to 10 men). The medical history noted was diabetes in 5 patients (4%), cholecystectomy in 2 patients (1.7%), and Caroli's disease in one patient (0.8%).

Four patients (3.2%) had recurrent pancreatitis. The stage of AP was stage A in 3 cases (13.04%), stage B in 7 cases (30.43%), stage C in 5 cases (21.7%), and stage E in 8 cases (34.8%).

Echoendoscopy revealed a lithiasic origin in 16 cases (12.9%), autoimmune pancreatitis in 3 cases (2.4%), and a mass in the head of the pancreas in 3 patients (2.4%), with histology confirming pancreatic adenocarcinoma in one patient and autoimmune pancreatitis in its pseudotumoral form in the other patient, pancreas divisum in one patient (0.8%), and TIPMP in one patient (0.8%). In 4

patients (3.22%), echoendoscopy revealed no abnormalities.

Among the four patients who presented with recurrent pancreatitis, endoscopic ultrasound revealed a heterogeneous appearance with diffuse calcifications in two of them, thus revealing chronic calcifying pancreatitis.

Conclusions In light of our study, echoendoscopy has established itself as an essential diagnostic modality in the evaluation of acute pancreatitis, particularly for identifying underlying causes such as microlithiasis or unrecognized biliary abnormalities, diagnosing chronic pancreatitis and autoimmune AP, determining the benign or malignant nature of pancreatic masses through histology, and detecting pancreatic malformations.

benign or malignant nature of pancreatic masses, and to detect pancreatic malformations.

Its high resolution and ability to combine morphological exploration and interventional procedures make it a tool of choice in an integrated diagnostic and therapeutic approach. However, its use must be carefully considered and reserved for appropriate indications, as part of an optimized multidisciplinary management approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP498 Everything is never as it seems. Clinical and endoscopic appearance of lymphocytic esophagitis: a case series from two spanish tertiary hospitals

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DOI 10.1055/s-0046-1821825

Aims Lymphocytic esophagitis (LyE) is the finding of a dense lymphocytic infiltrate in the esophageal epithelium, along with spongiosis, in the absence of granulocytes or other causes of esophageal inflammation such as eosinophilic esophagitis or gastroesophageal reflux disease (GERD). It is a novel disease, first

described in 2006, that can cause dysphagia and other esophageal dysfunction symptoms. However, its clinical manifestations, endoscopic appearance and risk factors are still in debate, with some authors considering it as a phenotype of esophageal inflammation rather than an independent disease. While Crohn's Disease is a known risk factor in children, risk factors in adults, as well as the disease, are yet to be determined [1–3].

Methods We collectively analysed esophageal biopsy reports and endoscopy reports from two referral centers in Spain from 2000 to 2025. Reports compatible with lymphocytic esophagitis or esophageal intraepithelial lymphocytosis were carefully analyzed with the patient's clinical history to determine a proper diagnosis of lymphocytic esophagitis. Patients with more than 20 lymphocytes per high power field (LxHPF) in esophageal biopsies were considered as potential patients with LyE. Afterwards, if more than 15 eosinophils per high power field (EoxHPF) or other entities such as candidiasis esophagitis were found, such patients were excluded. As such, only patients with more than 20 LxHPF, less than 15 EoxHPF and no evidence of other esophageal disease were considered as patients with LyE and their clinical records were studied. Regarding endoscopic appearance, we considered an EREFS-like system, describing findings similar to eosinophilic esophagitis, although there was no score calculated on these patients.

Treatment response was considered when, after an onset of treatment, less than 20 LxHPF were found. If no LxHPF were found, it was considered as a complete response.

Results A total of 7 patients were included from both centers. Women were more frequent than men on a 2.5 ratio with a mean age of 62.43 years. 85 % of patients had dysphagia as a symptom, with 28.5 % of them presenting with food bolus impaction. Chest pain was also reported on 28.5 % of patients. Regarding comorbidities, none of them were recurring in our patients. Only one of them presented autoimmune comorbidities with a case of sclerosing lupus erythematosus (SLE).

Regarding endoscopic appearance, edema (57.14 %) and rings (57.14 %) were the most common findings. We have to point out the appearance of panesophagic rings throughout the whole esophagus in these patients, which leads to a macroscopic appearance of trachealization (Figure 1). In our patients, panesophagic affection was more common, reported in 71.43 % of cases.

Regarding treatment and response, proton pump inhibitors (PPIs) were the first treatment on all patients, although dosage and PPI of choice differ. Oral budesonide was used in 1 patient but candidiasis esophagitis developed as an adverse effect. While response was found in 2 patients, in 3 patients it was not studied with further endoscopic studies, pointing out a need for standardised protocols in such patients. All these results are summarized in Table 1.

Conclusions Lymphocytic esophagitis appears to be more frequent in women older than 60 years old. While no comorbidities are associated with this disease, the presence of dysphagia and the endoscopic findings of panesophagic rings should make us consider this disease. While PPIs are an effective treatment, dosage and treatment of choice are still not standardized, as well as follow-up via biopsy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Reddy CA, McGowan E, Yadlapati R, Peterson K. AGA Clinical Practice Update on Esophageal Dysfunction Due to Disordered Immunity and Infection: Expert Review. Clin Gastroenterol Hepatol 2024; 22 (12): 2378–2387 PMID: 39436337
- [2] El Halabi M, Saoud C, Nasser SM. Lymphocytic Esophagitis: A Histologic Pattern of Various Underlying Disorders. J Clin Gastroenterol 2025; 59 (7): 626–628 PMID: 39729980
- [3] Visaggi P, Savarino E, Del Corso G et al. Clinical Characteristics, Endoscopic Findings, and Treatment Outcomes in Lymphocytic Esophagitis Compared With Eosinophilic Esophagitis. Am J Gastroenterol 2025; 120 (2): 469–472 PMID: 39162734

eP499 Assessment of the Accuracy of Colonic Polyp Classification Scores by Endoscopy (PARIS, NICE, CONNECT) and Their Correlations With Histopathological Findings

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DOI 10.1055/s-0046-1821826

Aims Colonic polyps are common lesions of the lower digestive tract and often represent precursors of colorectal adenocarcinomas. Their accurate detection and characterization are essential for appropriate management and for optimizing screening and prevention strategies.

Endoscopic classification systems such as the Paris, NICE (Narrow-band Imaging International Colorectal Endoscopic), and CONNECT (Classification for Optical Diagnosis of Colorectal Neoplasia) classifications were developed to standardize the description of polyps and predict their histological nature.

This study aims to assess the accuracy of these classifications in characterizing colonic polyps and to evaluate their correlations with histopathological results in order to determine their reliability and clinical relevance.

Methods This is a retrospective descriptive study conducted between 2018 and 2025 within our department. All adult patients (aged over 18 years) who underwent complete ileocolonoscopy with polypectomy and for whom the Paris, NICE, and CONNECT classifications were used to describe the polyps were included. Histopathological data corresponding to each resected polyp were collected.

Results A total of 134 polypectomies were recorded, including 129 polyps classified according to the Paris classification, 4 according to the CONNECT classification, and 1 according to the NICE classification. The mean age of patients was 61.7 years [26–85], with a clear male predominance (sex ratio 1.9). Polyps were discovered during endoscopy performed because of rectal bleeding (40%) or a history of polypectomy (19%). The remaining polyps were incidentally found during colonoscopy performed for chronic abdominal pain (9.5%), chronic constipation (8%), follow-up of inflammatory bowel disease (7.5%), chronic diarrhea (6.5%), investigation of anemia (4.5%), personal history of surgically treated familial adenomatous polyposis (2%), family history of FAP (1%), family history of colorectal cancer (1%), and radiation proctitis (1%). Most resected polyps were located in the colon (83%), predominantly in the left colon (68%), and 17% were found in the ileocecal region.

Regarding the Paris classification, 95% of polyps were classified as 0-ls and 5% as 0-lp. This classification is based solely on macroscopic features and does not directly predict the histological nature of the lesions. Histopathological analysis revealed that 56% were tubular adenomas with low-grade dysplasia, 17% sessile serrated adenomas with low-grade dysplasia, 10% tubulovillous adenomas with low-grade dysplasia, 9% inflammatory pseudopolyps, 5% hyperplastic polyps, 1% glandulocystic polyps, 1% intramucosal adenocarcinoma arising in a tubular adenoma with high-grade dysplasia, and 1% fibroblastic polyps (Vanek's tumor). For the CONNECT classification, four polyps were identified: Two CONNECT IIA polyps corresponded to Paris 0-ls polyps: one was a tubular adenoma with low-grade dysplasia and the other an inflammatory pseudopolyp on histology. One CONNECT IIA polyp corresponded to a Paris 0-lp polyp, histologically confirmed as a tubular adenoma with low-grade dysplasia. One CONNECT IH polyp corresponded to a Paris 0-lp polyp, confirmed as an inflammatory pseudopolyp. For the NICE classification, a single polyp was identified: A NICE 1 polyp corresponded to a Paris 0-ls polyp, confirmed histologically as a hyperplastic polyp.

Conclusions This study shows that the Paris classification, being solely macroscopic, is the most frequently used system in our setting for describing colonic polyps. However, it does not allow prediction of the histological nature of lesions, unlike the NICE and CONNECT classifications, which show generally good correlation with histology. Nevertheless, the limited use of the NICE and

CONNECT classifications in our study restricts the interpretation of these findings. More systematic use of these scoring systems could improve diagnostic accuracy and the effectiveness of screening strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP500 Endoscopic Management Of Gastric Variceal Bleeding With Cyanoacrylate Glue: Single-Center Outcomes

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DOI 10.1055/s-0046-1821827

Aims Bleeding from gastric varices is a life-threatening complication of portal hypertension, carrying high morbidity and mortality. Endoscopic injection of cyanoacrylate glue is a first-line therapy for isolated gastric varices (IGV1) and gastroesophageal varices (GOV), achieving immediate hemostasis in over 90% of cases in prior studies. We report our 8-year experience from a tertiary hospital in Athens, evaluating the efficacy, safety, and survival outcomes of this treatment.

Methods We retrospectively analyzed all patients treated with N-butyl cyanoacrylate (Glubran) injection for acute IGV1 or GOV bleeding from 2014 to 2022 in our endoscopy unit. Twenty-six patients (n = 26) were identified (77% male; median age 57 years, range 14–86). Underlying etiologies of portal hypertension included cirrhosis (alcoholic or viral), portal vein thrombosis, myeloproliferative disorders, and others. Data on hemostasis success, complications, and survival to hospital discharge were collected. Hemostasis success was defined as control of bleeding without need for additional rescue therapy. Safety assessment focused on procedure-related adverse events. Survival was evaluated as survival to discharge and early outcomes [1–5].

Results A total of 26 endoscopic glue injection sessions were performed for active gastric variceal hemorrhage (85% IGV1, 15% GOV). Acute bleeding control was achieved in 24 patients (92.3%). Two patients (7.7%) had refractory hemorrhage despite glue injection, requiring emergency intubation and intensive care. No patient required a second endoscopic session, and no procedure-related complications (such as glue embolization or distant thrombosis) were observed. Twenty-one patients (80.8% of the cohort) survived the acute episode and were discharged alive, yielding an in-hospital mortality of 0% among cases with known outcomes. Three patients (11.5%) had indeterminate immediate outcomes due to transfer or loss to follow-up, but none of these had documented failure of hemostasis at the time of endoscopy. No early rebleeding was noted in the successfully treated patients during their hospital stay. Over the 8-year period, the annual case load ranged from 1 to 6 cases, with a noticeable dip in 2020–2021 (COVID19 pandemic years). There was no clear temporal trend in treatment success or complication rates – outcomes remained consistently high across the study period regardless of year. Notably, the efficacy of glue injection was comparable in both isolated gastric varices and gastroesophageal varices. Overall, our series demonstrated a high hemostasis success rate and favorable short-term survival in this high-risk patient population.

Conclusions Endoscopic cyanoacrylate injection proved to be a highly effective and safe intervention for bleeding IGV1 and GOV varices in our single-center experience. The therapy achieved prompt hemostasis in the vast majority of cases and resulted in excellent survival to discharge, with minimal procedure-related adverse events. These findings support cyanoacrylate glue injection as an indispensable first-line treatment for gastric variceal hemorrhage, offering life-saving hemorrhage control and encouraging outcomes even in a Western tertiary care setting. Our real-world results align with previously reported success rates and underscore the critical role of endoscopic intervention in improving survival for gastric variceal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Huang YH, Yeh HZ, Chen GH et al. Endoscopic treatment of bleeding gastric varices by N-butyl-2-cyanoacrylate (Histoacryl) injection: long-term efficacy and safety. *Gastrointestinal Endoscopy* 2000; 52 (2): 160–167. doi:10.1067/mge.2000.107930
- [2] Morell B, Brunner N, Schmid M et al. Long-term surveillance of gastric varices after cyanoacrylate injection in patients with noncirrhotic portal hypertension: is it worth the effort? *Clinical Endoscopy* 2024; 57 (6): 692–698. doi:10.5946/ce.2023.100
- [3] Zhang M, Wang L, Zhu Y et al. Clip-assisted endoscopic cyanoacrylate injection for gastric varices: a multicenter study. *Endoscopy* 2019; 51 (10): e372–e375. doi:10.1055/a-0962-1217
- [4] Choudhuri G, Chetri K, Bhat G, Alexander G et al. Long-term efficacy and safety of N-butylcyanoacrylate in endoscopic treatment of gastric varices. *Tropical Gastroenterology* 2010; 31 (3): 155–164
- [5] Lo GH, Lai KH, Cheng JS et al. A prospective, randomized trial of butyl cyanoacrylate injection versus band ligation in the management of bleeding gastric varices. *Hepatology*. 2001; 33 (5): 1060–1064. doi:10.1053/jhep.2001.24102

eP501 VC-6: A Superior, AI-Friendly CODEC For Next-Generation Medical Imaging And Analysis

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DOI 10.1055/s-0046-1821828

Problem to solve The growing volume of high-resolution medical images demands efficient compression for storage and transmission. While JPEG is widely used, its lossy nature can introduce artifacts that compromise diagnostic integrity and hinder the performance of AI-driven analysis. This study evaluates VC-6, a novel, AI-friendly codec, as a superior alternative to JPEG for modern medical imaging workflows.

Innovation We performed a quantitative comparison of VC-6 and JPEG image compression. Our source material was an endoscopy video encoded as a ProRes file. For VC-6, TIFF frames were extracted and then encoded into the VC-6 format. For JPEG, the ProRes file was converted to MPEG4, and JPEG frames were extracted at a quality level consistent with our standard workflow. We then conducted a full-reference quality assessment using the decoded VC-6 image as the reference and the JPEG image as the distorted input. The key metrics evaluated were Video Multiscale Assessment Fusion (VMAF), Contrast Aware Multiscale Banding Index (CAMBI), Peak Signal-to-Noise Ratio (PSNR), and Structural Similarity Index Measure (SSIM).

Results The results demonstrated a significant quality degradation in the JPEG images when compared to the VC-6 reference. The mean VMAF score of 82.63 for the JPEG images indicates a noticeable loss of perceptual quality compared to the VC-6 source. The mean CAMBI score of 0.009 for the JPEGs suggests minimal banding artifacts, but still measurable differences from the VC-6 reference. The mean PSNR of 33.97 dB and mean SSIM of 0.9068 for the JPEGs further quantify the distortion introduced by JPEG compression. In terms of file size, VC-6 files were found to be ~315% larger than JPEGs. However, both offer substantial compression compared to uncompressed TIFFs, with VC-6 being 82.2% smaller and JPEG being 95.7% smaller.

Conclusions While VC-6 files are slightly larger than their JPEG counterparts, this increased file size is directly correlated with superior image quality and fidelity. More importantly, its inherent AI-friendly design, with its multi-resolution representation, makes it an ideal format for next-generation endoscopy AI video and image applications. By enabling more efficient and accurate data access for machine learning models, VC-6 has the potential to accelerate the development and adoption of AI-powered tools, where image fidelity and AI utility outweigh the increased storage footprint.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP502 Evaluating Platelet-to-Lymphocyte and Neutrophil-to-Lymphocyte Ratios in endoscopic disease activity in Inflammatory Bowel Disease

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DOI 10.1055/s-0046-1821829

Aims Inflammatory bowel disease (IBD) frequently requires repeated endoscopic assessments to evaluate mucosal inflammation and guide treatment decisions. However, endoscopy is invasive, expensive, and not always readily available. The neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) have emerged as potential blood-derived inflammatory markers, but their relationship with objective measures of disease activity remains uncertain. We aimed to evaluate the association of NLR and PLR with endoscopic activity in patients with IBD [1].

Methods This retrospective study reviewed medical records of patients followed in our department from January 2020 to October 2025. Demographic data, endoscopic findings, and histology results were collected. Patients with confirmed IBD were included if they underwent endoscopy in our unit and blood count parameters (neutrophils, lymphocytes, platelets) available within two weeks of the procedure. Endoscopic activity was classified using the Mayo endoscopic score for ulcerative colitis (UC) and the Simple Endoscopic Score for Crohn's Disease (CD) and histological activity as present or absent. Comparisons between activity groups, correlation analyses, logistic regression, and ROC curve evaluation were performed to assess the association and predictive value of NLR and PLR for endoscopic and histologic disease activity. All analyses were conducted in RStudio.

Results A total of 104 patients met the inclusion criteria (mean age 47.6 years; 66 males; 38 females), including 42 with CD and 62 with UC. PLR demonstrated a statistically significant association with endoscopic disease activity ($\beta_0 = -1.2774$, $\beta_1 = 0.0063$). ROC analysis showed an AUC of 0.608, with an optimal threshold of 145.09 corresponding to a sensitivity of 64.44% and a specificity of 59.32%. PLR did not correlate with histological inflammation ($p = 0.18$).

NLR was significantly associated with histologic inflammation in a probit regression model ($\beta_0 = -0.02707$, $\beta_1 = 0.23253$, $p = 0.041$), with an AUC of 0.629 and an optimal cut-off of 2.7 (sensitivity 52%, specificity 80%). However, NLR did not correlate significantly with endoscopic disease activity ($p = 0.10$).

Deep remission (combined endoscopic and histologic remission) was not significantly associated with PLR ($p = 0.467$) or NLR ($p = 0.149$). No significant associations were found between PLR ($p = 0.892$) or NLR ($p = 0.947$) and residual histologic inflammation among patients in endoscopic remission.

Conclusions PLR demonstrated a significant association with endoscopic disease activity, suggesting potential utility as a simple, accessible biomarker to support non-invasive assessment in IBD. In contrast, NLR was associated only with histologic inflammation and did not correlate with endoscopic findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Li P, Wu Y, Xiong W, Cao J, Chen M, Yuan Z, Guo W, Yang B. Association between the immune-inflammation index and the severity and clinical outcomes of patients with inflammatory bowel disease: a systematic review and meta-analysis. *BMC Gastroenterol*. 2025; 25 (1): 414. doi:10.1186/s12876-025-04033-4 PMID: 40442599 PMID: PMC12121125

eP503 The Current State of Endoscopic Submucosal Dissection in the UK: A Nationwide Cross-Sectional Survey

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DOI 10.1055/s-0046-1821830

Aims The study aimed to characterise the current landscape of independent practice of Endoscopic Submucosal Dissection (ESD) in the UK. It assessed workforce characteristics, training experience, case volumes, service provision, technical approaches, and perceived barriers to training and service delivery. It also examined endoscopists' views on the potential role of robotics in ESD.

Methods A nationwide, cross-sectional, anonymised online survey was conducted between 1 May and 30 June 2025 among UK endoscopists independently performing upper and/or lower gastrointestinal (GI) ESD. The 43-item questionnaire was piloted by two expert ESD endoscopists. It was hosted on Qualtrics and disseminated through major professional societies, a curated database, and social media. Responses were analysed descriptively using Qualtrics and SPSS.

Results Twenty-eight responses were analysed. Most respondents were gastroenterologists (79%), with the remainder being upper or lower GI surgeons; 82% were male. Responses were received from across the UK, with the largest proportions from Greater London (39%) and the South East (18%). Most units were perceived as low-volume for Upper GI ESD, whereas the majority reported high-volume lower GI activity. Across all ESD sites, only a minority achieved the ESGE-recommended threshold of ≥ 25 procedures annually, with high-volume practice largely confined to rectal ESD. Overall, 68% had completed an advanced fellowship (commonly in the UK or Japan), and 82% had attended accredited ESD courses, often on multiple occasions. Respondents reported varied experiences across different ESD modalities during their training, including ex vivo, in vivo and human cases. Narrow Band Imaging (93%) and white light endoscopy (86%) were the most common delineation methods; colloid-based solutions (75%), epinephrine (82%), and blue dye (100%) were widely used for submucosal injection. Most respondents routinely used tunnelling (93%) and traction-assisted techniques (82%). General anaesthesia was preferred for upper GI ESD (82%), and conscious sedation for lower GI ESD (46%). Most procedures were scheduled within 1–3 months, with longer delays uncommon; 85% of respondents maintained a prospective ESD database. Reported barriers to training included heavy workload (37%), low caseload (26%), and limited institutional support (19%). Nearly all respondents (93%) believed robotics has a future role in ESD. Nearly as many expressed interest in adopting them (89%).

Conclusions Independent ESD practice in the UK is delivered by a small workforce, with heterogeneous training backgrounds and case volumes often below recommended thresholds. National strategies for structured training, centralisation, and evaluation of new technologies are needed to support safe and sustainable expansion of ESD.

Conflicts of Interest CJP declares paid consultancy for TTP on the topics of advanced endoscopy

eP504V Same-session aspiration of unexpected significant ascites and EUS-guided gastroenterostomy in gastrojejunal anastomotic stenosis

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DOI 10.1055/s-0046-1821831

Abstract Text

Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) represents an effective minimally invasive alternative for gastric outlet obstruction (GOO). Ascites has traditionally been considered a contraindication due to the risk of LAMS misdeployment. We report a 79-year-old man with recurrent GOO after pancreaticoduodenectomy for pancreatic adenocarcinoma. CT revealed gastrojejunal anastomotic stenosis with mild ascites. During EUS-GE, a large, unexpected, perigastric ascites impaired visualization of the target loop. To avoid aborting the procedure, ascites were aspirated transgastrically using a 19-gauge needle in the same session. This restored a clear acoustic window and allowed safe LAMS deployment. This case supports the feasibility and safety of same-session EUS-guided ascites aspiration to enable EUS-GE and avoid procedural delays or repeat sedation.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/58dac5f9-2f14-4258-8835-a2205fdf96e7/Uploads/19978_video_ESGE.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP505 Rectal suturing in the lower gastrointestinal tract

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DOI 10.1055/s-0046-1821832

Aims This study aimed to assess the clinical success rate of endoscopic hand suturing (EHS), defined as complete closure of the mucosal defect. While current literature supports the feasibility of closing post-ESD defects in the upper gastrointestinal tract, data regarding its application in the colorectum remain scarce. This case series assessed the outcomes of EHS for rectal mucosal defects following ESD and for the closure of fistulous tracts. Secondary objectives included documenting intraoperative and delayed adverse events and total procedure time [1–3].

Methods This prospective, single-centre case series was conducted between November 2023 and October 2025 and included 12 patients meeting the following criteria: presence of a mucosal defect after rectal ESD requiring EHS, or an indication for endoscopic closure of a fistulous orifice. Data were reported descriptively using continuous quantitative variables without inferential statistical analysis.

Results The cohort comprised 66.6% male and 33.3% female patients, with a median age of 65.3 years (range 44–86). One patient was classified as ASA I, eight as ASA II, and three as ASA III. One patient on acetylsalicylic acid continued therapy without interruption, while another receiving a direct oral anticoagulant discontinued treatment three days prior to the procedure.

A total of 10 rectal lesions were treated, and two fistulous tracts were closed. According to the Paris classification, lesions included three 0-IIa, two 0-Is, four 0-IIa + IIc, and one 0-IIa + Is. Histology revealed eight lesions with low-grade dysplasia and one neuroendocrine tumour. Absorbable 3-0 barbed sutures mounted on 17-mm needles were used in all procedures without overtube assistance.

The overall complete closure rate was 83% (10/12). En bloc resection was achieved in 90% of ESDs, and both unsuccessful closures occurred after ESD. Fistula closure demonstrated a 100% immediate success rate; however, one case subsequently reopened, resulting in a final 50% success rate. A combined EHS-clip strategy was required in 66.6% of procedures. Intraoperative adverse events included one perforation and one episode of bleeding not controlled with haemostatic forceps. Only one delayed bleed occurred, corresponding to the case in which suturing could not be successfully completed.

The median procedural time was 120 minutes (range 48–189), with a mean of 130 minutes.

Conclusions This study suggests that EHS is both effective and safe for colorectal defect closure, achieving an 83 % success rate. Published evidence supports its potential to reduce post-ESD bleeding in high-risk patients. In this series, the only perforation occurred in the sole fragmented ESD. Fistula closure achieved a 100 % initial response, suggesting its potential application for other indications. Nevertheless, procedure duration remains a limiting factor, influenced by operator expertise, defect size, anatomical location, and technical complexity. The single-centre design and small sample size constitute the main limitations, underscoring the need for further research and larger multicentre studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Orzeszko Z, Kasprzyk P, Zawada U, Szura M, Spychalski M. Endoscopic hand suturing after advanced endoscopic procedures: early outcomes of 31 cases in the upper and lower gastrointestinal tract (with video). *Videosurgery and Other Minimally Invasive Techniques*. 2025; 20 (1): 44–50. doi:10.20452/wiitm.2025.17928
- [2] Kato M, Yahagi N. Suturing the mucosal defect after ESD. *Endoscopy International Open* 2020; 8: E1218–E1219. doi:10.1055/a-1216-1717
- [3] Abe S, Saito Y, Tanaka Y, Ego M, Yanagisawa F, Kawashima K et al. A novel endoscopic hand-suturing technique for defect closure after colorectal endoscopic submucosal dissection: a pilot study. *Endoscopy*. 2020; 52: Published online 23 March 2020. doi:10.1055/a-1120-8533

eP506 Risk of neoplasms in patients with inflammatory bowel disease: a study of 11 cases

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DOI 10.1055/s-0046-1821833

Aims Chronic inflammatory bowel diseases (IBD) are associated with an increased risk of gastrointestinal cancers, influenced by various individual factors and the duration of disease progression. The aim of this study was to assess neoplastic transformation in patients with IBD based on the experience of our center.

Methods We conducted a retrospective single-center study spanning 2017 to 2024. Data were collected from patient medical records

Results We report a series of 11 patients who developed tumors in the context of IBD: 10 with Crohn's disease and 1 with ulcerative colitis (sex ratio 1.2). Neoplasia was the presenting feature in five cases. In the remaining cases, the mean duration of IBD prior to diagnosis was 9.16 years (range 1–16). Five patients had been treated with corticosteroids. Only one was on salicylates, while the others had not received any maintenance therapy. The tumors were diagnosed under various circumstances: screening colonoscopy (1 patient), symptomatic presentation (e.g., weight loss, bowel habit disturbances) in 6 patients, or tumor-related complications such as superinfection or acute intestinal obstruction (4 patients). The mean age at tumor diagnosis was 60 years (range 36–88). Among the identified tumors, two patients had MALT lymphoma—one located in the colon and the other in the cecum. One of these cases showed isolated colonic involvement, while the other revealed additional lesions in the tonsils, nasopharynx, duodenum, and ileum. Treatment involved a combination of surgical resection and chemotherapy (Chlorambucil-Rituximab). Nine patients were diagnosed with infiltrating adenocarcinoma: 4 in the small intestine, 1 in the cecum, 1 in the colon, and 3 in the rectum. One case presented with metastases. Additionally, one patient with rectal adenocarcinoma was found to have a neuroendocrine tumor (NET) in the colon, diagnosed through stepwise colonic biopsies. All patients underwent surgical resection and chemotherapy: 5 ileocolic resections, 1 subtotal colectomy, 1 anterior resection, and 2 abdominoperineal amputations with total proctocolectomy and permanent

ileostomy. Two patients also received radiotherapy. After a mean follow-up of 205 months (range 2–1496), 4 patients were in remission without recurrence—one of whom developed nodular regenerative hyperplasia as a chemotherapy complication. Two patients were still receiving adjuvant treatment, and 5 were lost to follow-up.

Conclusions Neoplasms linked to chronic inflammation in IBD are not uncommon and may be the initial presentation, as seen in nearly half of our cases—highlighting frequent underdiagnosis. This series also includes two rare cases of colonic MALT lymphoma, an association rarely reported. In patients with chronic ileal involvement, treatment strategies should consider early surgical options before initiating immunosuppressants. Additionally, the detection of a neuroendocrine tumor in a non-affected segment underlines the importance of systematic stepwise biopsies. These findings call for heightened clinical vigilance and further investigation into emerging and underrecognized tumor types in IBD.

Conflicts of Interest I have nothing to declare

eP507 Endobrachyoesophagus epidemiological profile and risk factors: which population in Morocco?

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DOI 10.1055/s-0046-1821834

Aims Barrett's esophagus (BE), or endobrachyoesophagus, is a precancerous condition characterized by intestinal metaplasia of the esophageal epithelium. This pathology results primarily from chronic gastroesophageal reflux disease (GERD) and is associated with an increased risk of esophageal adenocarcinoma. The objective of this study is to describe the epidemiological profile of BE and to identify the main risk factors in the Moroccan population. It aims to determine the prevalence of BE among Moroccan patients who underwent esophagogastroduodenoscopy (EGD), to identify the risk factors associated with this condition, and to analyze the clinical and endoscopic characteristics of patients diagnosed with BE.

Methods This is a retrospective descriptive study conducted on a population of patients who underwent EGD in Morocco between 2020 and 2025. Inclusion criteria involved patients with an endoscopic and/or histological diagnosis of BE, while exclusion criteria comprised patients with incomplete records or confirmed malignant pathology. The parameters studied included age, sex, medical history, clinical symptoms, endoscopic findings, and management.

Results 153 patients were included. The results show that the mean age of patients with BE is 55 years, with a male predominance. Sixty percent of patients with BE are over 50 years old. Among the identified risk factors, hiatal hernia was present in the majority of BE patients (65 %), heartburn in 38 % of cases, and regurgitation in 42 %. Several comorbidities were also reported, including hypertension (23 %), diabetes (17 %), and chronic kidney disease (15 %). Dietary habits—particularly the consumption of tea, coffee, and spices—are common in the Moroccan population and also appear to play a role in the development of BE. The diagnosis of BE was established according to the Prague classification, with a predominance of short-segment forms: C1M1 (20 %), C2M1 (15 %), and C1M2 (8 %). Biopsies were performed following the Seattle protocol to confirm the histological diagnosis.

Conclusions This study highlights the importance of screening for BE in at-risk patients, particularly those with a hiatal hernia and chronic gastroesophageal reflux. Implementing a national surveillance strategy could improve the management of this condition and prevent complications related to esophageal adenocarcinoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP508 Endoscopy-Driven Diagnosis and Management of Digestive Strictures in Crohn's Disease: Insights From a 10-Year Cohort

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DOI 10.1055/s-0046-1821835

Aims Digestive strictures are a major cause of morbidity in Crohn's disease (CD), yet their endoscopic assessment and contribution to treatment allocation remain underreported.

Our aim was to characterize the endoscopic features of CD-related strictures and evaluate how endoscopy influences subsequent medical or surgical management.

Methods We performed a 10-year retrospective study of adult CD patients with clinically and radiologically confirmed digestive strictures. Endoscopic parameters included location, traversability, ulceration, and histology. Post-endoscopic therapeutic decisions and outcomes after medical therapy were analysed.

Results Eighty-eight patients were included, with an average age of 39 years $\pm$ 12 and a sex ratio M/F = 1.3. The stricture was the initial presentation of CD in 36 % of cases and was symptomatic in 88 %. Endoscopy was performed in 90 % and confirmed the diagnosis in 78 %. The ileocecal valve was the most frequent location (38 %), followed by anastomotic (20 %), colonic (10 %), ileal (6 %), and duodenal (4 %) locations. Upper gastrointestinal strictures (3 %) were identified exclusively by gastroscopy. Strictures were non-traversable in 92 % and ulcerated in 68 %. Biopsies were performed in all cases, with malignancy excluded in all. Among patients responding to medical therapy (39 %), follow-up endoscopy demonstrated complete resolution of the stricture in all evaluated responders. In contrast, persistent stenosis was observed in 32 % of non-responders (n = 34), leading to surgical referral in more than half (n = 18).

Conclusions Endoscopy plays a decisive role in the diagnostic confirmation and morphological characterization of CD-related strictures. It directly influences therapeutic pathways by identifying inflammatory strictures responsive to medical therapy and persistent stenoses requiring surgery. These findings highlight the central role of endoscopic evaluation in the multidisciplinary management of stricturing CD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

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eP509 The yield of ERCP in Hydatid biliary Disease in a Tertiary Care Center

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DOI 10.1055/s-0046-1821836

Aims Hydatid hepatic cysts may fistulize into the biliary tree, leading to obstructive jaundice, cholangitis, and septic complications. ERCP plays a major therapeutic role in endemic regions, yet high-quality real-life data remain limited. This study aimed to evaluate endoscopic findings, therapeutic maneuvers, and outcomes in patients with hydatid cysts fistulized into the bile ducts.

Methods This retrospective, descriptive and analytical study included all patients with hydatid hepatic cysts complicated by biliary fistula who underwent ERCP in a tertiary center. Clinical, radiological, endoscopic and biological data were extracted from standardized records. Technical success was defined as complete ductal clearance, and clinical success as full symptomatic and inflammatory resolution. Exploratory analytical comparisons were performed be-

tween preoperative vs postoperative ERCP and between patients with vs without acute cholangitis. Categorical variables were compared using Chi-square or Fisher's exact test.

Results Eighteen patients were included, the mean age was 51.1 ± 15.4 years. All patients were presented with hydatid cysts fistulized into the biliary tree. Acute cholangitis was the presenting circumstance in 4 patients (22.2 %), including one case of septic shock (5.6 %), whereas the remaining patients presented with obstructive jaundice, biliary colic, abdominal pain or postoperative bile leaks. Intraductal hydatid membranes or daughter vesicles were found in 8 patients (44.4 %), and purulent bile in 9 (50.0 %). ERCP was performed in a preoperative setting in 8 cases (44.4 %) and in a postoperative context in 5 cases (27.8 %). Endoscopic sphincterotomy was carried out in 9 patients (50.0 %), while balloon extraction was required in 17 cases (94.4 %), and Dormia basket extraction in 1 case (5.6 %). Plastic biliary stents were placed in 3 patients (16.7 %), typically in the presence of large fistulas or incomplete clearance of biliary duct. Technical success was achieved in all patients (100 %), and clinical success in 17 patients (94.4 %), with only one documented recurrence of hydatidobiliary obstruction after an initial favorable response.

In comparative analyses, intraductal hydatid membranes were significantly more frequent during preoperative ERCPs than during postoperative procedures (87.5 % vs 20.0 %, $p = 0.032$). The presence of pus showed a non-significant tendency to be higher in postoperative ERCPs (100 % vs 50.0 %, $p = 0.105$). Biliary stenting rates did not differ significantly between preoperative and postoperative groups (37.5 % vs 0 %, $p = 0.231$). Moreover, acute cholangitis was neither associated with the timing of ERCP nor with the need for stent placement (0 % vs 18.8 %, $p > 0.05$).

Conclusions In this real-life cohort, all hydatid cysts were complicated by biliary fistulization, confirming the major burden of hydatid biliary disease in our setting. ERCP proved highly effective, with universal technical success and near-complete clinical resolution, and the hydatid materials extraction (mainly with balloon) was the cornerstone of therapy. The strong association between intraductal hydatid material, cholangitis and preoperative presentations highlights the need for early endoscopic management in hydatid biliary complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP510 Endoscopic Profile of Cirrhotic Patients According to Helicobacter pylori Status: A 7-Year Cohort Analysis

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DOI 10.1055/s-0046-1821837

Aims Helicobacter pylori (HP) infection is common worldwide, but its influence on portal hypertension-related gastroduodenal lesions in cirrhotic patients remains uncertain. Upper gastrointestinal endoscopy (EGD) is essential for assessing mucosal injury and bleeding risk in this population.

Our aim was to determine the prevalence of HP infection in cirrhotic patients and evaluate its impact on the type and severity of endoscopic gastroduodenal lesions.

Methods We conducted a retrospective study including all cirrhotic patients who underwent EGD with systematic gastric biopsies between January 2017 and August 2023. Patients were classified into two groups: HP-negative (GA) and HP-positive (GB). Endoscopic findings—including esophageal varices, gastric varices, portal hypertensive gastropathy (PHG), and congestive, erosive, or ulcerative gastroduodenal lesions—were compared between groups.

Results A total of 127 patients were included (mean age 61 years, sex ratio 1.49). HP infection was detected in 54 % of patients. The most frequent endoscopic findings were esophageal varices (100 %), gastric varices (14 %), PHG (32 %), congestive gastropathy (51 %), ulcerated lesions (39 %), nodular lesions (13 %), and gastroduodenal ulcer (25 %). Comparison between the two groups

showed no significant difference in the prevalence or severity of endoscopic lesions, including PHG (31 % vs 33.3 %; $p = 0.783$), ulcerated lesions (34.5 % vs 42 %; $p = 0.384$), and gastroduodenal ulcer (29.3 % vs 21.7 %; $p = 0.328$). HP status was not associated with the grade or type of portal hypertension-related lesions.

Conclusions HP infection is frequent among cirrhotic patients but does not appear to influence the type or severity of gastroduodenal or portal hypertension-related endoscopic lesions. However, given its high prevalence and potential role in mucosal fragility, systematic HP screening and eradication may still offer clinical benefit and should be considered as part of comprehensive cirrhosis management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP511 Endoscopic Glue Injection for Gastric Varices: Experience of a Tertiary Care Center

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DOI 10.1055/s-0046-1821838

Aims Endoscopic obturation using cyanoacrylate glue injection is currently the reference treatment for active gastrointestinal bleeding due to ruptured gastric varices, as well as for secondary prophylaxis.

The aim of this study was to describe the epidemiological profile and clinical outcomes of patients who underwent biological glue injection for gastric varices.

Methods This was a single-center, retrospective, descriptive study conducted over 4 years and 10 months, from March 2020 to January 2025, within the endoscopy unit of our department.

All patients who underwent esophagogastroduodenoscopy (EGD) with biological glue injection were included.

Results During the study period, 27 patients underwent endoscopic glue therapy. The mean age was 48 years (range 23–68). The sex ratio was 1.25 (15 women and 12 men).

All patients had clinically significant portal hypertension and presented with hemorrhagic decompensation: melena in 12 patients (44.4 %), isolated hematemesis in 5 patients (18.5 %), and hematemesis associated with melena in 10 patients (37 %).

Portal hypertension was of cirrhotic origin in 14 patients (51.8 %), secondary to Budd–Chiari syndrome in 2 women (7.4 %), to portal vein thrombosis in 5 patients (18.5 %), and remained under investigation in 6 patients (22.2 %).

Gastric varices were classified as GOV2 in 14 patients (51.8 %), GOV1 in 7 patients (25.92 %), and IGV1 in 6 patients (22.2 %). Gastric varices were associated with esophageal varices in 21 patients (77.7 %).

The mean number of glue injection sessions was 1.9 per patient (range 1–3). Minor immediate bleeding occurred in 3 patients and was rapidly controlled with additional glue injection. Immediate therapeutic efficacy was achieved in 100 % of cases.

During follow-up, rebleeding occurred in only 3 patients (11.11 %), all successfully managed with a second glue injection session. Subcardial ulcerations at the previous injection site were observed in 2 patients (7.4 %) during follow-up.

Conclusions Biological glue injection is an effective technique for the treatment of gastrointestinal bleeding due to ruptured gastric varices, as well as for secondary prophylaxis. The recurrence rate remains low, confirming the value of this approach in the management of gastric variceal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP512 Factors Associated with Recurrence of Hemorrhage from Esophageal Varices

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DOI 10.1055/s-0046-1821839

Aims Hemorrhage from esophageal varices represents a major complication of portal hypertension and is commonly observed in patients with cirrhosis. This condition is associated with significant mortality, mainly due to the risk of recurrent bleeding, which may lead to severe complications and a poor prognosis if left untreated. The objective of this study is to analyze the factors contributing to recurrence of hemorrhage from esophageal varices, with the aim of identifying clinical and therapeutic elements that can improve prevention strategies and optimize patient management.

Methods This is a retrospective, descriptive, single-center study conducted over a period of 5 years (2020–2025), consecutively including patients hospitalized for recurrent upper gastrointestinal bleeding due to rupture of esophageal varices (EV), confirmed by esophagogastroduodenoscopy performed in the HepatoGastroenterology and Proctology Department “Medicine B” of Ibn Sina Hospital, Rabat. Demographic, clinical, endoscopic, and therapeutic data, as well as risk factors associated with recurrence of bleeding, were collected from patients’ medical records.

Results A total of 24 patients were included. The mean age was 49 ± 13 years, ranging from 26 to 80 years. A male predominance was observed, with 14 men (58.33 %) versus 10 women (41.66 %), resulting in a male-to-female ratio of 1.4. The majority of patients (45 %) had hepatic cirrhosis ($n = 11$), with an indeterminate etiology (64 %), followed by hepatitis C (18 %), alcohol-related cirrhosis (9 %), and portal hypertension-related (9 %). Patients classified as Child A and Child B each represented 44.4 % of cases, while Child C accounted for 11.1 %. The mode of gastrointestinal bleeding presentation was hematemesis in 41 %, melena in 41 %, and both in 16 % of patients. Esophageal varices were graded as grade III in 62.5 %, grade II in 29.16 %, and grade I in 8.33 %, with red signs observed in the majority of cases (79 %). 13 patients (54 %) received beta-blocker therapy after the initial hemorrhagic episode, and 12 patients (50 %) underwent endoscopic variceal ligation to prevent recurrence. The time to recurrence of bleeding was measured in months, with a median of 4 months [range: 1–6.5].

Conclusions Recurrence of hemorrhage from esophageal varices is multifactorial, involving hemodynamic, clinical, and therapeutic factors. Optimal management requires strict control of portal hypertension, effective secondary prophylaxis (endoscopic ligation and beta-blockers), and close endoscopic follow-up to reduce recurrence risk and improve patient survival.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP513 Cyanoacrylate injection for gastric varices: real-world outcomes and quality indicators from a prospective audit in a Sri Lankan tertiary endoscopy centre

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DOI 10.1055/s-0046-1821840

Aims To evaluate real-world outcomes and key quality indicators of cyanoacrylate injection for gastric varices in a tertiary hepatology–endoscopy unit, and to benchmark performance against international standards for portal hypertensive bleeding

Methods We conducted a prospective single-centre audit of consecutive patients undergoing cyanoacrylate glue injection for gastric varices between April 2025 and August 2025. Data collected using a standardised proforma included demographics, Child–Pugh class, indication, varix type, operator level, glue

volume, adjunctive pharmacotherapy (antibiotics, vasoactive drugs, carvedilol), technical success, intraprocedural complications, early (≤ 5 days) and 6-week rebleeding, 6-week mortality, and follow-up endoscopy findings. Results are descriptive

Results Seventeen patients (median age 61 years; IQR 57–67; 13/17 male) were included. Most had decompensated cirrhosis: Child–Pugh A/B/C in 29%, 53% and 18% respectively. Indications were prophylactic treatment in 13/17 (76%) and active bleeding in 4/17 (24%). Varix types included GOV2 (47%), IGV1 (29%), GOV1 (18%) and IGV2 (6%). Management reflected real-world practice patterns in our unit, including selected use of cyanoacrylate for high-risk GOV1 lesions when band ligation was not feasible.

Median glue volume was 2 mL (IQR 1–3). Procedures were performed by consultants in 82% and by Senior registrars in 18%. Carvedilol was used in 65% and antibiotics in 69% of cases. Vasoactive drugs were appropriately administered only in patients with active bleeding. Immediate technical success was achieved in 15/17 (88%). Intraprocedural complications occurred in 4/17 (24%): bleeding in 3 patients, controlled endoscopically, and mild pain in 1; no embolic events were observed.

Early (≤ 5 days) rebleeding occurred in 19% (3/16) with available data, and 6-week rebleeding in 17% (2/12). Six-week mortality was 19% (3/16), all in Child–Pugh C patients. Follow-up endoscopy was planned in 71% and completed in 3 to date, all showing residual varices requiring further therapy. Key quality indicators (technical success, safety, rebleeding) align with expected ranges for a predominantly Child–Pugh B/C population.

Conclusions Cyanoacrylate injection for gastric varices demonstrated high technical success and an acceptable safety profile in this real-world cohort, with no embolic complications. Rebleeding and mortality reflected underlying disease severity. These findings highlight opportunities to strengthen adjunctive therapy consistency and structured follow-up endoscopy. Ongoing audit cycles will support benchmarking against ESGE and Baveno VII quality standards.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP514 Jejunal adenocarcinoma as the index presentation of lynch syndrome: the pivotal role of endoscopy

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DOI 10.1055/s-0046-1821841

Introduction: Primary small bowel adenocarcinoma (SBA) is a rare entity, representing a diagnostic challenge due to its vague clinical presentation. While Lynch syndrome (hereditary nonpolyposis colorectal cancer) is a known risk factor, SBA is infrequently the first manifestation of the syndrome. We present a case where endoscopic investigation of anemia led to the diagnosis of both SBA and Lynch syndrome [1–3].

Case Description: A 50-year-old woman with no significant personal or family history was evaluated for chronic abdominal pain and anemia. Standard bidirectional endoscopy (gastroscopy and colonoscopy) was normal, and a thoracoabdominal computed tomography (CT) scan showed no relevant findings.

Suspecting small bowel pathology, a Video Capsule Endoscopy (VCE) was performed. It revealed a mid-jejunal exophytic lesion occupying two-thirds of the lumen circumference, with a neoplastic, partially obstructive, and ulcerated appearance. To obtain histological confirmation, a device-assisted enteroscopy was performed. The procedure identified the lesion extending approximately 4–5 cm; it was friable to the touch with indurated areas. Biopsies were taken. Histopathological analysis confirmed a primary small bowel adenocarcinoma. Crucially, immunohistochemistry demonstrated a loss of expression of DNA mismatch repair (MMR) proteins, specifically MLH1, MSH2, and MSH6. This

distinct immunophenotype is highly consistent with microsatellite instability and Lynch syndrome, prompting genetic counseling and family screening.

Conclusion: This case underscores the essential role of VCE and enteroscopy in patients with explained symptoms and negative standard workup. Furthermore, it highlights the importance of testing for MMR protein deficiency in all small bowel adenocarcinomas, as this rare malignancy can serve as the sentinel event for hereditary syndromes, even in patients without a suggestive family history.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pennazio M et al. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Update 2022. *Endoscopy*. 2023; 55 (1): 58–95

[2] Jun SY et al. Lynch syndrome-related small intestinal adenocarcinomas. *Oncotarget*. 2017; 8 (13): 21483–21500. Guidelines in Oncology. *J Natl Compr Canc Netw*. 2024

[3] Benson AB et al. Small Bowel Adenocarcinoma, Version 2.2024, NCCN Clinical Practice Guidelines in Oncology. *J Natl Compr Canc Netw*. 2024;

eP515 Peptic Esophagitis: Epidemiological Profile and Risk Factors

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DOI 10.1055/s-0046-1821842

Aims Peptic esophagitis, the most common complication of gastroesophageal reflux disease (GERD), involves inflammatory lesions of the esophageal layers. It can cause debilitating symptoms and, in the long term, severe complications such as strictures or increased risk of esophageal cancer. The aim of this study was to evaluate the current epidemiology and risk factors of peptic esophagitis.

Methods This is a retrospective, descriptive, single-center study conducted over 5 years (2020–2025), including all cases of peptic esophagitis confirmed by upper gastrointestinal endoscopy at the HepatoGastroenterology and Proctology Department “Medicine B” of Ibn Sina Hospital, Rabat. Demographic, clinical, endoscopic data, and risk factors were collected from medical records.

Results Among 1,654 patients undergoing upper gastrointestinal endoscopy, 23 cases of peptic esophagitis were identified, yielding a prevalence of 1.39%. The mean age was 46 years, ranging from 23 to 71 years. A male predominance was observed, with 15 men (65%) and 8 women (35%), resulting in a male-to-female ratio of 1.86. Most patients resided in urban areas (86.95%), compared to 13.04% in rural areas. Identified risk factors included hiatal hernia in 4 patients (17.3%), chronic smoking in 2 patients (8.6%), and a history of alcohol consumption in 2 patients (8.6%). The mean BMI was 19.2 kg/m². *H. pylori* infection was present in 39.13% of cases. High-risk medications included NSAIDs in 48.82% of patients, bisphosphonates in 4.38%, and certain sedatives in 4.38%. Clinically, gastroesophageal reflux was the main symptom in 82.6% of cases, dysphagia in 56.56%, and digestive bleeding in 30.43%. Endoscopically, according to the Los Angeles classification, 5 cases (21.73%) were grade A, 5 cases (21.73%) grade B, 4 cases (17.39%) grade C, and 9 cases (39.13%) presented with severe peptic stricture (grade B).

Conclusions Peptic esophagitis in this urban cohort predominantly affects middle-aged men. Key risk factors include smoking, *H. pylori* infection, and certain medications. Early detection and appropriate treatment are essential to prevent severe complications such as strictures. These findings highlight the need for increased awareness and careful monitoring of at-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP516 Endoscopic Diagnosis of Segmental Portal Hypertension Caused by a Giant Pancreatic Serous Cystadenoma

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DOI 10.1055/s-0046-1821843

Abstract Text

Serous cystadenomas of the pancreas (SCP) are rare benign tumors, usually asymptomatic and diagnosed incidentally. Segmental portal hypertension (SPH) caused by vascular compression from an SCP is exceptional. We report a case in which endoscopy played a pivotal role in confirming SPH and guiding management.

An 85-year-old woman with a history of hypertension and type 2 diabetes presented with a gradually enlarging abdominal mass in the left flank and epigastrium. Laboratory tests were unremarkable. Abdominal CT revealed a 24 × 13 cm multiloculated mass originating from the pancreas, compressing the splenic vein, inferior mesenteric vein, and partially the portal vein, suggesting SPH. Upper GI endoscopy was performed to assess for portal hypertension and showed grade I esophageal varices and isolated gastric varices (IGV1), confirming SPH. Percutaneous biopsy of the mass demonstrated a multiloculated cystic lesion consistent with a benign serous cystadenoma without malignant features. The case was discussed in a multidisciplinary tumor board. Owing to the giant size of the lesion, vascular involvement, and the patient's operative risk, surgical resection was not recommended. A conservative management strategy was adopted. Primary prophylaxis for gastroesophageal varices was initiated with non-selective beta-blockers. Clinical, endoscopic, and radiologic surveillance was planned.

This case highlights a rare complication of serous pancreatic cystadenomas: segmental portal hypertension secondary to major vascular compression. Endoscopy played a key role in diagnosing SPH, stratifying bleeding risk, and guiding therapeutic decisions. Awareness of this unusual presentation is essential to ensure appropriate multidisciplinary management of large benign pancreatic tumors.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP517 The "single stripe sign" beyond the left colon: a diagnostic red flag for crohn's disease

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DOI 10.1055/s-0046-1821844

Introduction: The "single stripe sign" (a continuous longitudinal ulceration) is widely recognized as a highly specific marker for mild ischemic colitis, particularly when observed in the left colon (descending and sigmoid segments). However, when this morphology appears outside this typical topographic distribution, alternative diagnoses must be considered. We present a case of severe Crohn's disease (CD) masquerading as ischemia through a right-sided "stripe sign."

Case Description: A 35-year-old male was admitted with fever, polyarthralgia, oral aphthae, and erythema nodosum. Laboratory workup showed anemia, elevated acute phase reactants, and high fecal calprotectin. The patient reported a history of recurrent bloody diarrhea [1, 2].

Colonoscopy revealed a dual morphological pattern. The sigmoid colon showed a large, deep, excavated ulcer occupying 75% of the circumference with a fibrin-covered base, causing stenosis. Surprisingly, the right colon displayed long, linear ulcerations (> 3 cm) surrounded by normal mucosa. While this longitudinal appearance strongly resembled the "single stripe sign" of ischemia, its

location in the ascending colon and the patient's young age made vascular etiology highly unlikely.

Biopsies from both the right-sided "stripes" and the sigmoid ulcer confirmed chronic active inflammation compatible with Crohn's disease, ruling out ischemia, CMV, or tuberculosis.

Conclusion: This case highlights a critical diagnostic caveat: while the "single stripe sign" in the left colon is a reliable indicator of ischemia, its specificity drops precipitously when found in the right colon. In such atypical locations, especially in young patients with extraintestinal symptoms, this longitudinal ulceration represents the "railroad track" pattern of Crohn's disease. Endoscopists must integrate lesion morphology with anatomical location to avoid misdiagnosing CD as ischemia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Shivashankar R, Lichtenstein GR. Mimics of Inflammatory Bowel Disease. *Inflamm Bowel Dis* 2018; 24 (11): 2315–2321

[2] Kucharzik T et al. ECCO-ESGAR-ESP-IBUS Guideline on Diagnostics and Monitoring of Patients with Inflammatory Bowel Disease: Part 1. *J Crohns Colitis* 2025; 19 (7):jjaf106

eP518 Prevalence of Colorectal Polyps in Lower Gastrointestinal Bleeding

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DOI 10.1055/s-0046-1821845

Aims Lower gastrointestinal bleeding (LGIB), defined as bleeding originating distal to the ligament of Treitz, is a common reason for consultation in gastroenterology, often related to colorectal lesions. Colorectal polyps, implicated in 6–12% of LGIB cases, include adenomatous polyps with malignant potential and non-adenomatous polyps. According to the literature, 25–40% of adenomatous polyps progress to colorectal adenocarcinoma within approximately ten years, highlighting the importance of screening and early management. The aim of our study was to determine the prevalence of colorectal polyps in the context of LGIB, to describe the epidemiological and clinical characteristics of affected patients, and to analyze the endoscopic and histological features of these lesions along with their therapeutic management.

Methods This was a retrospective, descriptive study conducted over a 3-year period, from January 1, 2022 to October 31, 2025, within our department. The study included all patients who underwent colonoscopy for evaluation of LGIB with endoscopic confirmation of colorectal polyps. Data were collected from colonoscopy report registries. Descriptive analysis was performed using a standardized data collection sheet ensuring patient anonymity.

Results During the study period, 160 colonoscopies were performed for LGIB, identifying 54 cases of colorectal polyps, yielding a prevalence of 33.7%. The male-to-female ratio was 1.6 (33 men, 21 women). The mean age was 51.7 years (range: 23–78), with 72% of patients aged ≥ 45 years (39 patients). One patient (2%) had a family history of familial adenomatous polyposis (FAP), and 20 patients (37%) were chronic smokers.

Clinically, 34 patients (63%) presented with isolated rectorrhagia, while 20 (37%) had associated symptoms, including anemia (9 cases), constipation (4), proctalgia (3), weight loss (2), diarrhea (1), and abdominal pain (1).

Endoscopically, polyps were mainly located in the left and right colon (n = 20; 37%), followed by the rectum (n = 6; 11.1%). Extensive colonic involvement was observed in 2 patients (3.7%). Thirty patients (55.6%) had sessile polyps and 14 (25.9%) had pedunculated polyps. Eight patients (14.8%) had both sessile and pedunculated polyps, 2 (3.7%) had pedunculated and flat polyps, and 1 patient (1.9%) had sessile and flat polyps. A single polyp was found in 28 patients (51.9%), and 2 cases (3.7%) of colorectal polyposis were reported. Regarding size, 33 patients (61.1%) had polyps measuring 3–10 mm, 9 (16.7%) had polyps 1–2 mm, and variable sizes were observed in 8 patients (14.8%).

Most patients underwent polypectomy ($n = 53$; 98 %), including cold-snare resection in 12 patients (22.2 %) and mucosectomy in 2 patients (3.7 %). Seventeen patients (31.5 %) had associated endoscopic findings, such as a tumoral process (6 cases), internal hemorrhoids (4), uncomplicated diverticulosis (3), angiodysplasia (2), mild proctitis (1), and colonic melanosis (1).

Histopathological analysis identified 45 adenomatous polyps (83.3 %), including 28 (51.9 %) tubular, 11 (20.4 %) serrated, and 6 (11.1 %) tubulovillous. One hyperplastic polyp (1.9 %) and 3 cases (5.6 %) of in situ adenocarcinoma were also noted.

Conclusions Colorectal polyps are a frequent cause of lower gastrointestinal bleeding, accounting for 37.8 % of cases in our study, and carry a significant risk of malignant transformation. Our findings underscore the importance of systematic screening and early management to prevent progression to adenocarcinoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP519 Quality Criteria in Endoscopy: A Retrospective Study

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DOI 10.1055/s-0046-1821846

Aims Endoscopy is a visual exploration technique that allows for the diagnosis, treatment, and monitoring of a wide range of gastrointestinal conditions. The quality of endoscopic procedures is essential to ensure patient safety, comfort, and diagnostic accuracy. However, despite strict protocols, variations in examination quality may still occur.

The aim of our study was to analyze quality criteria in digestive endoscopy based on retrospective data and to identify areas for improvement in clinical practice.

Methods This is a retrospective, descriptive study conducted over one year, from January 2024 to January 2025, within the endoscopy unit of our department. All patients who underwent an esophagogastroduodenoscopy (EGD) or a total ileocolonoscopy during this period were included. We collected epidemiological data, indications for endoscopy, as well as information on tolerance, quality of visualization, completeness of the procedure, and complications. For EGD, procedural completeness was defined as visualization of the second portion of the duodenum (D2). For colonoscopy, completeness was defined as intubation of the cecal pole. Quality of preparation was assessed through the visualization of the gastric mucosa for EGD and using the Boston Bowel Preparation Scale for total ileocolonoscopy.

Results A total of 330 endoscopic procedures were performed during the study period, including 199 esophagogastroduodenoscopies (EGD) and 131 total ileocolonoscopies. Among the patients undergoing EGD, women were slightly predominant (56.3 %), with a mean age of 47.9 years. The most common indication was anemia (10.05 %), followed by upper and lower gastrointestinal bleeding, epigastric pain, vomiting, and dysphagia. Nearly all patients (95 %) benefited from a pre-anesthesia consultation, while 5 % underwent the examination without sedation. Overall tolerance was good in 96 % of cases, with only 3.5 % showing intolerance related mainly to desaturation or difficulties with the unsedated procedure. Visualization of the gastric mucosa was satisfactory in 93.5 % of EGD examinations, while limitations were mostly due to non-aspirable food debris, esophageal strictures, or significant gastric stasis. The procedure was complete—with successful progression to the second portion of the duodenum—in 91.5 % of patients. Incomplete examinations (8.5 %) were mainly due to solid food residue, non-passable esophageal stenosis, gastric stasis, or early termination caused by intolerance. No major complications occurred, aside from a few cases of desaturation and intolerance to unsedated endoscopy. Among the 131 ileocolonoscopies, there was a female predominance with 73 women (55.7 %) and 58 men (44.3 %) (sex ratio 1.25). The mean age was 47.6 years (16–86). The main indications were rectal bleeding in 26 cases

(19.84 %), IBD-related evaluation colonoscopies in 25 cases (19.08 %), bowel habit disorders in 22 cases (16.79 %), and chronic abdominal pain in 16 cases (12.21 %). Most procedures were performed under anesthesia (126 patients, 96.2 %), while 5 (3.8 %) were unsedated. Tolerance was good in 129 patients (98.5 %), whereas 2 unsedated patients (1.5 %) did not tolerate the procedure. Bowel preparation quality (Boston Scale) showed: 9 patients (6.9 %) with a score of 0 requiring rescheduling; 9 (6.9 %) with a score of 4; 35 (26.7 %) with 5; 32 (24.4 %) with 6; 21 (16 %) with 7; 21 (16 %) with 8; and 4 (3.1 %) with a score of 9. Cecal intubation was achieved in 87 cases (66.41 %), including 74 with terminal ileum (TI) intubation and 13 without. Completion was not possible in 44 cases (33.58 %): 29 due to poor preparation, 14 due to stenosis, and 1 due to high perforation risk. No complications were reported.

Conclusions Endoscopy is an essential technique for the diagnosis and management of many gastrointestinal diseases, but ensuring high-quality examinations remains a major challenge to guarantee patient safety and continuously improve medical practice. Our study showed that the majority of endoscopic procedures achieved good quality in terms of diagnostic precision and safety. However, improvements are still needed, particularly regarding unsedated procedures and patient education on optimal preparation, to ensure the best possible outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP520 Eradication protocol of esophageal varices in cirrhotic patients: what timeframe and which influencing factors?

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DOI 10.1055/s-0046-1821847

Aims Esophageal variceal rupture is a major complication of portal hypertension in cirrhotic patients, leading to a high risk of upper gastrointestinal bleeding. Although endoscopic variceal ligation (EVL) is a cornerstone of both primary and secondary prophylaxis, rebleeding remains frequent. This study aims to determine the average time required for variceal eradication and to identify predictors of hemorrhagic recurrence to improve the management of cirrhotic patients treated with EVL.

Methods This was a retrospective, descriptive, and analytical study conducted over a five-year period, from January 1st, 2019 to 31 October, 2025, within our department. The study included all patients followed for cirrhosis who underwent an upper GI endoscopy (EGD) with esophageal variceal ligation. Patients were divided into two groups: **Group I**: 40 cirrhotic patients in whom variceal eradication was achieved within ≤ 3 months and **Group II**: 28 cirrhotic patients in whom eradication was achieved after > 3 months. Data were collected from patient medical records and endoscopy reports. Descriptive data analysis was performed using a standardized data collection form, while statistical analysis was carried out using JAMOVI software.

Results During the study period, 172 patients underwent EGD with EVL. Among them, 68 (39.5 %) were cirrhotic. Cirrhosis was of indeterminate etiology in 21 patients (30.9 %). Post-viral hepatitis B cirrhosis was found in 9 patients (13.2 %) and post-viral hepatitis C cirrhosis in 8 patients (11.8 %).

Group I The male-to-female ratio was 1.2 (22 men, 18 women). The mean age was 50.4 years (range 19–74). EVL was performed as primary prophylaxis in 23 patients (57.5 %) and as secondary prophylaxis in 17 patients (42.5 %). Beta-blockers were used for primary prophylaxis in 21 patients (52.5 %) and for secondary prophylaxis in 19 patients (47.5 %). According to the Child-Pugh classification, 17 (42.5 %) were Child A, 14 (35 %) Child B, and 9 (22.5 %) Child C. Endoscopically, 26 patients (65 %) had grade III varices and 14 (35 %) had grade II varices. Most patients presented red signs (72.5 %; $n = 29$) and more than three variceal columns (80 %; $n = 32$). The mean number of bands applied per session was 4 (1–7). The mean number of sessions required for variceal

eradication was 6 (2–7). The mean interval between the first and last ligation sessions was 56 days (14–84). Hemorrhagic recurrence occurred in 5 patients (12.5 %). Eradication within ≤ 3 months was associated with EVL performed as primary prophylaxis ($p = 0.003$) and with the use of beta-blockers in primary prophylaxis ($p = 0.0004$).

Group II The male-to-female ratio was 1.5 (17 men, 11 women). The mean age was 50.7 years (range 25–74). EVL was performed as primary prophylaxis in 6 patients (21.4 %) and as secondary prophylaxis in 22 patients (55 %). Beta-blockers were used for primary prophylaxis in 5 patients (17.9 %) and for secondary prophylaxis in 23 patients (82.1 %). According to the Child-Pugh score, 10 (35.5 %) patients were Child A, 11 (39.3 %) Child B, and 7 (25 %) Child C. Endoscopically, 22 patients (55 %) had grade III varices and 6 (21.4 %) grade II varices. Red signs were present in 75 % ($n = 21$), and more than three variceal columns in 96.4 % ($n = 27$). The mean number of bands applied per session was 5 (2–7). The mean number of sessions required for eradication was 8 (3–9). The mean time between the first and last sessions was 154 days (112–336). Hemorrhagic recurrence occurred in 9 patients (32.1 %). Eradication beyond 3 months was associated with secondary prophylaxis ($p = 0.003$), the use of beta-blockers in secondary prophylaxis ($p = 0.0004$), and hemorrhagic recurrence ($p = 0.049$).

Conclusions Endoscopic variceal ligation (EVL) is a key treatment for cirrhotic patients at risk of variceal bleeding. Our study shows that anticoagulant use is a significant predictor of hemorrhagic recurrence and that early EVL combined with beta-blockers may improve effectiveness and shorten variceal eradication time.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP521 The "ulcerated yellowish nodule": a distinctive endoscopic phenotype of ileal neuroendocrine tumors

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DOI 10.1055/s-0046-1821848

Introduction: Small bowel neuroendocrine tumors (NETs) are the most common malignancy of the small intestine but often face diagnostic delays due to their subtle presentation. While they originate from the submucosa, advanced lesions can develop specific mucosal alterations. We present a case that illustrates the classic "yellowish and ulcerated" morphology, a key endoscopic sign that should trigger immediate suspicion of a NET during ileoscopy [1–3].

Case Description: A 72-year-old male was referred for evaluation of chronic intermittent diarrhea, right lower quadrant pain, and significant weight loss (10 kg). Biochemical workup revealed elevated serum chromogranin A and urinary catecholamines, raising suspicion for a neuroendocrine etiology.

High-definition ileocolonoscopy was performed. The colon was endoscopically normal. However, deep intubation of the terminal ileum (5 cm proximal to the valve) revealed a solitary, 3-cm exophytic lesion. Morphologically, the mass was striking: it presented a distinct yellowish submucosal hue that differentiated it from typical adenomas. Furthermore, the lesion exhibited a central surface ulceration with irregular edges and friability upon contact.

Biopsies taken from the ulcerated margin confirmed a well-differentiated, low-grade neuroendocrine tumor. The patient underwent oncological resection, confirming the diagnosis.

Conclusion: This case underscores the importance of recognizing specific visual patterns during ileoscopy. The combination of a yellowish coloration (reflecting the lipid-rich neuroendocrine tissue) and spontaneous surface ulceration constitutes a highly suggestive phenotype for ileal NETs. Endoscopists observing a "yellowish ulcerated nodule" in the distal ileum should prioritize this diagnosis over Crohn's disease or simple inflammatory polyps to expedite appropriate surgical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rossi RE et al. Endoscopic techniques to detect small-bowel neuroendocrine tumors: A literature review. *United European Gastroenterol J* 2017; 5 (1): 5–12
- [2] Lamarca A et al. European Neuroendocrine Tumor Society (ENETS) 2024 guidance paper for the management of well-differentiated small intestine neuroendocrine tumours. *J Neuroendocrinol* 2024; 36 (9): e13423
- [3] Sorbye H et al. E. European Neuroendocrine Tumor Society (ENETS) 2023 guidance paper for digestive neuroendocrine carcinoma. *J Neuroendocrinol* 2023; 35 (3): e13249

eP522 Familial Adenomatous Polyposis: Clinical and Therapeutic Insights from a Tunisian Cohort of 30 Patients

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DOI 10.1055/s-0046-1821849

Aims Familial adenomatous polyposis (FAP) is a rare hereditary condition marked by the development of numerous adenomatous polyps in the colon and rectum, significantly elevating the risk of colorectal cancer.

This retrospective study aimed to delineate the epidemiological, clinical, and therapeutic characteristics of a cohort of patients followed-up at our institution.

Methods We reviewed the medical records of the patients diagnosed with FAP between 2012 and 2025. Data on family history, presenting symptoms, findings from colonoscopy, and therapeutic interventions were analyzed.

Results Thirty patients were enrolled. The mean age at diagnosis was 49.5 years (range: 17–78), with a male-to-female ratio of 1.14. A family history of FAP was present in 40 % of cases. Diagnosis was made via family screening in 26.7 %, incidentally in 16.7 %, and in 56.6 % due to digestive symptoms. The attenuated FAP phenotype was predominant, affecting 76.6 % of patients. Polyps were mainly found in the rectum and descending colon (66.7 %). Nine patients (30 %) had prophylactic colectomy. Surgery was performed in 70 % of the cases after diagnosis of cancerous polyposis. Adenocarcinoma was located in the rectum in 20 % of patients and treated by colectomy and ileoanal anastomosis. In 80 % of the cases it was located in the colon: 13 patients (61.9 %) underwent a total colectomy with ileorectal anastomosis, while 2 (9.5 %) underwent a colectomy with ileoanal anastomosis. The 5-year recurrence rate was 19 %, predominantly involving the rectum. Extra-colonic manifestations were frequent, with 33.3 % of patients presenting with gastric polyps (mostly hyperplastic), 26.7 % with duodenal polyps, 43.3 % with thyroid nodules, 10 % with retinitis pigmentosa, and one patient with desmoid tumors.

Conclusions This study highlights the critical need for early diagnosis and regular surveillance in FAP patients. The attenuated phenotype was prevalent, and extra-colonic manifestations were common. Prophylactic colectomy remains the gold standard for colorectal cancer prevention in these patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP523 Inflammatory pseudopolyp secondary to chronic diverticulitis: an unusual finding

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DOI 10.1055/s-0046-1821850

Abstract Text

Inflammatory pseudopolyps are benign, reactive lesions usually arising in chronic inflammatory bowel disease, formed by regenerating mucosa surrounded by ulcerated areas. Their occurrence following acute diverticulitis is exceedingly rare, as diverticular inflammation typically resolves without producing localized polypoid regenerative changes [1].

We present the case of a 46-year-old male evaluated in the endoscopy unit for follow-up after an episode of acute diverticulitis occurring four months before colonoscopy.

Colonoscopy revealed colonic diverticulosis from the sigmoid colon to the hepatic flexure. A 5-cm sigmoid segment showed luminal narrowing and edematous mucosa, with difficulty advancing the endoscope. Immediately proximal to this segment, an arboriform polypoid lesion measuring approximately 8 mm was identified. The surface showed no features of dysplasia but demonstrated increased vascular pattern. Close inspection of the polyp base revealed glandular elongation. Given the unusual appearance, biopsies were obtained for further evaluation.

Histopathology reported vascular dilation and stroma with abundant collagenous tissue, without adenomatous changes, consistent with an inflammatory lesion. At follow-up, the patient reported persistent but gradually improving abdominal pain since the diverticulitis episode. A second-look colonoscopy was therefore scheduled.

On repeat colonoscopy performed three months later, the previously described sigmoid segment persisted, but the polyp had completely disappeared, leaving a diverticulum containing granulation tissue.

This case represents an uncommon inflammatory pseudopolyp arising after acute diverticulitis, with complete endoscopic resolution on short-term follow-up, highlighting the rarity and transient nature of such reactive postdiverticulitis lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Katerji R, Huber AR. Giant Inflammatory Polyps in Diverticular Disease Mimicking a Colonic Mass: A Potential Malignant Masquerader. *Am J Case Rep* 2020; 21:e923242

eP524 The "coalescing" esophageal ulcer in acute severe colitis: biopsy strategy and endoscopic patterns of herpes simplex infection

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DOI 10.1055/s-0046-1821851

Introduction: In patients with acute severe ulcerative colitis (ASUC) undergoing rescue therapy with cyclosporine and steroids, new-onset odynophagia is an ominous sign. Differentiating between drug-induced injury, Candida, CMV, and Herpes Simplex Virus (HSV) is critical but endoscopically challenging. We present a case illustrating the distinct "coalescing geographic" pattern of severe HSV esophagitis and the importance of targeted biopsy sampling [1–3].

Case Description: A 43-year-old female with extensive ulcerative colitis was admitted for a severe corticosteroid-refractory flare. Rescue therapy with intravenous cyclosporine was initiated. During hospitalization, she developed acute, intense odynophagia.

Urgent gastroscopy revealed a striking pathology in the mid-esophagus (31–37 cm from incisors). Unlike the discrete plaques of Candida or the deep, punched-out ulcers typically seen in CMV, the mucosa exhibited multiple flat, geographic ulcerations. These lesions were non-fibrinous with an erythematous base and showed a clear tendency to coalesce, resulting in circumferential involvement of the esophageal lumen. The distinct lack of raised plaques or pill fragments shifted the suspicion toward a viral etiology.

Crucially, biopsies were targeted at the raised margins of the ulcers rather than the necrotic center. Histopathology revealed multinucleated giant cells with nuclear molding and "ground-glass" chromatin (Cowdry type A bodies). Immunohistochemistry confirmed Herpes Simplex Virus Type 1 (HSV-1). Treatment with acyclovir resulted in rapid symptom resolution.

Conclusion: This case highlights two essential learning points for the endoscopist managing immunosuppressed IBD patients. First, the endoscopic phenotype of HSV esophagitis evolves from vesicles to diffuse, coalescing geographic ulcers with friable borders, mimicking caustic or pill-induced injury. Second, diagnostic yield depends on technique: unlike CMV (which resides in the ulcer base), HSV infects the squamous epithelium at the ulcer margins. Recognizing this pattern ensures correct biopsy targeting and avoids diagnostic delay in the critical setting of ASUC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Agarwal A et al. Herpes Simplex Virus Esophagitis. *N Engl J Med*. 2025; 393:
[2] Kim NY, Lee J. Infective Esophagitis. *Korean J Helicobacter Up Gastrointest Res* 2025; 25 (2): 108–116
[3] Kucharzik T et al. ECCO Guidelines on the Prevention, Diagnosis, and Management of Infections in Inflammatory Bowel Disease. *J Crohns Colitis* 2021; 15 (6): 879–913

eP525 Correlation Between Rutgeerts Score and Clinical Recurrence in Crohn's Disease

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Aims Surgery remains frequent in patients with Crohn's disease (CD), with a potential cumulative risk of short bowel syndrome. The aim of our study was to evaluate the correlation between the Rutgeerts endoscopic score and clinico-endoscopic recurrence during the first year following intestinal resection in patients with CD.

Methods We conducted a retrospective analytical and descriptive study within the Department of Hepato-Gastroenterology and Proctology, including all patients with CD who underwent ileocecal or right ileocolic resection between 2019 and 2024. Patients without postoperative colonoscopy were excluded. Postoperative endoscopic recurrence was defined as a Rutgeerts score $\geq$ i2.

Results A total of 92 patients were included. The mean age was 41.3 years (20–72 years), with a slight female predominance (F/M sex ratio = 1.19; 50 women and 42 men). The mean interval between CD diagnosis and surgery was 2.6 years. Six patients (6.5%) were smokers.

Disease location was ileocecal in 50% of patients (n = 59), ileocolic in 44.5% (n = 41), ileal in 4.3% (n = 4), and extensive in 1%. The phenotype was stricturing in 64.1% (n = 59), penetrating in 18.4% (n = 17), mixed stricturing/penetrating in 14.1% (n = 13), and inflammatory in 2 cases.

Thirty-three patients (35.8%) had perianal Crohn's disease, including: complex fistulas: 29 patients (31.5%) anal ulcerations: 2 patients (2.1%) anal stenosis: 1 patient (1%) anal fissure: 1 patient (1%)

Indications for surgery were ileal or ileocecal stricture in 73.9% of patients (n = 59), internal or external fistulas in 20.6% (n = 19), and deep abscess in 2 patients.

Postoperative colonoscopy was performed after a mean of 9.2 months (6–11 months). Endoscopic recurrence (Rutgeerts $\geq$ i2) was observed in 59.7% of patients (n = 55), distributed as follows: Rutgeerts i2: 20 patients (21.7%) Rutgeerts i3: 9 patients (9.7%) • Rutgeerts i4: 26 patients (28.2%)

Clinical recurrence occurred in 53.2% of patients (n = 49).

In univariate logistic regression analysis, statistically significant predictors of clinical recurrence were: Rutgeerts score $\geq$ i2 (p < 0.001) presence of perianal disease (p = 0.042)

In multivariate analysis, only a Rutgeerts score ≥ 2 remained significantly associated with clinical recurrence ($p < 0.001$).

Conclusions Endoscopic recurrence of Crohn's disease assessed by the Rutgeerts score is strongly correlated with the risk of clinical recurrence. These findings highlight the predictive value of the Rutgeerts score in postoperative monitoring and support early therapeutic optimization in high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP526 Hemostatic powder for the management of massive "geographic" gastric ulcers: a safer approach to cmv-induced bleeding

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DOI 10.1055/s-0046-1821853

Introduction: Cytomegalovirus (CMV) gastropathy is a serious complication in solid organ transplant recipients. Endoscopically, these ulcers often present as large, deep, and friable lesions with diffuse oozing bleeding. Standard hemostatic techniques (clips, thermal coagulation) carry a high risk of tissue tearing or perforation in this setting. We present a case demonstrating the utility of hemostatic powder as a safe and effective primary therapy for high-risk CMV ulcers.

Case Description: A heart transplant recipient (1 year post-transplant) with a history of prior rectal CMV infection presented with melena and hemodynamic instability. Emergent gastroscopy revealed multiple ulcerations in the gastric body posterior wall.

The dominant lesion was a giant (> 3 cm) ulcer with a characteristic "geographic" morphology, deep fibrin base, and irregular borders. An adherent clot was present, and upon washing, active diffuse oozing ("sheet-like") bleeding was observed from the ulcer edges. Given the extreme friability of the tissue and the extensive surface area of the bleeding, mechanical clipping was deemed technically unsafe, and thermal therapy posed a perforation risk. Consequently, hemostatic powder was applied as the primary modality, achieving immediate hemostasis without tissue contact [1–3].

Biopsies taken from the ulcer margins were positive for CMV on immunohistochemistry. The patient was treated with intravenous ganciclovir. A follow-up gastroscopy showed complete re-epithelialization of the ulcer, replaced by a flat, hyperplastic nodular scar, confirming therapeutic success.

Conclusion: This case highlights two critical points for the endoscopist. First, the "geographic" ulcer pattern in an immunocompromised patient is pathognomonic for CMV and mandates biopsy for immunohistochemistry, even in the setting of acute bleeding. Second, hemostatic powder represents an ideal therapeutic tool for these specific lesions, offering effective control of diffuse bleeding in friable, high-risk tissue where conventional mechanical or thermal methods may be hazardous.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jentzer A et al. Cytomegalovirus and Inflammatory Bowel Diseases (IBD) with a Special Focus on the Link with Ulcerative Colitis (UC). *Microorganisms*. 2020; 8 (7): 1078
- [2] Abosheishaa H et al. The efficacy of Hemospray in managing bleeding related to gastrointestinal tumors: systematic review and meta-analysis. *Eur J Gastroenterol Hepatol* 2024; 36 (12): 1370–1383
- [3] Gralnek IM et al. Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021. *Endoscopy*. 2021; 53 (3): 300–332

eP527 Endoscopic balloon dilation of Roux-en-Y anastomotic stricture after gastric bypass: a systematic review and meta-analysis

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Aims Bariatric surgery is the most effective treatment to achieve weight loss and to improve metabolic outcomes. In this context, Roux-en-Y gastric bypass (RYGB), is one of the main surgical procedures for obesity. Although it is effective, it is burdened by early and late complications such as gastro-jejunal (GJ) anastomotic stricture. In this context, endoscopic balloon dilation is an effective non-operative approach. Aim of our meta-analysis is to evaluate clinical success and safety of endoscopic balloon dilation.

Methods This MA was conducted in accordance with the Cochrane Handbook for Systematic Reviews of Interventions and in accordance with the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) statement. A systematic literature search of MEDLINE, SCOPUS and EMBASE databases was performed. For clinical success, the DerSimonian and Laird random-effects model estimated the untransformed proportions. This approach provides a point estimate from the analysis along with 95 % Confidence Interval (95 % C.I.) from the rate proportion of the estimate. For all other analyses, a p value less than .05 was considered statistically significant. We included 26 studies.

Results In 26 studies, the overall clinical success rate was 98.3 % (95 % CI: 97.08–99.61 %) with no significant difference between patients undergoing open and laparoscopic surgery. The presence of anastomotic ulcers was significantly associated with reduced clinical success, with a negative correlation (estimate = 0.0021, $p < 0.0001$), suggesting that the presence of anastomotic ulcers negatively impacts the clinical success. Among the 24 studies, the improvement rate after a single session was 54.13 % (95 % CI: 44.09–64.17 %). A significant inverse correlation between the presence of anastomotic ulcers and symptom improvement after one dilation session, confirming that ulcer on anastomotic stricture may require more than one dilation session ($p = 0.007$). Overall the pooled rate of adverse (EAs) was 0.72 % (95 % CI: 0.12–1.33 % ($I^2 = 0\%$)). Most of EAs are bleeding, perforation or mucosal tears managed conservatively with no needed of surgery. No significant difference on safety was observed between patients undergone laparotomy ($p = 0.53$) compared to those undergone laparoscopic surgery ($p = 0.40$). Furthermore, no association with stapler type ($p = 0.34$), time to diagnosis/treatment ($p = 0.71$) and presence of anastomotic ulcer ($p = 0.49$) was observed.

Conclusions Endoscopic balloon dilation is a highly effective and safe treatment for GJ anastomotic strictures following Roux-en-Y gastric bypass. Although patients with ulcer-associated strictures may need multiple dilation sessions, the overall clinical success remain excellent.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP528 Assessment of the Value of Colonoscopy in Patients With Rectal Bleeding: Comparative Study According to Age

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DOI 10.1055/s-0046-1821855

Aims Rectal bleeding is a common reason for consultation, with etiologies ranging from benign anorectal and colorectal conditions to more severe diseases, including neoplastic processes, whose prevalence varies with age. The aim of this study was to assess the diagnostic value of colonoscopy in cases of rectal bleeding according to patient age.

Methods A retrospective descriptive and analytical study was conducted from January 2022 to December 2024, including 225 patients who underwent colonoscopy for rectal bleeding. Patients were divided into two groups: Group 1

(patients under 50 years) and Group 2 (patients over 50 years). Epidemiological, clinical, and endoscopic data were compared between the two groups. Patients diagnosed with inflammatory bowel disease (IBD) were excluded. Statistical analysis was performed using Jamovi software version 2.3.28.

Results Results: The mean age of patients was 54 ± 13 years, with a female predominance: 120 women (53.3%) and 105 men (46.6%), corresponding to a male-to-female ratio of 0.9. Among the 225 patients presenting with rectal bleeding, 35.6% were under 50 years of age and 64.4% were over 50. Rectal bleeding was isolated in 50.5% of cases, associated with constipation in 20.3% (G1: 15% vs G2: 13%; $p = 0.213$), with diarrhea in 17.3% (G1: 13% vs G2: 9.9%; $p = 0.184$), and with iron-deficiency anemia in 8% (G1: 6.8% vs G2: 6.7%; $p = 0.645$). Colonoscopy findings were normal in 57% of cases and pathological in 43% (G1: 30.6% vs G2: 69.3%; $p = 0.001$). The most frequently observed pathologies were: colorectal polyps in 46.6% of cases (G1: 30.7% vs G2: 52.1%; $p = 0.041$), rectitis/colitis in 23.2% (G1: 46.6% vs G2: 10.9%; $p < 0.002$), colorectal tumors or suspicious processes in 14% (G1: 6.7% vs G2: 19.7%; $p = 0.02$), colonic diverticulosis in 11% (G1: 6.3% vs G2: 12.8%; $p = 0.122$), colonic angiodysplasia in 8% (G1: 5.2% vs G2: 13.5%; $p = 0.409$), solitary rectal ulcer in 1.3% (G1: 0.8% vs G2: 0.4%; $p = 0.816$). Univariate and multivariate analyses revealed that factors associated with pathological colonoscopy findings in rectal bleeding were age over 50 years ($p = 0.03$) and the presence of associated constipation ($p = 0.011$).

Conclusions Colonoscopy remains a key diagnostic tool in the evaluation of rectal bleeding. In our study, age over 50 years was associated with pathological findings, most commonly polyps and colorectal lesions, whereas rectitis or rectocolitis was the most frequent diagnosis in patients under 50 years.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP529 Associated factors with advanced colorectal polyps in patients under 50 years: A retrospective study

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DOI 10.1055/s-0046-1821856

Aims Advanced colorectal polyps (ACPs) are the immediate precursors of colorectal cancer. Although less common in individuals under 50, the occurrence of ACPs in this age group is an emerging concern due to the risk of malignant progression to colorectal cancer, highlighting the need to investigate associated risk factors in younger adults.

This study aims to investigate the frequency and associated factors for the development of ACPs in patients under 50 years.

Methods We conducted a descriptive, retrospective study of 302 consecutive patients aged under 50 who underwent total colonoscopy between April 2023 and October 2024. Data were extracted from electronic medical records, including demographics, lifestyle factors (BMI, smoking, alcohol), family history, and comorbidities. Endoscopic characterization of polyps were classified according to the NICE and CONNECT criteria. ACPs were defined as adenomas ≥ 10 mm, those with villous histology, or high-grade dysplasia.

Results The study included 302 patients, with a male-to-female ratio of 1.51. The mean age was 41.13 years (range: 16–50 years). A family history of colorectal cancer was present in 10.9%. Overall, colonic polyps were found in 32.4% of the cohort, while ACPs based on polyp size and histopathological examination were detected in 4.6% ($n = 14$). Statistical analysis identified age ($p = 0.002$), family history of polyps ($p = 0.026$) and macroangiopathic diabetes complications ($p = 0.05$) as significant associated factors. Polyp-related characteristics were also strongly associated with ACPs, including polyp multiplicity ($p < 0.001$), polyp location ($p < 0.001$), and both the NICE ($p < 0.001$) and CONNECT classifications ($p = 0.04$). In addition, ACPs were significantly associated with resection-related complications ($p < 0.001$) and with polyp recurrence ($p < 0.001$).

Conclusions These findings suggest that although ACPs are relatively uncommon in young adults, several demographic, clinical, and polyp-specific characteristics can help identify individuals at higher risk. Identification of these factors may allow early detection and better prevention strategies in younger individuals.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP530 EUS-guided biliary drainage versus percutaneous transhepatic biliary drainage after failed ERCP in oncological patients: a 10-year retrospective comparison

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DOI 10.1055/s-0046-1821857

Aims To compare technical success, clinical success, bilirubin response, safety, and survival between EUS-BD and PTBD after failed ERCP in patients with malignant biliary obstruction treated at a Brazilian tertiary referral center.

Methods Retrospective cohort study including 67 consecutive oncology patients (34 EUS-BD, 33 PTBD) managed between 2013 and 2023 after unsuccessful ERCP. All EUS-BD procedures were performed with lumen-apposing metal stents (LAMS) or self-expandable metal stents via hepaticogastrostomy or choledochoduodenostomy routes. Demographic, laboratory, procedural and follow-up data were collected. Categorical variables were compared using χ^2 or Fisher's exact test; continuous variables using Student's t-test or Mann-Whitney U test. Survival was evaluated by Kaplan-Meier curves and log-rank test. A p -value < 0.05 was considered significant [1–3].

Results Baseline characteristics were comparable except for oncological stage: stage IV disease was significantly more frequent in the EUS-BD group ($p = 0.004$). Technical success was 100% in both arms. Clinical success (resolution of jaundice or $> 50\%$ bilirubin reduction within 30 days) was similar (EUS-BD 70.6% vs PTBD 78.8%; $p = 0.576$). Pre-procedure total and direct bilirubin levels were higher in the PTBD group ($p = 0.019$ and $p = 0.011$, respectively), yet both techniques achieved significant bilirubin decline.

Peri-interventional adverse events occurred in 8.8% (EUS-BD) versus 3.0% (PTBD) ($p = 0.614$); most were mild and managed conservatively. In-hospital late adverse events (AE) were 29.4% versus 33.3% ($p = 0.796$) and post-discharge AE 29.4% versus 18.2% ($p = 0.147$), with no significant differences. Severity of AE according to ASGE lexicon was also comparable. Notably, despite more advanced oncological stage at baseline, the EUS-BD cohort exhibited significantly better in-hospital survival (log-rank $p < 0.05$); overall survival did not differ between groups.

Conclusions In this 10-year Latin-American oncology cohort with failed ERCP, EUS-BD provided technical and clinical success rates equivalent to PTBD, with comparable safety profiles despite treating patients with more advanced disease. EUS-BD was associated with improved in-hospital survival and avoided external catheters, enhancing patient comfort and quality of remaining life. Selection bias (physician preference) cannot be excluded. Nevertheless, our findings support EUS-BD as the preferred rescue strategy after failed ERCP in malignant biliary obstruction and underline the need for institutional protocols favouring endoscopic ultrasound-guided approaches over percutaneous routes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Zafar Y, Azam H, Azhar MAB, Shaheen F, Javaid SS, Manzoor L, Masood M, Krishnamoorthi R. Efficacy of endoscopic ultrasound-guided biliary drainage of malignant biliary obstruction: a systematic review and meta-analysis of randomized controlled trials. *Clin Endosc.* 2025; 58 (4): 533–543. doi:10.5946/ce.2024.183 Epub 2025 Feb 24 PMID: 40010703 PMID: PMC12314615

- [2] hao H, Zhang XW, Song P, Li X. Endoscopic ultrasound-guided biliary drainage vs percutaneous transhepatic biliary drainage for malignant biliary obstruction after endoscopic retrograde cholangiopancreatography failure. *World J Gastrointest Surg.* 2024; 16 (11): 3614–3617. doi:10.4240/wjgs.v16.i11.3614 PMID: 39649198 PMID: PMC11622083
- [3] Neuhaus H. Choose the best alternative wisely for biliary interventions after failed ERCP. *Endosc Int Open.* 2024; 12 (1): E176–E178. doi:10.1055/a-2230-8540 PMID: 38292590 PMID: PMC10827475

eP531 Endoscopic Resection of a Gastric Metastasis From Malignant Melanoma: A Case Report

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DOI 10.1055/s-0046-1821858

Introduction Malignant melanoma is one of the most aggressive cancers. It primarily affects the skin and has a strong metastatic potential, involving multiple organs and systems such as the gastrointestinal tract. Within the digestive system, the small intestine is the most common metastatic site, followed by the stomach, although overall incidence remains low [1–4].

Case Report A 68-year-old male, active smoker, with a history of nodular melanoma on the back (Breslow index 3.7 mm and Clark level III), resected with clear margins and no evidence of malignancy in three right axillary sentinel lymph nodes. He later developed pulmonary metastases that were treated with anti-PD1 therapy, achieving complete radiological response. A follow-up abdominal CT scan revealed an apparent polypoid mural thickening with lobulated contours in the gastric antrum, measuring approximately 5 cm in its longest axis. Upper endoscopy with biopsy was performed, and histology confirmed metastatic melanoma. A subsequent endoscopic reassessment demonstrated a pedunculated lesion, which was completely resected and removed endoscopically (in fragments).

Discussion The gastrointestinal tract is among the most frequent sites of melanoma metastasis. The most affected organs are the small intestine (51–71 %), followed by the stomach (27 %), colon (22 %), and esophagus (5 %). Clinical symptoms of gastric melanoma are nonspecific and, in many cases—like our patient—may be absent. Most common presenting features include abdominal pain, gastrointestinal bleeding, nausea, vomiting, anemia, and weight loss. In this case, routine imaging surveillance allowed early detection and treatment of the lesion. It is estimated that up to 60 % of patients who die from melanoma have gastrointestinal metastases; however, only about 4.4 % are diagnosed before death due to the frequent absence of symptoms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Farshad S, Keeney S, Halalau A, Ghaith G. A case of gastric metastatic melanoma 15 years after the initial diagnosis of cutaneous melanoma. *Case Rep Gastrointest Med* 2018; 2018:7684964
- [2] Serrao EM, Lo Mastro A, O'Hare N et al. The different faces of metastatic melanoma in the gastrointestinal tract: imaging review. *Insights Imaging* 2022; 13 (1): 108
- [3] Kohoutova D, Kluska J, Grolich T et al. Malignant melanoma of the gastrointestinal tract. *World J Gastroenterol* 2021; 27 (48): 8282–8294
- [4] Wong K, Serafi SW, Bhatia AS, Ibarra I, Allen EA. Melanoma with gastric metastases. *J Community Hosp Intern Med Perspect* 2016; 6 (4): 31972

eP532 Locally Advanced Rectal Cancer and Total Neoadjuvant Therapy: The Endoscopist's Perspective

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DOI 10.1055/s-0046-1821859

Aims Total neoadjuvant therapy (TNT) has emerged as the standard approach for locally advanced rectal cancer (LARC), aiming to improve tumor downstaging and organ preservation. Post-TNT evaluation is crucial to identify patients eligible for a non-operative “watch and wait” strategy. This study aimed to analyze the clinical, endoscopic, and radiologic response assessment of patients with LARC who underwent TNT.

Methods This retrospective observational study included patients who received TNT between July 2023 and June 2025 at the Gastroenterology Department of Theageneio Anticancer Hospital. Demographic, clinical, endoscopic, and imaging data were collected. Endoscopic response was categorized as complete, near complete or incomplete based on mucosal appearance (flat white scar, telangiectasia, mucosal nodularity, persistent erythema or residual ulceration). MRI response was assessed in parallel, and management outcomes (surgical vs. non-surgical) were recorded. Follow-up included endoscopic and imaging surveillance every 3–6 months. Statistically comparisons were performed using Fisher's exact, Student's t-, or Mann–Whitney U tests, as appropriate.

Results Twenty patients were included, mean age of 68.65 ± 8.05 years, and 11 (55 %) were male. Presenting symptoms were rectal bleeding (55 %), pseudo-diarrhea (15 %), perianal pain (10 %), constipation (10 %), anemia (10 %) and tenesmus (5 %). Baseline MRI staging: stage IIIB in 60 %, stage IIA in 15 %, and stage IIIC in 25 %. After TNT, complete endoscopic response was observed in 5/20 patients (25 %), characterized by a flat white scar (4/5) or telangiectasia (1/5). Near complete response was noted in 1/20 (5 %) with mild erythema and small mucosal nodules, while 14/20 (70 %) showed no endoscopic response. MRI assessment demonstrated complete response in complete endoscopic responders, yielding a 100 % concordance rate between MRI and endoscopy, these five patients were managed non-operatively under a watch-and-wait protocol, with a median follow-up of 21 months (range 10–27). Rectal bleeding was significantly more frequent in the conservative group (5/5, 100 %, p = 0.038) than in the surgical group (6/15, 40 %). All other variables did not differ between groups. During follow-up, one patient developed local recurrence and underwent surgical resection. Fourteen patients (75 %) proceeded to surgery, with one specimen showing no residual dysplasia. whereas one patient refused surgery for personal reasons. At last follow-up, all patients were alive.

Conclusions Endoscopy is a valuable tool for assessing treatment response in patients with LARC undergoing TNT. Integrating systematic endoscopic evaluation into TNT response protocols may improve patient selection for organ preservation and reduce unnecessary surgery, as a substantial proportion of patients (25 % in our cohort) achieve complete clinical response and can safely avoid operative management through structured endoscopic and radiologic surveillance. Familiarity of endoscopists with post-TNT findings is essential for accurate evaluation, multidisciplinary decision-making, and implementation of “watch and wait” strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP533 Predicting Post-Clearance Stone Events After ERCP: A Simple Real-Life Risk Model

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DOI 10.1055/s-0046-1821860

Aims Despite technically successful ERCP, a subset of patients re-presents with stone-related events requiring repeat interventions. Current ESGE guidance acknowledges recurrence but offers no practical strategy to identify high-risk individuals. This study aimed to determine real-life predictors of post-clearance events and develop a simple, immediately applicable risk model.

Methods Consecutive patients with confirmed choledocholithiasis undergoing therapeutic ERCP were retrospectively analyzed. Only procedures with strict verification of complete clearance (stone extraction and clean cholangiogram) were included. Stone-related reintervention was defined as any repeat ERCP for residual or recurrent stones. Clinical, radiologic, and endoscopic variables were assessed. A concise 3-item risk score was constructed based on the strongest predictors.

Results Among 494 patients with complete duct clearance, 33 (6.7%) required stone-related reintervention. Stone burden was the dominant determinant: empiement (≥ 3 stones) increased risk nearly fourfold (12.4% vs 3.7%; OR 3.7). Papillary anatomical difficulty (bombante, deformed, or peri-diverticular papilla) showed a synergistic impact. In contrast, stone size ≥ 15 mm, CBD dilation ≥ 12 mm, and prior cholecystectomy were not independent predictors. The resulting 3-item Stone-Risk Score (empiement + papillary difficulty + pre-ERCP drainage) stratified risk from 2.1% (score 0) to 14.8% (score ≥ 2), with meaningful discrimination (AUC ≈ 0.72).

Conclusions Post-clearance stone events are predictable rather than random. Stone burden and papillary complexity—rather than stone size or duct dilation—drive recurrence risk. This pragmatic model provides immediate clinical value and can refine post-ERCP follow-up strategies. These findings highlight a gap in current ESGE recommendations and justify targeted surveillance for high-risk profiles.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP534 Prevalence of post-traumatic stress symptoms and risk factors among advanced endoscopists: the second victim phenomenon

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Aims Therapeutic endoscopy has evolved significantly, with increasingly complex procedures carrying higher complication risks. While severe adverse events profoundly impact patients (first victims), their psychological effect on endoscopists (second victims) remains understudied in our setting. This research assessed the prevalence of post-traumatic stress symptoms (PTSS) and associated risk factors among advanced endoscopists in Spain.

Methods A nationwide cross-sectional study was conducted among Spanish Society of Digestive Endoscopy (SEED) members. Using the validated PCL-5 questionnaire (DSM-5 criteria), we evaluated PTSS prevalence and severity.

Data from 85 complete responses (out of 100 collected; 15 excluded for incompleteness) were analyzed using SPSS 31.

Results Participants' mean age was 46.34 years (SD 9.96), with 55.29% male representation. PTSD prevalence was 12.94% (n = 11), while 31.76% (n = 27) reported significant symptoms without meeting full diagnostic criteria. Among symptomatic participants, symptom severity distribution was: mild (18.17%; n = 21), moderate (12.94%; n = 11), and severe (8.23%; n = 7). Univariate analysis identified performing ≥ 12 procedures per endoscopy list as a potential risk factor (p = 0.04), though this association did not persist in multivariate analysis. No significant associations were found with age, sex, or years of experience.

Conclusions A non-negligible prevalence of PTSD was identified among advanced endoscopists in our setting. These findings highlight the need to recognise the endoscopist as a potential second victim and to promote institutional strategies for psychological support and prevention. In a field where technical precision is essential, our results emphasise that the emotional well-being of the endoscopist is also a critical component of patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP535 Predictors of Technical Failure During ERCP for Malignant Biliary Strictures

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DOI 10.1055/s-0046-1821862

Aims Technical failure in ERCP for malignant biliary strictures remains a major determinant of patient outcome and procedural quality. This study aimed to identify robust, real-life predictors of technical failure using universally available anatomical and procedural variables, with the goal of guiding strategy in high-risk malignant obstruction.

Methods All index ERCPs performed for malignant biliary obstruction (2017–2023) were retrospectively reviewed. Technical failure was defined as the inability to achieve selective biliary cannulation or complete intended drainage. Candidate predictors included stricture level, intrahepatic duct dilation, completeness of cholangiogram, baseline bilirubin, and papillary anatomy. Independent predictors were identified using multivariable logistic regression.

Results Among 510 patients (mean age 66 ± 13 years; 51% male), technical success was achieved in 94.8%. Failures occurred predominantly in proximal or extensive hilar strictures. Incomplete cholangiogram was the strongest predictor of technical failure (adjusted OR ≈ 7.5), followed by absence of intrahepatic duct dilation (adjusted OR ≈ 5.8). Markedly elevated baseline bilirubin (> 300 $\mu\text{mol/L}$) was also associated with higher failure rates. Papillary distortion showed a weaker but consistent association.

Conclusions Technical failure during malignant ERCP follows a reproducible anatomical pattern rather than procedural variability. Three high-risk features—Incomplete cholangiogram, non-dilated ducts, and severe cholestasis—characterize nearly all failures and should prompt upfront adaptation of drainage strategy. Anticipating rather than managing failure aligns directly with ESGE quality principles and enhances the safety and effectiveness of malignant biliary drainage in routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP536 Comparative Efficacy and Safety of Remimazolam Versus Propofol for Sedation in Gastrointestinal Endoscopy: A Systematic Review and Meta-Analysis of 37 Randomized Controlled Trials

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Aims The aim of this study was to systematically compare the efficacy and safety of remimazolam versus propofol for sedation in gastrointestinal endoscopic procedures by synthesizing evidence from randomized controlled trials. Specifically, the study sought to evaluate differences in induction and recovery profiles, procedural performance, patient and endoscopist satisfaction, and the incidence of adverse cardiopulmonary events.

Methods A comprehensive search of PubMed, Web of Science, Scopus, Cochrane, and Embase was conducted from inception to January 2025. Randomized controlled trials comparing remimazolam and propofol in adult patients undergoing endoscopy were included. Primary outcomes included induction time, total sedation time, sedation success, procedure time, recovery parameters, and satisfaction. Safety outcomes included hypotension, bradycardia, hypoxemia, respiratory depression, postoperative nausea/vomiting, injection pain, and body movement. Random-effects models, subgroup analyses, sensitivity analyses, and meta-regression were performed.

Results From 2,304 records, 37 randomized controlled trials involving 8,533 patients met inclusion criteria. All studies were conducted in China or South Korea between 2020–2024. Risk of bias assessment showed 35 studies at low risk, one with some concerns, and one at high risk.

Induction time showed no overall difference between remimazolam and propofol (MD 0.13 s; 95% CI – 0.05 to 0.31), though subgroup analysis showed significantly longer induction with remimazolam when MOAA/S = 1. Remimazolam was associated with shorter total sedation time (MD – 1.84 min; 95% CI – 3.07 to – 0.61). Sedation success, procedure time, time to discharge, time to recovery, awake time, and endoscopist satisfaction showed no significant differences between drugs. Patient satisfaction slightly favored remimazolam (RR 1.06; 95% CI 1.00–1.11).

Safety outcomes consistently favored remimazolam, with significantly lower risks of hypotension (RR 0.42), bradycardia (RR 0.42), respiratory depression (RR 0.37), hypoxemia (RR 0.42), and injection pain (RR 0.11). No significant differences were found for postoperative nausea/vomiting or body movement. Subgroup analyses across gastroscopy, colonoscopy, and ERCP highlighted procedure-specific differences, with remimazolam demonstrating longer induction time in gastroscopy and colonoscopy, but comparable performance in ERCP. Meta-regression showed age significantly modified induction time ($P = 0.0239$) but did not influence other outcomes.

Conclusions Remimazolam provides a markedly safer sedation profile than propofol for GI endoscopy, with significantly reduced cardiopulmonary adverse events and comparable efficacy across most clinical endpoints. Although induction may be slower, especially in certain procedures, remimazolam's overall performance supports its integration into routine endoscopic sedation practice. Larger multicenter trials with standardized MOAA/S criteria and more diverse populations are needed to refine clinical recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose. Noha Hammad, MD, earned her medical degree from Port Said University, Egypt. She is an active clinical researcher with growing expertise in gastroin-

testinal endoscopy and procedural sedation, with a particular focus on the comparative safety and efficacy of emerging sedative agents. Dr. Hammad is a trainee member of the American Society for Preventive Cardiology and a member of both the Medical Research Group of Egypt and Negida Academy (USA). She has authored multiple peer-reviewed publications and has presented her work at national and international conferences. Her current research interests include endoscopic sedation strategies, optimization of patient safety during GI procedures, and evidence-based evaluation of novel anesthetic and analgesic agents.

eP537 Predictors and Clinical Impact of Post-ERCP Complications in Malignant Biliary Strictures

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DOI 10.1055/s-0046-1821864

Aims Complications after ERCP for malignant biliary obstruction remain an important determinant of safety and procedural quality. This study assessed the incidence, spectrum, and predictors of post-ERCP adverse events using universally available clinical and procedural variables.

Methods All ERCPs for malignant biliary strictures (2017–2023) were retrospectively reviewed. Adverse events were defined according to ESGE criteria (pancreatitis, bleeding, perforation, cholangitis). Candidate predictors included sphincterotomy, papillary morphology, intrahepatic duct dilatation, completeness of cholangiogram, and procedural success. Associations were evaluated using univariate and multivariable logistic regression.

Results Among 510 patients (mean age 66 ± 13 years; 51% male), overall complication rate was 9.8%. Pancreatitis was most frequent (5.6%), followed by bleeding (2.5%), cholangitis (1.3%), and perforation (0.4%). Minimal functional sphincterotomy showed a higher pancreatitis rate numerically (7.4% vs 4.1%) but without statistical significance. Abnormal papillary anatomy doubled overall complication risk (10.8% vs 4.2%, $p = 0.02$). Absence of intrahepatic duct dilatation and incomplete cholangiogram were also associated with increased complications (14.3% vs 7.5%, $p = 0.03$). On multivariable analysis, non-dilated ducts (adjusted OR 2.9, 95% CI 1.1–7.6) remained the only independent predictor. No procedure-related mortality occurred.

Conclusions Post-ERCP complications in malignant strictures follow reproducible patterns rather than patient fragility. Papillary anatomy, ductal architecture, and opacification strategy—not the underlying malignancy—drive risk. Identifying non-dilated ducts and avoiding excessive contrast injection are key to improving safety. Tailored technique and anticipatory strategy align directly with ESGE quality principles and enhance the safety of malignant biliary drainage in routine practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP538 Stenosing Esophageal Involvement in Acquired Epidermolysis Bullosa

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Introduction Acquired epidermolysis bullosa (AEB) is a rare autoimmune sub-epidermal blistering disorder mediated by autoantibodies against type VII collagen. Mucosal lesions are frequent, but esophageal involvement remains exceptional. When present, it may cause progressive dysphagia linked to cicatricial strictures, with major nutritional impact and impaired quality of life.

Case Report A 50-year-old man presented with bullous and post-bullous lesions on friction areas, associated with atrophic scarring and milia. Oral and nasal mucosal erosions were noted, with an 8-kg weight loss. Histopathology showed a subepidermal blister; direct immunofluorescence revealed linear IgG/C3 at the dermo-epidermal junction. ELISA demonstrated markedly elevated anti-type VII collagen antibodies and marginal anti-envoplakin positivity. Corticosteroids (0.5 mg/kg/day) were ineffective. Dapsone (100 mg/day) produced partial cutaneous improvement only. Endoscopy revealed a 7-cm circumferential mid-esophageal ulceration. Cyclosporine (3 mg/kg/day) induced transient improvement followed by progressive dysphagia. Repeat endoscopy showed an ulcerated cervical stricture with extensive mucosal detachment. Balloon dilation combined with high-dose corticosteroids and IVIG restored swallowing, improved weight, and prevented recurrence despite persistent mucosal fragility. Rituximab was subsequently initiated [1–3].

Discussion Esophageal involvement in AEB, although rare, represents a severe mucosal manifestation. Blistering, ulceration, and fibrotic strictures may occur, and endoscopy—while essential—is technically hazardous due to high mucosal fragility. Conventional therapies frequently fail to control severe mucosal disease. Endoscopic dilation is often required but carries procedural risks. Recent literature supports IVIG and rituximab as effective options in severe, refractory AEB, including stenosing esophageal forms, with favorable tolerance profiles.

Conclusion Esophageal AEB necessitates individualized, multidisciplinary management. Biologic therapies offer promising perspectives for refractory and stenosing mucosal disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Schmidt E., Zillikens D. Meta-analysis of the clinical and immunopathological characteristics and treatment outcomes in epidermolysis bullosa acquisita patients. *Orphanet Journal of Rare Diseases* 2018; 13: 153
- [2] Kim M., Craig P., Murrell D. A case report of the use of rituximab and the Epidermolysis Bullosa Disease Activity Scoring Index (EBDASI) in a patient with epidermolysis bullosa acquisita with extensive esophageal involvement. *Acta Dermatovenereologica Croatica* 2018; 26 (4): 323–328
- [3] Figueredo C., Boroda K., Hertan H. Epidermolysis bullosa acquisita: an uncommon cause of esophageal stricture. *Oxford Medical Case Reports*. 2021; 2021 (4): omab010

eP539 Recurrent Lower Gastrointestinal Hemorrhage Due to Post-Embolization Ischemic Injury

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DOI 10.1055/s-0046-1821866

Introduction Endovascular angiography (EA) and transcatheter arterial embolization (TAE) are diagnostic and therapeutic procedures indicated in the management of selected gastrointestinal bleedings, particularly in hemodynamically unstable patients or when endoscopy is ineffective or unable to localize the bleeding source. Although it is a minimally invasive and generally safe technique, it is not exempt from complications, including intestinal ischemia.

Case Report A 78-year-old man with a history of ischemic heart disease was admitted to the hospital due to episodes of hematochezia without initial analytical impact. An abdominal CT scan revealed only diverticulosis. During hospitalization, rectal bleeding recurred with hemodynamic instability and anemia, requiring transfusion of up to eight red blood cell units. Upper endoscopy

showed no abnormalities, and colonoscopy revealed abundant fresh blood without an identifiable source. CT angiography demonstrated an arterial bleeding focus in the hepatic flexure. Arteriography with embolization of three arterial branches from the ascending branch of the right colic artery was performed, achieving a significant reduction in blood flow. After 48 hours, new bleeding and anemia occurred. Repeat colonoscopy identified a pale mucosa with a fibrin-covered ulcer located at the hepatic flexure, likely secondary to post-embolization ischemia. The patient improved with conservative management, achieving clinical and analytical stability, with no further bleeding episodes [1–3].

Discussion Transcatheter arterial embolization is an effective and minimally invasive therapy for lower gastrointestinal bleeding, especially when endoscopic management fails. Although modern super-selective techniques have reduced complications, intestinal ischemia remains the main risk. A decrease in local blood flow may lead to mucosal damage, manifesting as ulcers or, rarely, necrosis or perforation. The hepatic flexure is particularly vulnerable due to its watershed vascular supply, which explains the ischemic ulcer observed in this patient. Early endoscopic reassessment is essential when rebleeding occurs, allowing prompt diagnosis and conservative management in most cases. This case highlights the importance of clinical vigilance after embolization to ensure timely recognition of ischemic injury and prevent severe outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nykänen T, Kiviniemi H, Kauhanen S et al. Transcatheter arterial embolization in lower gastrointestinal bleeding: long-term follow-up from a high-volume centre. *J Obstet Gynaecol Sci*. 2018; 109 (1): 47–53
- [2] Chevallier O, Comby PO, Guillen K et al. Efficacy, safety and outcomes of transcatheter arterial embolization with N-butyl cyanoacrylate glue for non-variceal gastrointestinal bleeding: a systematic review and meta-analysis. *Diagn Interv Imaging* 2021; 102 (5): 479–487
- [3] Lee S, Hong I-K, Park D et al. Clinical outcomes and prognostic factors predicting mortality in non-variceal gastrointestinal bleeding treated with transarterial embolization. *J Clin Med* 2022; 11 (23): 7010

eP540 Plastic Stents for Malignant Biliary Obstruction: High Technical Success and Reliable Clinical Outcomes in a Resource-Limited Center

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DOI 10.1055/s-0046-1821867

Aims In settings where metallic stents are rarely available, plastic stents remain widely used for malignant biliary obstruction. This study evaluated real-life technical and clinical outcomes of plastic stent drainage in a Moroccan tertiary center and assessed predictors of early reintervention.

Methods All index ERCPs with plastic stent placement for malignant biliary strictures (2017–2023) were retrospectively reviewed. Technical success was defined as successful cannulation and stent deployment across the stricture with adequate drainage. Clinical success at one month required symptomatic improvement and $\geq 50\%$ bilirubin reduction when available. Data included demographics, stricture level, papillary anatomy, and prior drainage. Outcomes were technical/clinical success, early ERCP-related adverse events, and need for repeat ERCP due to stent dysfunction. Logistic regression explored predictors of reintervention.

Results A total of 510 patients were analyzed (mean age 66 ± 13 years; 51 % male). Technical success reached 99 %, with effective drainage in nearly all cases. Clinical success at one month was 80 %, consistent with ESGE benchmarks. Early adverse events occurred in 8 %, mainly mild pancreatitis (5 %) and limited post-sphincterotomy bleeding (2 %); perforations were rare (< 1 %). Repeat ERCP was required in 11 %, predominantly due to stent occlusion or migration. No independent predictors of early reintervention were identified

Conclusions In the absence of metallic stents, plastic stents achieve excellent technical success, reliable early clinical improvement, and an acceptable safety profile in malignant biliary obstruction. These real-life results highlight that high-quality biliary drainage can be delivered in resource-limited centers while aligning with ESGE quality indicators. Plastic stents remain a pragmatic, cost-effective solution when SEMS availability is restricted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP541 “Whipple’s Disease: Capsule Endoscopy as a Non-Invasive Diagnostic Tool”

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DOI 10.1055/s-0046-1821868

Introduction: Whipple’s disease is a rare, chronic multisystemic infection caused by *Tropheryma whipplei*, a Gram-positive bacillus. Its low prevalence and non-specific presentation lead to diagnostic delay, although early treatment is essential as the disease can be fatal.

Case Report: A 40-year-old man with no relevant medical history was admitted to the rheumatology department for axial and peripheral arthralgias of 3-year duration. He developed acute-onset diarrhea lasting less than one week, without pathological products. He reported constitutional symptoms, including 5-kg weight loss over the previous year, asthenia, fever, and cervical lymphadenopathy. Laboratory tests indicated malabsorption with iron-deficiency anemia, hypoproteinemia, and low vitamin D, along with elevated acute-phase reactants. Upper and lower endoscopy revealed only mild, non-specific erythema in the duodenum and distal ileum. Capsule endoscopy (CE) demonstrated marked villous atrophy, multiple ulcerations, and whitish infiltrates—more prominent in the proximal small bowel—suggestive of lymphangiectasia. Terminal ileum biopsies showed periodic acid–Schiff (PAS)-positive foamy macrophages. Based on CE findings and histology, treatment with intravenous ceftriaxone 2 g daily for 14 days was initiated. Extraintestinal involvement was excluded by transthoracic echocardiography and cerebrospinal fluid polymerase chain reaction (PCR). Stool PCR for *T. whipplei* was positive. The patient then received oral trimethoprim–sulfamethoxazole 800/160 mg every 12 hours for one year, with significant clinical improvement.

Discussion: Whipple’s disease is caused by *T. whipplei*, a ubiquitous actinomycete with an incidence of 1–3 cases per 1,000,000, occurring mainly in predisposed individuals. Its clinical course is typically long-standing and non-specific, mimicking several rheumatologic conditions. The onset of gastrointestinal symptoms increases diagnostic specificity. Neurological involvement is associated with poorer prognosis. Diagnosis relies on identifying PAS-positive foamy macrophages in affected tissue or detecting the microorganism by PCR in stool, urine, or cerebrospinal fluid. The intestinal mucosa may appear normal on endoscopy in up to 30 % of cases, and PCR can yield false positives. Immunohistochemistry is not universally available. In this case, CE was decisive in guiding the diagnosis by identifying characteristic patterns—villous atrophy, edema, lymphangiectasia, and denuded mucosa with petechiae—previously reported in other cases. CE also avoided the need for deep enteroscopy. Antibiotic therapy leads to clinical improvement within weeks, but long-term follow-up is required to prevent relapse. CE may represent a valuable non-invasive tool for disease monitoring. Given the limited literature, additional CE-based case reports may improve recognition of this rare entity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP542 ERCPs in Malignant Hilar Biliary Obstruction – 10 years' experience from a tertiary centre

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DOI 10.1055/s-0046-1821869

Aims Malignant Hilar Biliary Obstruction (MHBO) is caused by a variety of malignancies and patients often present with jaundice, necessitating biliary drainage. Endoscopic retrograde cholangiopancreatography (ERCP) is typically performed however this can be technically challenging in MHBO. We aim to present the characteristics and outcomes of patients who underwent ERCP for MHBO at Leeds Teaching Hospital Trust, a tertiary institution.

Methods Patients were identified from a prospectively maintained database of patients who underwent ERCP between November 2014 and December 2023. All those diagnosed with MHBO during this period were included. Retrospective analysis of electronic patient records was performed.

Results 228 patients underwent ERCP for MHBO. 51.8 % (n = 118) were male and 48.2 % (n = 110) were female. The mean age was 68 years old (SD ± 13.2), and the median follow-up period was 89.5 days (IQR 38.5–248.75). The commonest aetiology was cholangiocarcinoma in 58.0 % of patients (n = 130), followed by colorectal metastasis in 12.1 % (n = 27), gallbladder cancer in 8.0 % (n = 18) and hepatocellular carcinoma in 4.9 % (n = 11).

Technical success of ERCP, defined as successful placement of stents into the intended ducts, was achieved in 82.1 % of patients (n = 184); 68.5 % (n = 126) of which had metal stents and 28.8 % (n = 53) had plastic stents inserted. 5 patients had both plastic and metal stents inserted. Of the 40 patients who did not achieve technical success, 23 underwent further biliary intervention within 30 days (17 percutaneous transhepatic cholangiograms (PTC) and 6 repeat ERCP).

Clinical success, defined as reduction of pre-procedural bilirubin to ≤ 50 % within 30 days, was achieved in 57.5 % of patients (n = 107); 68.2 % (n = 73) of which had metal stents and 28.0 % (n = 30) had plastic stents inserted. 4 patients had both plastic and metal stents inserted. Of the 79 who did not achieve clinical success, 30 patients underwent further biliary re-intervention within 30 days (16 repeat ERCP and 14 PTC).

The post-procedural adverse event rate was 35.6 % (n = 79). Cholangitis occurred in 23.2 % (n = 51), pancreatitis in 10.5 % (n = 23), perforation in 0.9 % (n = 2) and liver abscess in 0.45 % (n = 1). 31 patients had multiple adverse events. The 30-day mortality rate was 16.1 % (n = 36); 21 patients died due to disease progression and 10 due to post-operative complications, of which cholangitis (n = 6) was most frequent.

Of the 94 patients who were deemed technically surgically operable at time of index ERCP, 29.8 % (n = 28) went on to have surgical intervention, with 19.2 % (n = 18) having successful curative resection. Surgical resection did not occur in 80.8 % of patients due to inoperable disease identified during work up (n = 34), poor surgical fitness (n = 19), disease progression (n = 10), perioperative finding of metastatic disease (n = 9), patient declined (n = 1) and failed portal vein embolization (n = 1). The median time from index ERCP to surgical resection was 76 days (IQR 42–137).

Conclusions Cholangiocarcinoma represented the majority of patients with MHBO requiring ERCP. Post ERCP adverse events occurred in just over a third of patients, although 30-day mortality was largely due to disease progression, indicating a need for better patient selection for a high-risk intervention. Only a small proportion of patients progressed to surgical resection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP543 Beyond Sedation: Can Virtual Reality Make Colonoscopy More Comfortable?

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DOI 10.1055/s-0046-1821870

Aims In many low- and middle-resource settings, unsedated colonoscopy remains widely practiced due to limited access to anesthetic support, cost constraints, and overloaded endoscopy units. Although safe and feasible, the procedure is often perceived as uncomfortable and anxiety-provoking, which may reduce patient adherence to surveillance programs. Virtual reality (VR) has emerged as a simple, low-cost, and scalable non-pharmacological tool that may enhance patient experience during endoscopic procedures. The aim of our study is to assess whether VR distraction can improve comfort, reduce pain and anxiety, and increase patient satisfaction during unsedated colonoscopy.

Methods Adult patients undergoing elective unsedated colonoscopy at our department, were invited to participate. Participants were randomized either to receive VR immersion during the procedure or to standard care. A low-cost VR headset displaying 20-minute immersive tropical landscape sequences with low-volume audio was used. Exclusion criteria included cognitive impairment, visual/hearing deficits, balance disorders, epilepsy, or limited language abilities. Outcomes were evaluated at four time points using validated tools: Anxiety: State-Trait Anxiety Inventory (STAI), pre/post – Pain: Numeric Rating Scale (NRS) – Comfort: Gloucester 5-point scale- Satisfaction: Net Promoter Score (NPS) and willingness-to-return Procedural metrics included cecal intubation rate, cecal intubation time, and total procedure duration.

Results Of 40 invited patients, 32 consented; 24 were analyzed (VR: n = 12; control: n = 12). Baseline characteristics were similar between groups.

Technical success: 100 % cecal intubation in both groups.

Cecal intubation time: shorter in the VR group (median 12 min vs 15 min), although not statistically significant.

Pain: lower expression in VR patients, without significant difference.

Comfort: higher in the VR group, with 64 % reporting good comfort vs 42 % in controls.

Anxiety: significantly reduced after the procedure in VR patients compared with controls.

Satisfaction: higher with VR (NPS 85.7 % vs 50 %). No VR-related adverse events occurred, and all VR participants completed the procedure wearing the headset and rated the experience as positive.

Conclusions In a real-world setting where unsedated colonoscopy remains common due to resource limitations, VR proves to be a safe, inexpensive, and highly acceptable tool to improve patient comfort and reduce anxiety. While this pilot experience does not compromise procedural performance, it offers an innovative, scalable strategy to enhance patient experience and could support broader adoption of unsedated colonoscopy in similar healthcare systems. Larger studies are warranted to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP544 Anti-Reflux Mucosal Ablation Extended to Z-Line (ARMA-Z) for Gastroesophageal Reflux Disease (GERD): Preliminary Results from the First International Experience

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DOI 10.1055/s-0046-1821871

Aims Minimally invasive endoscopic techniques have been proposed in recent years for non-medical symptom control in patients with gastroesophageal re-

flux disease (GERD). Anti-reflux mucosal resection (ARMS) and ablation (ARMA) involve resection or ablation of the mucosa at the cardia to induce scar retraction at the esophagogastric junction (EGJ), with the aim of tightening the flap valve. Various technical variations have been described to optimize the technique. To date, their efficacy has been demonstrated in numerous reports and a few meta-analyses.

Methods Between March 2023 and November 2025, patients on long-term proton pump inhibitor (PPI) therapy for diagnosed GERD were enrolled at our institution. The technique consists in ablation of the cardiac mucosa for 3 cm on the gastric side and along the Z-line, sparing 25 % of the mucosa at the greater curvature. We chose to include the Z-line in the ablation area (ARMA-Z), hypothesizing that this approach may reduce acid sensitivity by improving mucosal integrity and restoring the impaired esophageal barrier function in GERD. Ablation was performed in the retroflex position using an Argon Plasma Coagulation probe (Forced APC, effect 2, 40W). A submucosal bleb was first created by injecting saline mixed with methylene blue along the EGJ. Clinical and endoscopic data were collected at baseline and at follow-up (3, 6, and 12 months). The primary outcome was subjective symptom improvement; secondary outcomes included changes in flap valve grade and rates of PPI discontinuation.

Results A total of 15 patients underwent ARMA-Z (8 women, mean age 57 ± 4.4 years). All had a long history of typical symptoms and 7 also reported pharyngo-laryngeal symptoms. All showed positive 24-hour pH-impedance monitoring with significant symptom correlation. High-resolution manometry ruled out major motility disorders. All patients had experienced satisfactory symptom control on standard-dose PPIs but relapsed rapidly after withdrawal (PPI-dependent). One patient experienced medication-related side effects. Technical success was achieved in 100 % of cases, with no immediate adverse events. Follow-up data are available for 12 patients. All patients reported symptomatic improvement at 3 months and all subsequent follow-ups, with 58 % achieving complete remission. At 6 months, 8 patients (67 %) discontinued PPI therapy and 1 (8 %) reduced the dose; the remaining 25 % continued on standard dose. Among patients who discontinued PPI, 75 % remained off medication at 12 months follow-up, while 25 % required short courses of therapy for occasional symptoms. Upper endoscopy confirmed improvement in flap valve morphology, with all patients achieving Hill grade 1. No transient stenosis or significant dysphagia was observed.

Conclusions Our preliminary findings demonstrate promising results in GERD symptom control through mechanical strengthening of the flap valve and desensitization of the Z-line. Compared with similar techniques, ARMA-Z appears to have a safer profile, is easier to perform, and is cost-effective. If longer follow-up and objective testing in larger cohort studies confirm these results, ARMA-Z could become a game changer for GERD patients with persistent troublesome symptoms requiring long-term medical therapy or those experiencing adverse drug reactions.

Conflicts of Interest No

eP545 Endoscopic Plastic Multistenting for Post-Transplant Biliary Anastomotic Strictures: Eight-Year Incidence, Outcomes, and Predictors of Endoscopic Failure in a High-Volume Center

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DOI 10.1055/s-0046-1821872

Aims Biliary anastomotic strictures (BAS) are the most common biliary complication following orthotopic liver transplantation (OLT) with duct-to-duct anastomosis, occurring in up to 25 % of cases [1]. Endoscopic plastic multistenting (EPM), with [2] or without [3] previous stent exchange, is the first-line treatment for post-OLT BAS [4]. While most patients respond favorably, a significant proportion fail EPM and require percutaneous transhepatic biliary drainage (PTBD) or surgical revision [5]. This study aims to determine the incidence of BAS in a high-volume transplant center, the effectiveness and safety of EPM without stent exchange and of PTBD in ERCP-failure patients.

Methods This retrospective single-center cohort study included all adult patients who developed BAS after OLT and completed a 6-months biochemical and radiological follow-up after completion of the EPM or PTBD treatment protocol. Clinical, biochemical, radiological, and procedural data were systematically collected. The EPM group included patients who completed ERCP treatment protocol as previously described by Tarantino et al., i.e. ERCP scheduled every 3 months, up to 1 year, with endoscopic dilation plus sequential plastic stents across the narrowing without removing the previous stents. The PTBD group included any ERCP failure patients receiving a 2-step PTBD with metal stenting to be removed 4–6 later via ERCP. The primary endpoint was the clinical success defined by biochemical and radiological resolution at six months follow-up. EPM or PTBD with a clear radiological success in patients with biochemical alterations secondary to chronic rejection or hepatocarcinoma recurrence were classified clinically successful on a case-by-case basis with a multidisciplinary judgment.

Results Between January 2017 and April 2024, 43 BAS were identified among 348 OLT, corresponding to an overall incidence of 12.4 %.

Among these, 33 entered the EPM group and 10 the PTBD group. Baseline characteristics were comparable in the EPM and the PTBD group: median age at first ERCP 58.9 years (52.6–63.6) vs 59.1 years (57.2–62.8), male sex 79 % vs 60 %, Kehr T-tube placement 48 % vs 30 %, respectively.

Pre-procedural imaging identified a clear BAS in 73 % of cases within the EPM group and in all PTBD cases ($p = 0.089$); consistently, upstream biliary dilatation was slightly more frequent in the PTBD cohort (100 % vs 67 %, $p = 0.043$). Biliary stones or sludge were found in 15 % vs 10 % ($p = 1.00$). Median follow-up following EPM and PTBD was 21.6 and 34.6 months ($p = 0.24$).

In the EPM group, the biochemical, radiological and clinical success at 6-months follow-up was achieved in 93.5 %, 96.0 %, and 90.9 % respectively. Only one late BAS recurrence (3.0 %) occurred 4.2 months after a successful EPM and was conservatively treated with additional ERCP plus balloon dilation. Adverse events included stent migration in 8 patients (24 %), cholangitis in 9 (27 %), fever in 10 (30 %), and transient abdominal pain in 7 (21 %).

In the PTBD group, biochemical, radiological and clinical success at 6-month follow-up were achieved in 20.0 %, 30.0 % and 30.0 % of patients, respectively, all markedly inferior to the ERCP group ($p < 0.01$). BAS recurrence occurred in 2/10 PTBD patients (20.0 %) compared with 1/33 in the ERCP cohort (3.0 %). In the PTBD group, 3 patients (30 %) ultimately required re-transplant and 2 (20 %) underwent hepaticojejunostomy because of persistent or recurrent biliary complications.

Conclusions In this eight-year experience, the incidence of BAS after OLT was 12.4 %, consistent with international benchmarks. EPM has excellent effectiveness and long-term outcomes, with > 90 % clinical success and sporadic late recurrence. PTBD was a rescue treatment to prevent surgical anastomotic revision or re-transplant successful only in a proportion of patients with failed EPM, reflecting the higher intrinsic complexity of ERCP-refractory post-OLT BAS. These findings confirm the strategy of sequential EPM without stent exchange as a robust first-line therapy and highlight the importance of early

identification of ERCP-failure to optimize therapeutic sequencing in post-OLT biliary complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaldas F.M., Korayem I.M., Russell T.A., Agopian V.G., Aziz A., DiNorcia J., Busuttill R.W. 2019; Assessment of anastomotic biliary complications in adult patients undergoing high-acuity liver transplant. *JAMA surgery* 154 (5): 431–439
- [2] Dumonceau J.M., Tringali A., Papanikolaou I.S., Blero D., Mangiavillano B., Schmidt A., van Hooft J.E. 2018; Endoscopic biliary stenting: indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline—Updated October 2017. *Endoscopy* 50 (9): 910–930
- [3] Tarantino I., Amata M., Cicchese N., Ligresti D., Barresi L., Granata A., Traina M. 2019; Sequential multistenting protocol in biliary stenosis after liver transplantation: a prospective analysis. *Endoscopy* 51 (12): 1130–1135
- [4] Costamagna G., Pandolfi M., Mutignani M., Spada C., Perri V. 2001; Long-term results of endoscopic management of postoperative bile duct strictures with increasing numbers of stents. *Gastrointestinal endoscopy* 54 (2): 162–168
- [5] Jarlot-Gas C., Muscari F., Mokrane F.Z., Del Bello A., Culetto A., Buscail E., Maulat C. 2021; Management of anastomotic biliary stricture after liver transplantation and impact on survival. *HPB* 23 (8): 1259–1268

eP546 Successful management of portal cavernoma cholangiopathy induced CBD stricture with haemobilia using Fully Covered Self Expanding Metal Stent and somatostatin infusion

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DOI 10.1055/s-0046-1821873

Background: A 40-year-old woman with a 15-year history of extrahepatic portal vein obstruction (EHPVO) presented with jaundice and pancreatic-type of pain. Magnetic Resonance Cholangiopancreatography (MRCP) revealed portal cavernoma, lienorenal collaterals, and multiple small choledocholithiasis. Mild acute pancreatitis was also noted [1–3].

Objectives:

- To highlight the challenges and caution needed while attempting ERCP in patients with portal cavernoma cholangiopathy (PCC)
- To evaluate the utility of peri-procedural somatostatin infusion in preventing haemobilia
- To assess the role of fully covered self-expanding metal stents (FCSEMS) in managing biliary stricture with concurrent choledocholithiasis

Methods and Treatment: Endoscopic Ultrasound revealed multiple vascular channels obscuring the lower CBD. Endoscopic Retrograde Cholangiopancreatography (ERCP) done which showed filling defects and distal CBD narrowing. After small sphincterotomy no obvious bleed seen. Hence, decision taken to do balloon dilatation of papilla, however massive haemobilia occurred, necessitating urgent plastic stent placement. This stent became clogged within three days due to haemobilia. A repeat ERCP was planned with prophylactic somatostatin infusion. The stent was removed, and a 10 × 60 mm FCSEMS was placed under somatostatin cover and no repeat episode of haemobilia happened.

Outcome: Six weeks later, the FCSEMS was removed uneventfully under cover of somatostatin infusion. No residual stones or bleeding were observed. The patient remained asymptomatic at four weeks follow-up.

Discussion: PCC poses unique therapeutic challenges due to vascular alterations around the bile duct. ERCP can be hazardous, with haemobilia being a major complication. Peri-procedural somatostatin may reduce bleeding risk. FCSEMS offers stricture dilatation, salvage bleeding, and facilitates spontaneous passage of stones.

Conclusion: In patients with PCC, ERCP should be approached with caution and planning. Somatostatin infusion and FCSEMS can enhance safety and efficacy in complex biliary interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Pinto E, Elkrief L, Hernández-Gea V, Busatto A, Ferdinande K, Zanetto A, Shukla A, Senzolo M. Portal cavernoma cholangiopathy: A systematic review of current understanding, clinical significance, and management. *Hepatology Communications* 9 (11): e0833 2025. doi:10.1097/HCG.0000000000000833
- [2] Bhavsar R, Yadav A, Nundy S. Portal cavernoma cholangiopathy: Update and recommendations on diagnosis and management. *Ann Hepatobiliary Pancreat Surg.* 2022; 26 (4): 298–307. doi:10.14701/ahbps.22-029 Epub 2022 Sep 28
- [3] Kotinda APST, Poujol-Robert A, Payance A, Leenhardt R, Camus Duboc M, Dray X, Chaput U. Endoscopic ultrasound evaluation of portal cavernoma cholangiopathy and endoscopic management of choledochal variceal rupture during ERCP. *Endoscopy.* 2024; 56 (S 01): E39–E40. doi:10.1055/a-2224-3563 Epub 2024 Jan 9

eP547 Technological advances in endoscopic imaging and their implication in improving colonic adenoma detection

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DOI 10.1055/s-0046-1821874

Aims Detection and removal of colonic adenomas is a cornerstone in the prevention of colorectal carcinoma. However, a significant portion of adenomas remain undetected during index colonoscopy, that could lead to interval carcinoma. Many factors play a role, including patient characteristics, bowel preparation, investigator experience, and the technical features of the colonoscopy device. This study aimed to evaluate whether a new introduced advanced endoscopic system featuring ultra-high-resolution imaging fulfils the required adenoma detection rate in a real-world setting at a tertiary care hospital in Germany.

Methods Fifty consecutive patients undergoing screening colonoscopy between May 2025 and October 2025 were examined using the new AOHUA AQ-300 4K UHD Endoscopy System. All examinations were performed with high-definition white-light endoscopy followed by virtual chromoendoscopy. The system was launched in 2022 as one of the first 4K ultra-high-definition imaging system with a 4K display and 4K processor. There are four virtual chromoendoscopy modes, enabled by a 5-LED light source, which significantly improves image brightness. In our study we used only one of the integrated CBI modes.

The patient population was highly heterogeneous, aiming to reproduce a real-world scenario of colorectal carcinoma screening. The reasons for hospital-based screening included incomplete colonoscopy in an ambulatory setting or comorbidities with a high risk of periprocedural complications. The study population included 20 female and 30 male patients, with a mean age of 65 years. Bowel preparation was performed using a standard polyethylene glycol (PEG) formula, and the quality of bowel preparation was documented using standardised scale. Terminal ileum could not be reached in only one of the fifty patients. All colonoscopies were performed by the same experienced investigator.

Results Out of the 50 patients we screened, adenomas were detected in 20, corresponding to an adenoma detection rate (ADR) of 40% in our study population. In all patients with detected lesions, we used CBI to predict if a lesion is dysplastic or not. We detected altogether 56 lesions. Each lesion was endoscopically removed and histologically examined. Of the 44 lesions predicted as dysplastic, dysplasia was confirmed in 28. Of the 12 lesions predicted as non-dysplastic, 8 lesions were histologically confirmed as non-dysplastic. The virtual chromoendoscopy mode CBI demonstrated a sensitivity of 87% and the negative predictive value (NPV) in our cohort was 66%.

Conclusions With these results, the ADR in our study was higher than the average reported in Germany, suggesting a potential improvement in patient outcomes. The diagnostic performance of the evaluated CBI mode in predicting dysplasia was moderate.

The primary focus of this first study using the new AOHUA AQ-300 4K UHD Endoscopy System was the adenoma detection rate (ADR), as current European guidelines recommend only the routine use of high-definition white-light endoscopy systems in this population. Whether the additional application of chromoendoscopy, and moreover the use of all four available chromoendoscopy modes, could further enhance diagnostic accuracy warrants investigation in future studies with a larger cohort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP548 Effectiveness of once-daily orodispersible budesonide 1 mg as maintenance therapy in eosinophilic oesophagitis: a pragmatic real-world cohort study

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DOI 10.1055/s-0046-1821875

Aims Eosinophilic oesophagitis (EoE) is a chronic immune-mediated oesophageal disease requiring long-term anti-inflammatory therapy [1]. Budesonide orodispersible tablets (BOT) are licensed for induction and maintenance treatment [2], although real-world induction outcomes are more variable. The population-based DanEoE cohort reported 48% histological, 57% clinical and 39% combined remission after induction [3], illustrating the challenge of achieving stable disease control outside trial conditions. In the UK, maintenance prescribing policies vary geographically, leading many patients to choose a once-daily 1 mg regimen after induction to avoid treatment breaks. However, evidence for the effectiveness of this regimen is limited.

This study aims to evaluate the real-world effectiveness of once-daily orodispersible budesonide 1 mg as maintenance therapy in adult EoE patients.

Methods We conducted a single-centre prospective observational cohort study, over 25 months (Oct 2023–Nov 2025), of adults with confirmed EoE who achieved histological remission < 15 eosinophils / high powered field (phpf) following induction BOT, and chose to take 1 mg once-daily maintenance. Disease activity was assessed using endoscopy and/or capsule sponge test (Endo-sign) with EREFS scoring, histology (peak eosinophil count phpf). Symptoms were documented using the Dysphagia Symptom Questionnaire (DSQ) and direct symptom enquiry. Primary endpoints were histological and clinico-histological remission. Secondary endpoints included DSQ outcomes and phenotype-based comparisons.

Results 30 patients commenced once-daily 1 mg maintenance therapy (median age 46 years, IQR 32–58; 57% male). The median duration of maintenance treatment before reassessment was 17.9 weeks (IQR 12.3–35.6). Of these, 29/30 (96.7%) patients underwent gastroscopy, and 20/30 (66.7%) had same-day capsule sponge sampling; 1/30 (3.3%) had capsule sponge only. Using the highest peak eosinophil count across gastroscopy and capsule sponge, 25/30 (83.3%) were in histological remission and 5/30 (16.7%) had active inflammation. Clinical remission occurred in 26/30 (86.7%) patients. Clinical remission occurred in 26/30 (86.7%). DSQ scores were available for 23/30 (76.7%), of whom 14/23 (60.9%) had a DSQ score of 0. Clinico-histological remission occurred in 23/30 (76.7%).

Among the 29 gastroscopy patients, 16/29 (55.2%) had fibrostenotic disease and 12/29 (41.4%) had inflammatory-only disease. Histological remission occurred in 13/16 (81.3%) fibrostenotic patients vs 11/12 (91.7%) inflammatory patients (Fisher $p=0.61$). Clinical remission occurred in 13/16 (81.3%) vs 11/12 (91.7%) ($p=0.61$). Clinico-histological remission occurred in 11/16 (68.8%) vs 10/12 (83.3%) ($p=0.66$). Median treatment duration did not differ significantly between phenotypes ($p=0.35$).

Conclusions In this real-world cohort once-daily 1mg BOT maintained remission with similar or better efficacy to reported series using twice daily dosing. These findings support dose de-escalation after induction therapy to a once

daily 1 mg regime which may be easier to implement. They also demonstrate the previously reported use of capsule sponge sampling in monitoring EoE. Larger studies with extended follow-up are needed to confirm these findings but this study supports current pragmatic clinical practice. Additionally, once daily treatment may also improve compliance and be more financially acceptable.

Conflicts of Interest Authors do not have any conflict of interest to disclose.
References

- [1] Frandsen LT, Melgaard D, Hansen SK et al. Effectiveness of budesonide orodispersible tablets in eosinophilic oesophagitis: real-world data from the DanEoE cohort. *Scand J Gastroenterol* 2024; 59: 1137–1143
- [2] Straumann A, Lucendo AJ, Miehlke S et al. Budesonide orodispersible tablets maintain remission in eosinophilic oesophagitis: a randomized controlled trial. *Gastroenterology*. 2020; 159: 1672–1685.e5
- [3] Dhar A, Haboubi HN, Attwood SE et al. BSG/BSPGHAN joint consensus guidelines on the diagnosis and management of eosinophilic oesophagitis. *Gut*. 2022; 71: 1459–1487

eP549 Diagnostic and therapeutic cholangioscopy for biliary strictures and choledocholithiasis: A single-center experience from 24 patients with various indications

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Aims Cholangioscopy is an important tool, adjunctive to endoscopic retrograde cholangiopancreatography (ERCP), for cases that cannot otherwise be adequately evaluated or treated. Both single-operator peroral cholangioscopy (SOC) and percutaneous transhepatic cholangioscopy are available in our center. Our aim is to describe our experience with cholangioscopy, including safety and efficacy across various indications

Methods We retrospectively collected data from patients who underwent cholangioscopy from 2023 to 2025 and recorded demographics, medical history, ERCP–cholangioscopy procedure details (description–video–images), and complications such as cholangitis, pancreatitis, perforation, or bleeding that prolonged hospitalization for > 2 days.

Results A total of 24 patients were included. Their mean age was 66.2 ± 11.6 years, and 10/24 (42 %) were women. Fifteen patients (62.5 %) had undergone a prior ERCP. Difficult choledocholithiasis was the indication in 6 procedures (20.8 %); in 5/6, ERCP had previously failed to clear the common bile duct (CBD), which had a diameter > 20 mm. In cholangioscopy procedures for choledocholithiasis, electrohydraulic lithotripsy was performed, and in 3 of these cases multiple balloon trawls and basket stone retrievals were also carried out. In the remaining 18/24 cases, the indication was indeterminate biliary strictures. Three cases were approached percutaneously via a transhepatic route due to altered anatomy, and three involved anastomotic strictures in liver-transplant recipients. Sphincteroplasty was required in 7/24 patients (29 %), and biliary stents were placed in 20/24 (83 %). Complications occurred in 9/24 (37.5 %) patients, while the median length of hospitalization after cholangioscopy was 2 (IQR 3) days. Age, sex, sphincteroplasty, stent placement, prior ERCP, or the indication for cholangioscopy were not significantly associated with the development of complications ($P > 0.620$).

Conclusions Cholangioscopy is an effective procedure with acceptable safety, which can assist in the diagnostic evaluation and management of challenging biliary cases in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP550 Endoscopic Management of Fistulized Hepatic Echinococcus Cysts

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Aims The aim of this study was to describe the clinical and evolutionary features of patients presenting with biliary involvement of hydatid cysts.

Methods We conducted a retrospective descriptive study in the Hepato-Gastroenterology and endoscopy department, from January 2019 to July 2025. Were included all patients admitted for biliary dilatation secondary to hepatic cystic echinococcosis and managed by endoscopic drainage.

Results Eleven patients were hospitalized for hydatid cysts complicated by biliary fistulization. The mean age was 44.6 years (range: 22–79), with a marked female predominance (female-to-male ratio: 4.5). Clinically, 7 patients (64 %) presented with acute cholangitis, 2 cases were incidentally discovered, and 2 patients reported right upper quadrant pain.

Hydatid serology was positive in 7 patients (64 %). Leukocytosis was observed in 9 patients (82 %), associated with elevated CRP levels in 10 patients (90 %). Cyst localization was as follows: the left hepatic lobe in 6 patients (54 %), the right lobe in 2 patients (18 %), and bilobar involvement in 3 patients (28 %). Two patients (19 %) had cysts larger than 10 cm, six (54 %) had cysts between 5 and 10 cm, and three (27 %) had cysts smaller than 5 cm. WHO-IWGE staging was: CE2 in 5 patients (45 %), CE1 in 1 patient (9 %), CE4 in 1 patient (9 %), and CE5 in 1 patient (9 %). All patients (100 %) presented with biliary dilatation and underwent endoscopic sphincterotomy with successful extraction of hydatid material. No post-procedural complications were noted, and no morbi-mortality was noted.

Conclusions Biliary fistulization represents the most common complication of hepatic hydatid disease. Endoscopic treatment is effective and safe. In our series, left-lobe localization and cyst diameter greater than 5 cm were the most frequent characteristics of those patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP551 Optimizing Colorectal Screening: The Added Value of Endocuff Vision for Polyp Detection

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DOI 10.1055/s-0046-1821878

Aims Colonoscopy is the gold standard for colorectal cancer screening, yet up to one-third of adenomas may remain undetected due to limited mucosal visibility, particularly in hidden areas such as the sigmoid colon and caecum. Endocuff Vision (EC), an add-on device with flexible projections designed to flatten colonic folds, has emerged as a promising tool to improve mucosal exposure and optimize detection rates. The aim of this study is to evaluate whether the use of Endocuff Vision enhances polyp and adenoma detection compared with standard colonoscopy.

Methods A prospective randomized study was conducted in the our Department of CHU Mohammed. Twenty-five patients undergoing colorectal adenoma screening were enrolled. All underwent standard colonoscopy with or without EC assistance. Outcomes included polyp detection rate (PDR), adenoma detection rate (ADR), number of polyps per patient, segmental lesion distribution, and safety. Statistical analysis was performed to compare both groups.

Results The EC group demonstrated a 63 % higher number of polyps detected per patient compared with standard colonoscopy [2.00 (IQR 1.00–4.00) vs 1.00 (IQR 1.00–2.25), $p < 0.0001$]. PDR improved by 14 % with EC assistance (56 % vs 42 %, $p = 0.001$). Significant superiority was observed for polyps < 1 cm in the

sigmoid colon ($p = 0.001$) and caecum ($p = 0.002$). ADR increased by 86 % in the EC group ($p = 0.002$). No major complications occurred in either group.

Conclusions Endocuff Vision significantly improves both polyp and adenoma detection, particularly in anatomically challenging segments. The device is safe, feasible, and easy to integrate into routine practice. Its adoption may enhance the effectiveness of colorectal cancer screening programs by reducing missed lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP552 Incidence and Determinants of Post ERCP Pancreatitis Following Metallic Biliary Stent Placement: A Two Year Retrospective Cohort from a UK Tertiary Hepatopancreatobiliary Centre

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DOI 10.1055/s-0046-1821879

Aims To determine the incidence and characterise contributory risk factors for post-ERCP pancreatitis (PEP) in patients undergoing metallic biliary stent placement at a UK tertiary hepatopancreatobiliary centre [1, 2].

Methods A retrospective review was undertaken of 217 adult patients undergoing ERCP with biliary stent placement between January 2023 and April 2025. Stents comprised fully covered self-expandable metallic stents (FcSEMS) and uncovered SEMS (UnSEMS). Patients were observed for 20 days following ERCP. Post-ERCP pancreatitis (PEP) was defined in accordance with the revised Atlanta criteria and ESGE guidelines.

Results Post-ERCP pancreatitis (PEP) occurred in 7.83 % (17/217) of patients. The cohort demonstrated a male predominance, with mean age 78.7 years. Prophylaxis with NSAIDs or GTN was administered in all cases. Distribution was comparable between fully covered SEMS (8/17) and uncovered SEMS (9/17). Indications were dominated by complex proximal malignant strictures 76.5 % (13/17), with distal strictures 17.6 % (3/17) and Mirizzi syndrome 5.9 %. Procedural complexity was notable: prolonged duration > 15 minutes in 76.5 %, difficult cannulation in 35.3 %, pancreatic duct cannulation with contrast injection in 41.2 %, and trainee involvement in 52.9 % of the cases. Mortality within three months of PEP was 0.51 % (1/197).

Conclusions Post-ERCP pancreatitis (PEP) was observed in 7.83 % of patients undergoing metallic biliary stent placement. A distinct male predominance was noted. Risk was heightened by metallic stents, pancreatic duct manipulation, and procedural complexity. Prophylaxis was near-universal, yet procedural factors remained decisive. Prolonged duration, PD cannulation, and trainee involvement were prominent contributors. These findings underscore the need for gender-aware risk stratification, meticulous procedural planning, and for complex ERCP procedures to be performed by expert endoscopists. Such measures may reduce PEP incidence and optimise patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rectal diclofenac versus indomethacin for prevention of post-ERCP pancreatitis (DIPPP): a multicentre, double-blind, randomised, controlled trial. *Gut*. 2025;
- [2] Prevention, Detection, and Management of Post-Endoscopic Retrograde Cholangiopancreatography Pancreatitis. *Gut and Liver*. 2025; PMID: 41234031

eP553V Anastomotic stricturoplasty with cholangioscopy-guided tome in a liver transplant patient an innovative rescue technique for impassable biliary stricture

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DOI 10.1055/s-0046-1821880

Abstract Text

A 69-year-old man, six years post-orthotopic liver transplantation for alcoholic cirrhosis, presented with abnormal liver-function tests. 3D-MRCP showed a 14-mm dilation of the common hepatic duct and marked caliber mismatch at the biliary anastomosis. ERCP failed to achieve guidewire passage despite standard techniques and cholangioscopy revealed minimal bile flow without a visible orifice. Bite-on-bite attempts were unsuccessful. A 0.3-mm polypectomy snare was modified by removing its protective sheath to create a cutting tool compatible with the cholangioscope. During a second ERCP, a small endocut incision enabled proximal duct cannulation, balloon dilation (6 mm), and placement of a fully covered metal stent. Four-month follow-up ERCP showed normal intra-hepatic ducts and a significantly improved anastomotic caliber.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/6945b829-3647-4e54-94fa-2ae0b68250f7/Uploads/19978_Anastomotic_stricturoplasty%20with%20cholangioscopy-guided%20tome%20in%20...avi

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP554V When the Capsule Stops: Jejunal Adenocarcinoma Revealed by Capsule Retention – A Rare but Real Complication

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DOI 10.1055/s-0046-1821881

Abstract Text

Capsule endoscopy (CE) is a highly effective and safe technique for small-bowel evaluation, though capsule retention occurs in fewer than 2 % of cases and may uncover significant pathology. We report a 56-year-old woman with iron-deficiency anemia and positive fecal occult blood whose CE revealed a friable, stenosing proximal jejunal lesion that blocked capsule progression. Retention was confirmed radiographically, and the capsule was successfully retrieved endoscopically. Biopsies identified a moderately differentiated jejunal adenocarcinoma, subsequently treated with curative surgery and adjuvant chemotherapy. This case illustrates how capsule retention, despite being rare, can represent the first diagnostic clue to small-bowel malignancy and highlights the need for pre-procedure assessment for potential strictures to ensure safe CE use [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/2d3f6b59-469e-4da5-898c-b4ab4808b797/Uploads/19978_Capsule_ESGE%202026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Liao Z, Gao R, Xu C, Li ZS. Indications and detection, completion, and retention rates of small-bowel capsule endoscopy: a systematic review. *Gastrointest Endosc* 2010; 71 (2): 280–286
- [2] Rondonotti E, Pennazio M, Toth E et al. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2022; 54 (10): 1024–1046

eP555 The role of endoscopic ultrasound before ERCP in pancreatobiliary emergencies with inconclusive imaging: a real-world analysis from an emergency hospital

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DOI 10.1055/s-0046-1821882

Aims Current ESGE guidelines recommend endoscopic ultrasound (EUS) or MRCP before ERCP to confirm choledocholithiasis, minimizing unnecessary therapeutic procedures¹. Additionally, the ASGE recommends evaluating patients by assessing the risk of choledocholithiasis before any therapeutic intervention^{2,3}. Patients with intermediate and high risk were evaluated. We evaluated the diagnostic impact of EUS performed before ERCP in such cases, focusing on small-stone and sludge detection and on avoidance of negative ERCPs [1–3].

Methods We retrospectively analyzed 524 patients with EUS examination in which 24 patients with pancreatobiliary emergencies (acute biliary pancreatitis, acute cholangitis, or cholestatic jaundice) and inconclusive imaging (only normal / dilated common bile duct or intrahepatic bile ducts described on US, CT, or MR/MRCP) admitted over 36 months. All underwent EUS before ERCP according to local emergency-unit protocol. EUS findings, ERCP results, therapeutic yield, and complications were compared with historical controls managed by ERCP-first strategy.

Results Among 24 patients (mean age 65 ± 15 years; 29.2 % female), EUS identified bile-duct stones or sludge in 66.70 % of cases despite inconclusive cross-sectional imaging. ERCP confirmed stones in 93.75 % of EUS-positive cases. In 45.80 % of patients with negative EUS, ERCP was avoided, thus reducing overall ERCP rate.

Conclusions EUS before ERCP significantly improves diagnostic accuracy and prevents unnecessary invasive procedures in pancreatobiliary emergencies with inconclusive imaging. Adoption of an “EUS-first” strategy, even in resource-limited emergency hospitals, aligns with ESGE guidelines and enhances patient safety, procedural efficiency, and cost-effectiveness.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] de Jong MJP et al. “Application of EUS or MRCP prior to ERCP in patients with suspected choledocholithiasis in clinical practice.”. *Endoscopy international open* vol. 13:a24750099 2025. doi:10.1055/a-2475-0099
- [2] ASGE Standards of Practice Committee et al. “The role of endoscopy in the evaluation of suspected choledocholithiasis. *Gastrointestinal endoscopy* vol. 71 (1): 2010; 1–9. doi:10.1016/j.gie.2009.09.041
- [3] Manes G et al. Endoscopic management of common bile duct stones: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* vol. 51 (5): 2019; 472–491. doi:10.1055/a-0862-0346

eP556 Successful management of recurrent colorectal anastomotic dehiscence using Tube-in-Tube EVT and a full-thickness clip: a case report on the importance of seeking the complete closure

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DOI 10.1055/s-0046-1821883

Abstract Text

Anastomotic dehiscences after colorectal resections are serious complications following oncologic surgery and may require an individualized management. Colorectal Tube-in-tube Endoscopic Vacuum Therapy (CR TT-EVT) has emerged as a promising minimally invasive alternative for the treatment of these complications [1, 2].

We report the case of a 72-year-old man who underwent a rectosigmoidectomy with extended left colectomy and primary mechanical colorectal anastomosis, without derivative stoma, for colon cancer treatment (pT4a pN2b M0, stage III). Because of a slow post-operative recovery, a rectoscopy was performed on the 21th day, revealing an anastomotic dehiscence, with cavity formation which allowed finding the lower mesenteric artery clip visualization. Intracavitary, transanal, CR TT-EVT was initiated. By the 13th day of treatment, a marked reduction in the dehiscence was observed, with only a small residual fistulous tract opening remaining. Given the confirmed closure of the cavity on CT imaging and the patient’s clinical improvement, therapy was interrupted and patient discharged. Adjuvant chemotherapy was initiated. Following his first chemotherapy cycle, 37-days after discharge, the patient was readmitted with fistula recurrence and fever. A new course of CR TT-EVT was then initiated and, once again, a remaining small fistulous opening was found on the 19th day, when a full thickness clip (Padlock) was deployed to achieve complete closure and complete recovery. EVT is an effective minimally invasive strategy for managing anastomotic fistulas, even in cases of recurrence. Debate remains on when to interrupt it. However, pursuing complete closure should be the goal, mainly in the scenario of no diverting stoma. Whether achieved by continued vacuum therapy or with complementary techniques such as clipping.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] de Lima MS, Figueiredo LZ, Furuya CK Jr, Pombo AAM, Hora JAB, Maluf-Filho F. Tube-in-tube endoscopic vacuum therapy for treatment of colorectal anastomotic leaks: A low-cost, patient-friendly, feasible and efficient technical modification of sponge-based endoscopic vacuum therapy. *Colorectal Dis.* 2023;
- [2] Kühn F, Schardey J, Wirth U, Schiergens T, Crispin A, Beger N, Andrade D, Drefs M, Zimmermann P, Burian M, Andrassy J, Werner J. Endoscopic vacuum therapy for the treatment of colorectal leaks – a systematic review and meta-analysis. *Int J Colorectal Dis.* 2022;

eP557V Expanding the Horizons of EUS for Cervical Vertebral and Prevertebral Pathologies: A Case Series

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DOI 10.1055/s-0046-1821884

Problem to solve Cervical vertebral and prevertebral pathologies – including retropharyngeal/prevertebral abscesses, spondylodiscitis and vertebral body lesions – are difficult to sample due to their deep location and proximity to vital neurovascular structures. Blood cultures are frequently negative, with a sensitivity ≤ 50 % in deep neck or vertebral infections, making microbiological diagnosis uncertain and leading to frequent use of empirical antibiotics. CT-guided biopsy in the cervical region is technically challenging, offers limited real-time feedback, and carries procedural risks due to tight anatomical confines. Surgical biopsy is invasive and associated with higher morbidity. A safe, minimally invasive, real-time method for sampling cervical vertebral and prevertebral lesions—especially at high cervical levels (C2)—represents a major unmet clinical need.

Innovation We applied an innovative trans-pharyngeal and transesophageal EUS-guided sampling technique for cervical vertebral and prevertebral pathologies. Using a linear echoendoscope (FUJIFILM EG-580UT with ARIETTA system) introduced into the oropharynx and then the proximal esophagus under general anesthesia, the cervical vertebral column (C2–C7) was visualized in real

time. Between March 2024 and July 2025, patients with suspected cervical vertebral or prevertebral pathologies difficult for interventional radiology sampling underwent EUS-guided sampling under general anesthesia with endotracheal intubation. In the left lateral position, a linear echoendoscope (FUJIFILM EG-580UT with ARIETTA 750) was introduced into the oropharynx and proximal esophagus, and lesions were aspirated or biopsied using 19G or 22G needles. Fluoroscopy was used in selected cases to confirm the location of the vertebral body. Samples were sent for bacterial culture (in aerobic blood culture bottles to maximize yield), cytology, histopathology, and GeneXpert MTB/RIF when tuberculosis was suspected. This technique extends the application of EUS—traditionally limited to thoracic and mediastinal structures—into the cervical spine, offering a minimally invasive diagnostic pathway for lesions previously inaccessible or unsafe to sample using radiology or surgery.

Results Nine patients underwent EUS-guided sampling (median age 60 years; range 37–77; 6 males, 3 females). All presented with neck pain; one had dysphagia and another stridor. Sampling was successfully achieved from C2 through C7, including the first documented EUS-guided sampling of a C2 vertebral body lesion. The following were the diagnostic yield. A) Tuberculosis ($n=4$): Caseating granulomas or MTB positivity on GeneXpert for TB or AFB staining. All patients responded to ATT alone with full clinical recovery. B) Pyogenic infections ($n=3$): Organisms included *Acinetobacter baumannii*, *Enterobacter cloacae*, and *Klebsiella pneumoniae* with *Granulicatella adiacens*. Two patients required surgical drainage; one was managed medically. C) Others ($n=2$): One culture-negative lesion with acute suppurative inflammation improved with prolonged antibiotics and drainage. Another non-diagnostic sample (only squamous cells) resolved with short oral antibiotics—likely self-resolving pathology. EUS confirmed TB in four and ruled it out in others. EUS-guided cultures enabled tailored antibiotic therapy. At least one patient avoided unnecessary surgery due to microbiological diagnosis via EUS. All patients improved clinically (follow-up range: 1.5–18 months). No procedural complications or adverse events occurred.

Conclusions Transesophageal EUS-guided sampling is a safe, feasible, and clinically transformative technique for diagnosing cervical vertebral and prevertebral lesions. It significantly expands the diagnostic reach of EUS into the cervical spine—previously accessible only via invasive CT-guided or surgical methods—while providing high diagnostic yield with excellent safety. By enabling accurate pathogen identification, EUS supports evidence-based treatment decisions and can help avoid unnecessary surgery. This is the largest reported series of EUS-guided cervical vertebral sampling to date and includes the first documented C2 vertebral body case. Further multicenter studies are needed to validate and standardize this novel approach.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/2e9eb070-246e-4766-8626-1e793eb47b59/Uploads/19990_Abtract_video%20Dr%20Srikanth%20Gopi%201080p.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP558 The Contribution of Endoscopic Ultrasound in Tumor Pathology: A Retrospective Study

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DOI 10.1055/s-0046-1821885

Aims Endoscopic ultrasound (EUS) is an imaging technique that combines endoscopy and high-frequency ultrasound, allowing precise evaluation of the digestive wall and adjacent structures. Digestive tumors pose a major diagnostic challenge due to their location and histological variability. EUS has become an essential tool for assessing parietal and submucosal tumors of the gastrointestinal tract, as well as for guiding biopsies for diagnostic purposes.

Methods This is a descriptive retrospective study conducted in our department over a 4-year period, from October 2021 to August 2025. It included all patients

with a clinically or radiologically suspected digestive tumor who underwent endoscopic ultrasound in our institution. Clinical, radiological, EUS, and histological data were collected and analyzed [1–6].

Results In this study, 57 patients with a clinically or radiologically suspected digestive tumor were included, all of whom underwent endoscopic ultrasound in our department. The mean age was 63.78 years (range: 31–87 years), with a male predominance: 30 men (52.63%) and 27 women (47.36%), M/F ratio 1, 1.

Regarding the indication for EUS, 50 patients (87.71%) underwent the procedure for histological confirmation via fine-needle aspiration, while 7 patients (12.25%) underwent EUS for tumor staging.

The most frequent tumor locations were the pancreas, with 50 cases (87.71%), distributed as follows: 70% in the pancreatic head, 14% in the head and isthmus, 4% in the pancreatic tail, and 12% in the uncinate process. Other locations included the rectum (2 cases, 3.5%), the stomach (4 cases, 7%), and the ampulla of Vater (1 case, 1.75%).

The average tumor size was 30.5 mm × 30.1 mm. concerning echogenicity, tumors were heterogeneous in 36 cases (63.15%), hypoechoic in 16 cases (28.07%), and hyperechoic in 2 cases (3.5%).

EUS demonstrated locoregional invasion in 29 cases (50.87%) and identified lymph node metastases in three patients that had not been detected on CT. Fine-needle aspiration was carried out in 50 patients (87.71%).

Adenocarcinoma was the most common histological type, found in 44 patients (88%). A gastrointestinal stromal tumor (GIST) was identified in 1 patient (2%). Two cytological samples (4%) revealed no tumor cells within the sample limits, while three cytological samples (6%) were inconclusive.

Conclusions Endoscopic ultrasound is an essential tool for diagnosing and monitoring tumor pathology. It allows precise exploration of internal organs, particularly for digestive cancers, by locating tumors and assessing their extent. It also facilitates targeted biopsies and helps determine appropriate treatment. Thus, EUS plays a key role in tumor management, providing accuracy and therapeutic guidance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Puli SR, Bechtold ML, Buxbaum JL et al. How good is endoscopic ultrasound-guided fine-needle aspiration in diagnosing the correct etiology for a solid pancreatic mass? *Pancreas*. 2013; 42 (1): 20–6
- [2] Wiersema MJ, Vilman P, Giovannini M et al. Endosonography-guided fine-needle aspiration biopsy: Diagnostic accuracy a.
- [3] Tempero MA, Malafa MP, Chiorean EG et al. Pancreatic adenocarcinoma, version 1.2024, NCCN Clinical Practice Guidelines in Oncology. *J Natl Compr Canc Netw* 2024
- [4] Harewood GC, Wiersema MJ. Endosonography in the evaluation of pancreatic tumors. *Gastrointest Endosc* 2002; 55 (7): 870–6
- [5] ASGE Standards of Practice Committee Polkowski M, Jenssen C et al. Technical aspects of endoscopic ultrasound-guided sampling in gastroenterology: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2017; 49 (7): 695–714
- [6] Vilman P, Saftoiu A. Endoscopic ultrasound-guided fine needle aspiration biopsy: Equipment, technique, and applications. *Endoscopy*. 2005; 37 (7): 635–45

eP559V Dual-Access Endoscopic Closure of a Long, Oblique Jejuno-Bronchial Fistula Using a Self-Expanding Nitinol Occlusion Device and Cyanoacrylate Glue: An Innovation in Complex Fistula Management

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DOI 10.1055/s-0046-1821886

Problem to Solve Broncho-digestive fistulas are rare but serious post-surgical complications, and their management is particularly challenging in long or oblique tracts where the fistulous channel does not align parallel to luminal surfaces. Conventional endoscopic options—including clipping, stenting, or sealant injection—often fail because of fibrosis, poor tissue apposition, and high mechanical tension. We report the case of an 80-year-old woman with a complex surgical history, presenting with chronic cough and weight loss. After a Nissen fundoplication complicated by pleural empyema, vagotomy, and severe gastroparesis, she underwent multiple pyloric dilations for gastric outlet obstruction. 10 years later, a first gastro-bronchial fistula developed, likely secondary to chronic stasis, and several endoscopic treatments (fibrin glue, coagulation, bulking agents, and a bronchial plug) achieved only transient benefit. A subtotal gastrectomy with gastrojejunal reconstruction eventually progressed to total gastrectomy with left lung resection and Roux-en-Y esophagojejunal reconstruction 12 years after that. 4 years later, she developed a new jejuno-bronchial fistula between the alimentary limb and the left bronchial tree. Multiple endoscopic approaches the years afterwards—including TTS clips, APC, OTSC for candy-cane syndrome, ESD-flap with OTSC, vacuum-assisted stenting, and endoscopic suturing—resulted only in temporary improvement. Given the chronicity, fibrosis, and oblique trajectory of the tract, conventional endoscopic repair was considered unlikely to succeed, and no standardized strategy for definitive closure currently exists. Recently, systematic cough and inability to tolerate oral food recurred with exacerbation compromising quality of life and prognosis, letting to propose a novel modality of fistula closure to the patient.

Innovation A combined digestive-bronchial endoscopic approach was developed for definitive closure of this complex jejuno-bronchial fistula.

The procedure was performed under general anesthesia and fluoroscopic control. Simultaneous access through the jejunal and bronchial routes enabled full visualization using contrast opacification, of the fistulous path. Because the rigid bronchoscope could not reach the fistulous origin, a guidewire was advanced from the jejunal side into the left main bronchus and retrieved bronchoscopically.

Using a rendez-vous technique (bronchoscopic-jejunoscopy), after gentle abrasion of the fistula tract, an 8 Fr bronchial introducer was advanced through the fistula, and a self-expanding nitinol occlusion device (12 × 9 mm) was deployed, with the distal disc expanded into the jejunal lumen and the proximal portion anchored along the long, oblique tract.

A 50:50 mixture of cyanoacrylate glue (Glubran) and Lipiodol was then injected under fluoroscopic control into the expanded device, achieving homogeneous opacification and complete occlusion without extravasation.

Results The procedure was completed safely without complications. Immediate fluoroscopic and endoscopic assessment confirmed stable device positioning and complete tract sealing. A nasojejunal feeding tube was placed, and the patient resumed oral intake after 24 hours. At follow-up, she reported marked improvement of cough, with no symptoms during solid intake and only mild, qualitatively different cough with liquids. Early satiety persisted, but her nutritional status improved, and the nasojejunal tube was maintained per nutritional recommendations.

Conclusions This dual-access endoscopic strategy demonstrates that self-expanding nitinol occlusion devices can be adapted to long, fibrotic, non-parallel fistulous tracts traditionally considered unsuitable for endoscopic repair. Although described for tracheo-esophageal short fistula closure with parallel expanded discs, the use of self-expandable nitinol occlusion devices in long fistula tracts has not been reported. The combination of mechanical occlusion and cyanoacrylate sealing provides a reliable, minimally invasive solution for refractory broncho-digestive fistulas. This approach underscores the importance of multidisciplinary collaboration among interventional endoscopy, interventional radiology, and pulmonology in managing complex post-surgical fistulas.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/a1e6f063-c1ff-4072-aa9d-0e1fb6f8ced8/Uploads/19990_1453.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP560 Ampullary masses: cases series

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DOI 10.1055/s-0046-1821887

Aims Ampullary masses constitute a rare but important pathology of the biliopancreatic junction. They include benign or malignant lesions that may manifest as cholestatic jaundice, sometimes associated with pancreatic pain. This work aimed to describe the epidemiological, clinical, radiological, and histological characteristics of ampullary masses.

Methods Patients and Methods

This was a retrospective descriptive study including all patient hospitalized for suspicion or confirmation of an ampullary mass in the Medicine C Department of CHU Avicenne between 2020 and 2025. Data were collected from medical records, imaging examinations (ultrasound, CT scan, MRCP, endoscopic ultrasound), and histological results.

Results We recorded 40 cases of ampullary masses. The mean age of the patients was 64 years, with extremes ranging from 38 to 91 years. A female predominance was noted (55 %, n = 22) with a male-to-female sex ratio of 0.81. The main clinical presentation was cholestatic jaundice observed in 87.5 % of cases (n = 35), followed by pancreatic pain in 12.5 % of cases (n = 5). Imaging showed double-duct sign in 82.5 % of cases (n = 33), with a tissue process at the biliopancreatic junction measuring on average 17 mm (10–30 mm), responsible for an average dilation of the common bile duct to 15 mm (6–30 mm) and of the Wirsung duct to 6 mm (3–11 mm).

Histologically, 65 % of the lesions corresponded to ampullary adenocarcinoma (n = 26), 10 % to high-grade dysplasia (n = 4), 5 % to a neuroendocrine tumor (n = 2), 5 % to benign lesions (n = 2), and 15 % of biopsies (n = 6) were negative or non-contributive.

EUS staging showed a predominance of stage T2 (45 %, n = 18) followed by T3 (30 %, n = 12), T1 (20 %, n = 8), and T4 (5 %, n = 2). Lymph node involvement was observed in 30 % of cases (n = 12) and metastases in 5 % (n = 2).

Regarding treatment, endoscopic ampullectomy was performed in 20 % of patients (n = 8) and cephalic duodenopancreatectomy in 25 % (n = 10). The remaining 55 % (n = 22), who did not undergo any curative procedure, were managed palliatively, mainly with biliary drainage and stent placement.

The evolution was favorable in 60 % of cases (n = 24), with 20 % deaths (n = 8) and 20 % lost to follow-up (n = 8).

Conclusions ampullary masses represent a significant cause of cholestatic jaundice in elderly patients, with a female predominance and a clear predominance of malignant forms dominated by adenocarcinoma. Modern imaging techniques, particularly endoscopic ultrasound and MRCP, help refine the diagnosis and guide management. Treatment is based on surgery or endoscopic ampullectomy depending on the stage and histological nature. Despite diagnostic advances, the prognosis remains poor in infiltrative forms, highlighting the importance of early diagnosis and close follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP561 An unexpected choledochoduodenal fistula identified during ERCP: a rare enterobiliary communication

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DOI 10.1055/s-0046-1821888

Abstract Text

Choledochoduodenal fistulas (CDFs) – between the common bile duct and the duodenum – represent the rarest type of abnormal enterobiliary communications. The most common type is the cholecystoduodenal fistula (70% of all EFs) followed by cholecystogastric fistula (0–13.3%), cholecystocolic fistula (0–10.9%) and cholecystoileal (0–2.5%) [1]. Possible etiologies may include cholelithiasis, peptic ulcer disease and trauma. Diagnosis is typically made on endoscopic retrograde cholangiopancreatography (ERCP) [2]. We present a case of a 73-year-old female with choledocholithiasis.

Case Presentation A 73-year-old female with a medical history of arterial hypertension and smoking, presented to our department with mild abdominal pain and jaundice. Clinical examination revealed mild epigastric tenderness and scleral jaundice; otherwise, the examination was unremarkable. Her labs on presentation were notable for a high level of C-reactive protein (CRP). Her liver function panel was abnormal with a total bilirubin of 2.6 mg/dl, direct bilirubin 1.4 mg/dl, AST 138 U/L and ALT 144 U/L, alkaline phosphatase 446 U/L and γ -GT 640 U/L. INR and albumin were normal. A magnetic retrograde cholangiopancreatography (MRCP) had been conducted a few months prior to the visit, had demonstrated multiple gallstones within the intra- and extrahepatic biliary tree, accompanied by common bile duct dilatation. No biliary strictures were identified. The patient subsequently underwent endoscopic intervention. ERCP revealed the presence of a choledochoduodenal fistula containing a huge impacted stone (diameter greater than 45mm) within the fistula tract. A wide sphincterotomy and sphincteroplasty were performed and biliary double pig-tail stent was placed, uneventfully, achieving satisfactory drainage. The patient was discharged the next day, while on antibiotic therapy, after demonstrable improvement in laboratory values and remained asymptomatic with spyglass cholangioscopy lithotripsy pending.

Discussion Choledochoduodenal fistulas are extremely rare, pose a diagnostic challenge and are found mainly incidentally during endoscopy, which remains fundamental for their identification and direct visualization. Therapeutic decision making is contingent upon the underlying etiology, the presence of concomitant complications and overall symptom burden [3]. Our patient supposedly developed the fistula as a result of longstanding choledocholithiasis. In this case, it appears that cannulation of the common bile duct with subsequent stent placement contributed to effective biliary decompression, improvement of patients' symptoms and lowering the risk of recurrent biliary events. Management strategies of CDFs are not standardized, depend on etiology and symptom severity, with endoscopic intervention being effective in many cases. Larger fistulas may require surgical management, especially when other treatment strategies fail. Each case should be individualized based on the underlying etiology and the patients' clinical profile.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tsang CF. A rare case of gallstone ileus-the unanswered question. J Surg Case Rep. 2021; 2021 (4):
- [2] Golikov et al Endoscopic Management of Choledochoduodenal Fistula Presenting as Pneumobilia. American Journal of Gastroenterology. 112: p S1159–S1160 2017;
- [3] Mallikarjunappa B., Ashish S.R. Choledochoduodenal Fistula: A Rare Case Report with Review of Literature. JIMSA. 2013; Vol. 26: No. 4

eP562 Fecal microbiota transplantation in recurrent and refractory *Clostridioides difficile* infection: long-term insights from a tertiary health care center in a South European country

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DOI 10.1055/s-0046-1821889

Aims *Clostridioides difficile* infection (CDI) is associated with substantial morbidity and mortality. Patients at greatest risk are typically older, hospitalized and/or with multiple comorbidities. Fecal microbiota transplantation (FMT), a method aimed to restore the composition and diversity of gut's microbiota, has been recently approved for treating refractory CDI or recurrent CDI (rCDI), after a second recurrence that did not respond to conventional antibiotics. Current evidence suggests that FMT is a safe therapeutic method with few adverse effects, although, protocol optimization and long-term outcomes have not been completely elucidated [1, 2].

Methods We conducted a retrospective longitudinal analysis of all patients who underwent FMT in our department between 2017 and 2025. A rigorous selection of potential unrelated/cohabiting donors was carried out. All procedures were performed under aseptic conditions, ensuring that no more than 6 hours elapsed between the collection of fresh donor stools and the FMT execution. Demographic data, comorbidities, prior treatments, clinical outcomes (efficacy and safety), and follow-up data were collected.

Results Ten patients underwent FMT during the study period. The indication was rCDI for all cases. All procedures were performed via colonoscopy, with instillation of donor fecal solution into the ileum and cecum. The median age was 72.8 $\pm$ 12.1 years-old; 70% (n = 7) of patients were men. The mean Charlson Comorbidity Index was 6.4 $\pm$ 2.8. Type 2 diabetes was the most common comorbidity, followed by ulcerative colitis. Patients had experienced an average of 3.6 $\pm$ 1.0 prior CDI episodes before FMT. The mean interval between the first CDI episode and FMT was 15.6 $\pm$ 19.1 months with a range from 3 to 50 months. Three patients were receiving immunosuppressive therapy. All patients had been previously treated with antibiotics, the most frequent being vancomycin, followed by fidaxomicin and metronidazole. All patients responded to one-single FMT with an overall success rate of 100% and no CDI recurrence. Median follow-up was 6 (1–24) months. Five patients died during follow-up, three of them within 6 months of the procedure (due to pulmonary infection, suspected disseminated metastatic disease and non-Hodgkin B-cell lymphoma). No adverse events were registered. No deaths were attributed to CDI or the FMT.

Conclusions FMT proved to be effective and safe even in high-risk patients, including those who were chronically immunosuppressed, had inflammatory bowel disease and multiple and significant comorbidities. In case of refractory/recurrent CDI, repeat FMT via another route and/or another fecal donor may be considered. Mortality during follow-up was related to underlying comorbid conditions rather than FMT. Larger studies are needed to further assess the outcomes and consider the use of frozen stool capsules from universal stool donor banks.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang JW, Kuo CH, Kuo FC, Wang YK, Hsu WH, Yu FJ, Hu HM, Hsu PI, Wang JY, Wu DC. Fecal microbiota transplantation: Review and update. J Formos Med Assoc. 2019; 118: (Suppl 1): S23–S31. doi:10.1016/j.jfma.2018.08.011 Epub 2018 Sep 1 PMID: 30181015
- [2] Lee PC, Chang TE, Wang YP, Lee KC, Lin YT, Chiou JJ, Huang CW, Yang UC, Li FY, Huang HC, Wu CY, Huang YH, Hou MC. Alteration of gut microbial composition associated with the therapeutic efficacy of fecal microbiota transplantation in *Clostridium difficile* infection. J Formos Med Assoc. 2022; 121 (9): 1636–1646. doi:10.1016/j.jfma.2021.11.001 Epub 2021 Nov 24 PMID: 34836663

eP563 Diagnostic Value of EUS in Patients With Weight Loss

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DOI 10.1055/s-0046-1821890

Aims This study evaluated EUS diagnostic yield in patients presenting with weight loss.

Methods Among 74 EUS procedures performed between 2023–2024, patients with weight loss were identified (n = 28). Clinical presentation, EUS morphology, and final diagnoses were analyzed.

Results Of 28 patients with weight loss, 10 (35.7%) were diagnosed with a significant underlying lesion. Diagnoses included:

- 7 pancreatic adenocarcinomas
- 1 neuroendocrine tumor
- 1 pancreatic tuberculosis
- 1 TIPMP

The remaining 18 patients (64.3%) had no structural lesion on EUS.

Weight loss combined with jaundice showed the strongest association with malignancy.

Weight loss with fever predicted benign/infectious disease (TB case).

Cystic lesions (TIPMP and serous cystadenomas) did not present with isolated weight loss.

Conclusions In patients referred for EUS due to weight loss, approximately one-third had a clinically relevant diagnosis, predominantly pancreatic malignancy. Weight loss alone was not sufficiently specific, but its association with jaundice greatly increased the likelihood of malignancy. EUS remains an essential tool in the evaluation of unexplained weight loss.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP564 Optimal number of needle passes without ROSE during EUS-FNA and EUS-FNB: a marginal yield analysis

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DOI 10.1055/s-0046-1821891

Aims To determine the minimal number of EUS-guided needle passes that maintains high diagnostic adequacy in solid pancreatic masses when rapid on-site evaluation (ROSE) is not available, and to compare the marginal diagnostic yield and safety of FNA versus FNB.

Methods In a single-centre retrospective cohort of pancreatic EUS-FNA/FNB procedures, cases were grouped according to the number of needle passes. For each stratum, diagnostic adequacy (conclusive vs non-conclusive) was calculated separately for FNA and FNB. For FNA, complication rates were compared between procedures with ≤ 2 versus ≥ 3 passes (Fisher's exact test). ROSE was not used in any procedure.

Results For FNA, adequacy rates were 69.0% (20/29) with 1 pass, 73.4% (80/109) with 2 passes, 73.9% (34/46) with 3 passes and 100% (2/2, small n) with 4 passes, showing only a limited marginal gain beyond 2–3 passes. For FNB, adequacy was 81.8% (18/22) with 1 pass and 83.3% (10/12) with 2 passes, with an early plateau from 1–2 passes. Only one complication (a pseudoaneurysm) was observed in the FNA group, with no clear association with the number of passes; no complications occurred in the FNB group.

Conclusions In the absence of ROSE, FNB achieves a high diagnostic yield with only 1–2 passes. For FNA, 2–3 passes appear sufficient, and the benefit of ad-

ditional passes beyond this threshold seems minimal, with no signal of increased complications in this cohort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP565 EUS-FNA versus EUS-FNB for solid pancreatic masses: diagnostic performance, needle passes and predictors of failure

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DOI 10.1055/s-0046-1821892

Aims To compare the diagnostic performance (adequacy), number of needle passes and safety of endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA) versus fine-needle biopsy (EUS-FNB) for solid pancreatic masses, and to identify predictors of non-diagnostic sampling.

Methods Single-centre retrospective study including all pancreatic EUS-FNA/FNB procedures from a local database (FNA n = 187, FNB n = 34). The primary endpoint was diagnostic adequacy (conclusive vs non-conclusive). Secondary endpoints were number of passes and adverse events within 7 days. Proportions were compared using χ^2 /Fisher's exact tests and non-parametric variables using the Mann-Whitney test. A multivariable logistic regression model (outcome: non-conclusive result) included sampling technique (FNB vs FNA), lesion size (> 3 cm), location (head vs body/tail), puncture route (trans-duodenal vs trans-gastric) and number of passes. Because a reference standard (surgery/biopsy/follow-up) was not available, diagnostic performance was assessed through adequacy rather than sensitivity/specificity.

Results Adequacy was 73.3% (137/187) for FNA vs 82.4% (28/34) for FNB ($p = 0.365$; OR 1.70, 95% CI 0.66–4.36). Median passes (IQR) were 2 (2–3) for FNA vs 1 (1–2) for FNB ($p < 10^{-8}$). Adverse events were rare: one pseudoaneurysm in the FNA group (0.5%, 1/187) and none in the FNB group (0/34; $p = 1.00$). Adequacy did not differ by size (> 3 cm 75.3% vs < 3 cm 73.6%; $p = 0.95$) or access route. In FNA, adequacy was 69.9% for head vs 78.4% for body/tail lesions; a similar, non-significant trend was seen with FNB. In multivariable analysis, no factor was significantly associated with failure, although head location showed a trend towards higher non-conclusive rates (OR 2.61, 95% CI 0.96–7.07). FNB achieved high adequacy with 1–2 passes, whereas FNA plateaued around 2–3 passes.

Conclusions In this cohort, EUS-FNB required significantly fewer needle passes than EUS-FNA without an excess of complications and showed a numerically higher, though not statistically significant, adequacy. Lesion size and puncture route did not impact adequacy, while head lesions tended to be more frequently non-diagnostic. Robust sensitivity/specificity estimates will require linkage to a reference standard.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP566 Validation of a Fully Synthetic 3D-Printed Simulator for Paediatric Therapeutic EUS: Overcoming Ethical and Educational Barriers

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DOI 10.1055/s-0046-1821893

► Table 1

Characteristic	Novice group (n = 7)	Expert group (n = 4)	Total sample (n = 11)
Professional role			
Pediatrician	7	0	7
Senior endoscopist	0	4	4
Prior endoscopic experience			
Proficient in UGI	4	4	8
Proficient in LGI	3	4	7
Prior ERCP experience	none	2	2
Prior EUS experience	none	Only observational	-

Problem to solve Low procedural volumes and a shortage of expert trainers limit clinical access to paediatric interventional Endoscopic Ultrasound (EUS), creating a paradox where minimally invasive alternatives are precluded to the population with the greatest need. Given the significant ethical and hygienic limitations of animal-based "hybrid" simulators, there is an unmet need for a fully synthetic, realistic, and sustainable training tool to democratize access to advanced EUS skills without biohazard constraints.

Innovation We developed PROMETEUS (Polymeric, Realistic, Open, Modular, and Enhanced Trainer for EUS), a high-fidelity simulator designed to overcome the constraints of existing synthetic models regarding biomimetic accuracy. Unlike hybrid models requiring animal organs, PROMETEUS is fully synthetic, featuring:

"Glass-Box" Design: A transparent housing allowing direct visualization of needle trajectory, enhancing procedural awareness compared to blind in-vivo training.

Modular & Electrifiable: Compatible with electrosurgical units for realistic procedures with standard devices and equipment.

AI-Ready Architecture: Designed to facilitate future asynchronous learning through computer vision integration.

Results 1. To validate its educational efficacy, we conducted a prospective non-inferiority study comparing PROMETEUS with established benchmarks published for the "Magic Box" hybrid simulator. Procedural proficiency was quantified using a validated 4-point Global Rating Scale (GRS) focusing on endoscope manipulation, electrocautery, and stent placement (► Table 1).

Our validation study enrolled 11 participant: 7 Novices (young pediatricians) and 4 Experts (senior pediatric endoscopists) both groups naïve to therapeutic EUS.

Consistently with the "magic box" study, all participants successfully completed EUS-guided lumen – apposing metal stent (LAMS) placement. The simulator demonstrated an excellent construct validity, effectively discriminating between expertise levels. Experts achieved scores consistent with proficiency benchmarks (Mean: 3.50), whereas novices scored significantly lower (Mean: 2.17), confirming the realism of the task difficulty (Mann–Whitney U test). Statistical analysis (Mann–Whitney U test) revealed significant differences specifically for **scope positioning** ($p = 0.019$) and **stent deployment** ($p = 0.019$), confirming the non-inferiority of PROMETEUS to the hybrid model in terms of realism and skill differentiation.

Conclusions PROMETEUS is a valid, sustainable, and ethical educational resource. By eliminating the hygienic and ethical barriers of animal tissue while maintaining high construct validity, it bridges the gap between limited pediatric procedural exposure and the demand for competency-based training. It offers an accessible platform for novices to achieve baseline proficiency and experts to refine techniques before patient contact. Future developments will focus on deploying the AI-driven feedback system to further facilitate an asynchronous learning modality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP567 Atraumatic Over-the-Scope Clip (aOTSC): A Primary Hemostatic Tool or a Rescue Option in GI Bleeding?

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DOI 10.1055/s-0046-1821894

Aims Non-variceal gastrointestinal hemorrhage (NVGIH) remains a common and potentially life-threatening emergency associated with substantial morbidity and mortality. Endoscopic intervention is the cornerstone of management, with conventional modalities—including pharmacological, thermal and/or mechanical approaches such as through-the-scope (TTS) clips or band ligation—achieving high rates of initial hemostasis. However, rebleeding can occur in up to 26% of patients with high-risk stigmata. The atraumatic over-the-scope clip (aOTSC) system represents a newer endoscopic device capable of full-thickness tissue approximation and durable mechanical compression. Growing evidence suggests that aOTSC provides superior hemostatic efficacy as both rescue or primary therapy in selected high-risk patients, with lower rebleeding and mortality rates [1, 2].

Methods Prospective study of total of patients treated with 11/6 aOTSC (Ovesco Endoscopy AG, Germany) as a primary or rescue therapy for gastrointestinal bleeding at a tertiary health care center in Portugal, since device acquisition (2023). Efficacy and safety rates were evaluated.

Results Seven cases of gastrointestinal bleeding were managed with aOTSC (57.1% (n = 4) male sex and mean age of 82.0 ± 7.7 years-old). Mean Charlson Comorbidity Index was 5.6 ± 2.2. About eighty-eight percent (n = 6) of patients presented with upper gastrointestinal bleeding. Only two patients (28.6%) were on antithrombotic medication. On admission, the mean hemoglobin was 5.9 ± 1.3g/dL, systolic blood pressure 106.7 ± 40.5mmHg, and heart rate 86.2 ± 11.5bpm. Endoscopy revealed two Dieulafoy lesions (one gastric, one duodenal), four gastric ulcers (Forrest Ib and IIa), and one sigmoid diverticular bleeding. Five (71.4%) patients initially received conventional hemostatic therapy—on average 2.0 ± 0.8 attempts—including argon plasma coagulation, epinephrine injection, and TTS clips. The mean Rockall score after the first endoscopy was 7.1 ± 2.2, indicating high rebleeding risk. Mean calibre of bleeding vessel was 3.0 ± 0.7mm in diameter. Two (28.6%) patients were readmitted for rebleeding before aOTSC placement. First-line use of aOTSC reduced the number of hospitalization days (9.00 ± 1.00 vs 11.00 ± 3.74days; $p = 0.558$), as well as the number of procedures required (0 vs 2.0 ± 0.84procedures; $p = 0.047$). Immediate hemostasis was achieved in all cases. No rebleeding for a medium follow-up of 6.6 ± 6.5months. No complications or mortality were observed.

Conclusions aOTSC proved to be effective and safe as hemostatic endoscopic therapy for both primary and rescue gastrointestinal bleeding due to the high transmural grip force without tissue trauma, particularly to the blood vessel walls. All patients presented with high-risk features, such as high post-endoscopic Rockall score and bleeding vessel >2mm in diameter. This highlights the further need to establish standardized criteria and clinical scoring systems for the early or first-line aOTSC use.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wedi E., Fischer A., Hochberger J.A.A., Jung C., Orkut S., Richter-Schrag H.J. 2018; Multicenter evaluation of first-line endoscopic treatment with the OTSC in acute non-variceal upper gastrointestinal bleeding and comparison with the Rockall cohort: the FLETRock study. *Surgical endoscopy* 32 (1): 307–314
- [2] Bapaye J., Chandan S., Shehadah A., Deliwala S., Bhalla V., Chathuranga D., Okolo P.I. III 2022; Safety and efficacy of over-the-scope clips versus standard therapy for high-risk nonvariceal upper GI bleeding: systematic review and meta-analysis. *Gastrointestinal endoscopy* 96 (5): 712–720

eP568 "Crossing the Wrong Lumen" Rare complication of EUS-Gastroenterostomy

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DOI 10.1055/s-0046-1821895

Aims 68 year old female who presented to our hospital with nausea, vomiting and weight loss. Her medical history included high BMI and stage 3 ovarian cancer with peritoneal metastases.

Methods CT scan of abdomen and pelvis revealed gastric outlet obstruction secondary to metastatic cancer. Patient was referred to our endoscopy unit for EUS-guided gastro-enterostomy after discussion in multidisciplinary team [1–3].

Results Procedure was performed under conscious sedation. A loop of small bowel was identified on EUS close to the distal body of stomach. Direct EUS-GJ technique without fluoroscopy was used where a 19-G needle was used to puncture the target lumen. After distension of lumen with 600 ml of saline, 20x10mm LAMS stent was placed. Greenish colour discharge was noticed into the stomach. CT scan after the procedure confirmed entry into wrong lumen -inadvertent gastrocolostomy. Complication was discussed in MDT and international expert opinion was taken as this was likely first case of type-4 complication. LAMS was removed 3 weeks after the procedure to ensure fistula was epithelialised, tattoo was placed for marking the fistula and NG tube was placed. While patient remained on parenteral nutrition, one week later, fistula was closed with OVESCO Clip. NJ tube was placed to distend the small bowel with saline and indigocarmine. Fluoroscopy confirmed NJ guided distension. 20x10 mm Axios stent was placed to connect the right lumen with the stomach, confirmed with blue dye flow into the stomach and small bowel mucosal images on endoscopic view. Patient was started on oral feed and PN was gradually tapered off.

Conclusions EUS-GE is a high risk procedure and accidental placement of LAMS into colon is uncommon complication. Our case highlights the importance of sharing knowledge, complication and involvement of multidisciplinary team to manage rare complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] 10.1055/a-0871-1629?urlappend=%3Futm_source%3Dresearchgate.net%26utm_medium%3Darticle
- [2] <https://pmc.ncbi.nlm.nih.gov/articles/PMC5378550/>
- [3] <https://eref.thieme.de/e-videos>

eP569 Predictors of failure in endoscopic ultrasound-guided choledochoduodenostomy in malignant biliary obstruction

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DOI 10.1055/s-0046-1821896

Aims Endoscopic ultrasound-guided choledochoduodenostomy (EUS-CDS) using a lumen-apposing metal stent (LAMS) has emerged as an alternative method for biliary drainage when endoscopic retrograde cholangiopancreatography (ERCP) fails, particularly in the management of malignant obstructive jaundice. Given the growing applicability of this procedure, especially in palliative settings, recognizing factors that influence procedural success is crucial. The aim of our study is to identify predictors of failure in EUS-CDS with LAMS in malignant biliary obstruction.

Methods We conducted a retrospective single-center cohort study including patients with malignant obstructive jaundice who underwent EUS-CDS with LAMS, between 2018 and 2025. The following data were collected: patient and procedure details, adverse events, technical (correct placement of the LAMS) and clinical success ($\geq 50\%$ reduction in baseline bilirubin levels within four weeks). Univariable analysis was performed to identify predictors associated with technical failure. Statistical analysis included both parametric and non-parametric tests, chi-square and binomial logistic regression. A p-value <0.05 was considered statistically significant.

Results A total of 31 patients were included (median age 71 [36–91] years, 48.5% female). Pancreatic cancer was the most common etiology of malignant biliary obstruction (MBO) (n=24, 77.4%). Technical success was 87.1%, with a clinical success rate of 96.3% among these patients. In our analysis, extrahepatic bile duct diameter of ≤ 15 mm was not associated with increase odds of technical failure, although lower diameters were more common in this group (16 [9–24] vs 14 [12–17] mm, p=0.49). Non-pancreatic MBO (cholangiocarcinoma, ampullary cancer and metastasis) exhibited higher rates of technical failure (p=0.03). Technical failure was significantly associated with elevated C-reactive protein (CRP) levels (3.9 [1.1–10.3] vs 12.2 [1.1–15.0] mg/dL; p=0.02; OR=1.49 [1.10–2.09]) and with severe hypoalbuminemia (<2.5 mg/dL) (7 (25.9%) vs 4 (100%); p=0.01; OR=1.57 [1.11–2.46]). Median survival was 118 [7–1432] days.

Conclusions The etiology of MBO and the interaction between pro-inflammatory evolving tumor microenvironment and nutritional deterioration, reflected by elevated CRP and severe hypoalbuminemia, may contribute to technical failure of EUS-CDS. These findings highlight the need for careful pre-procedural assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP570 Determinants of Therapeutic Response and Recurrence in Digestive Angiodysplasias Treated with Argon Plasma Coagulation: A Monocentric Analytical Study

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DOI 10.1055/s-0046-1821897

Aims Digestive angiodysplasias are acquired vascular malformations responsible for chronic or acute gastrointestinal bleeding, mainly affecting elderly and polymorbid patients. Diagnosis relies primarily on endoscopy, and argon plasma coagulation (APC) is the standard therapeutic approach. However, the recurrence risk remains high and depends on several clinical and lesion-related factors. The aim of this study was to identify the therapeutic and clinical outcome determinants of digestive angiodysplasias, to assess the efficacy of endoscopic APC, and to analyze factors associated with recurrence.

Methods We conducted a retrospective, descriptive, and analytical study at a university hospital, including 79 patients treated with APC for endoscopically confirmed digestive angiodysplasias between January 2022 and June 2025. Clinical and endoscopic data were reviewed, and treatment details, immediate efficacy, clinical improvement, and recurrence were recorded. Statistical analyses were performed to identify factors associated with therapeutic response and recurrence.

Results The median age was 75 years, with a male predominance (59.5%). The most common comorbidities were hypertension (68.4%), diabetes (34.2%), coronary artery disease (27.8%), and renal insufficiency (20.3%). Anemia was the most frequent presenting symptom (67.1%), followed by rectal bleeding (46.8%). Lesions were predominantly located in the cecum. All patients underwent APC treatment, mostly in a single session. Immediate efficacy was achieved in most cases, and a significant clinical improvement was observed in 59.5% of patients. However, bleeding recurrence occurred in nearly half of cases, with a mean delay of 5.5 months. A better prognosis was observed in patients with localized involvement and a limited number of lesions, whereas multi-segmental disease, multiple lesions, and duodenal or jejunal localizations were significantly linked to higher recurrence rates.

Conclusions In our series, argon plasma coagulation was effective as a first-line treatment for digestive angiodysplasias, providing significant clinical improvement in most patients. Despite this, recurrence of bleeding remained relatively common, particularly in patients with multiple lesions or duodenojejunal involvement. Patients with localized and limited lesions experienced a better prognosis, highlighting the importance of careful endoscopic evaluation and close follow-up, especially for those at higher risk of recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP571 Endoscopic Dilatations: Indications and Outcomes

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DOI 10.1055/s-0046-1821898

Aims Endoscopic dilatation is a reference, first-line, simple, and effective technique used in the management of symptomatic digestive strictures. The objective of our study was to identify the indications for these dilatations and to evaluate their outcomes.

Methods This was a retrospective, descriptive, monocentric study conducted over a 6-year period (January 2019 to November 2025) in the endoscopy unit of the Department of Hepato-Gastroenterology and Proctology. It included patients who underwent endoscopic dilatation for digestive strictures. Dilatations performed using metallic or plastic stents were excluded. The collected variables included demographic data, the location and type of stricture, the type of dilatation, the mean number of dilatation sessions, and the success and failure rates.

Results A total of 72–74 patients underwent 132–139 endoscopic dilatations. The mean age was 43.8 years, ranging from 17 to 84. A male predominance was observed with 41 men (55.4%) and 33 women (44.6%), corresponding to a male-to-female ratio of 1.24. Stricture locations were esophageal in 35 cases (50%), gastric in 1 case (1.35%), pyloro-bulbar in 17 cases (22.9%), small bowel in 4 cases (5.4%), colonic in 6 cases (8.1%), rectal in 2 cases (2.7%), and anal in 2 cases (2.7%). In addition, 5 patients (6.8%) presented with an ileocolic anastomotic stricture, and 2 patients (2.7%) had an ileorectal anastomotic stricture.

Indications for dilatation included peptic strictures in 25 cases (35.1%), strictures related to inflammatory bowel disease in 17 cases (22.9%), achalasia in 10 cases (13.5%), tumoral strictures in 5 cases (6.8%), Plummer–Vinson syndrome in 4 cases (5.4%), and post-radiation strictures in 3 cases (4.1%). Four postoperative strictures (5.4%) were also dilated, including three esophageal strictures (4.1%) and one gastric stricture (1.35%) after sleeve gastrectomy. Additional indications included caustic esophageal strictures in two patients (2.7%), a post-band-ligation esophageal stricture in one patient (1.3%), an infectious colonic stricture due to intestinal tuberculosis in one patient (1.3%), and a stricture over an esophageal stent.

The types of dilatation performed were hydrostatic balloon dilatation (TTS) in 56 patients (75.7%), pneumatic dilatation in 9 patients (12.1%), and Savary bougie dilatation in 9 patients (12.1%). The mean number of dilatation sessions was 2.3 (range: 1–8). Clinical evolution showed a success rate of 95.9% (71 patients). Three cases (4.1%) of failure were reported due to refractory strictures after multiple sessions. Four strictures (5.4%) were recurrent. Three endoscopic dilatations (4.1%) were complicated by perforation, which was treated with clipping.

Conclusions Endoscopic management of digestive strictures remains the reference therapeutic approach. The choice of technique depends on the etiology and location of the stricture. Nevertheless, some strictures may recur or become refractory, which may require surgical intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP572 Quality of colonoscopy reports in IBD patients: preliminary audit according to ESGE 2022 standards

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DOI 10.1055/s-0046-1821899

Aims The quality of colonoscopy reports is essential for the follow-up and management of patients with inflammatory bowel disease (IBD), influencing diagnosis, disease activity assessment, dysplasia surveillance, and overall patient care. This study aimed to evaluate the compliance of colonoscopy reports from our center with ESGE 2022 standards and to identify areas for improvement, with the perspective of extending the audit over a two-year period.

Methods A preliminary prospective analysis was conducted on 50 colonoscopy reports from patients followed for IBD, including 13 ulcerative colitis and 37 Crohn's disease patients, of whom 7 had undergone previous surgery. ESGE indicators assessed included the precise indication for colonoscopy, quality of bowel preparation, Boston bowel preparation score, endoscopic activity score, performance of biopsies, terminal ileum intubation (TI), photodocumentation, and use of chromoendoscopy. Patients who had undergone surgery were excluded from items that were not applicable. Photodocumentation was not available in our center, and chromoendoscopy, although available, was not routinely used; these indicators were therefore considered non-assessable. For each ESGE indicator, the observed proportion was compared to the recommended threshold using a proportion z-test. This preliminary analysis will be extended over a two-year period to allow a more representative assessment of reporting practices and identify potential areas for quality improvement.

Results Among the 50 reports analyzed, the precise indication for colonoscopy was clearly documented in 72% of cases (vs 95% ESGE, $p = 0.0003$). The quality of bowel preparation was reported in 100% of evaluable reports; however, the Boston score was reported in only 49% (vs 90%, $p < 0.0001$) and the endoscopic activity score in 16% (vs 90%, $p < 0.0001$).

Biopsies were performed in 84% of reports (vs 80%, $p = 0.44$), and terminal ileum intubation was documented in 66% of cases after excluding non-applica-

ble items (vs 80 %, $p = 0.12$). In post-surgical Crohn's patients, the Rutgeerts score was documented in only 43 % of cases.

Conclusions This preliminary analysis shows that documentation in colonoscopy reports varies according to ESGE indicators. The precise indication for colonoscopy, Boston score, and endoscopic activity score were underreported, whereas biopsy performance and terminal ileum intubation were closer to ESGE standards. Extending the audit over a two-year period will provide a more comprehensive evaluation of compliance, help identify areas for improvement, and contribute to harmonizing colonoscopy reporting practices in our center.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP573 Concordance Between Pancreatic MRI and Endoscopic Ultrasound in the Evaluation of Intra-Ductal Papillary Mucinous Neoplasms (IPMN)

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DOI 10.1055/s-0046-1821900

Aims Assessing the risk of malignant transformation of intraductal papillary mucinous neoplasms (IPMN) is crucial for determining the optimal therapeutic approach, whether conservative or surgical. Early diagnosis and surveillance of features suggestive of malignancy rely mainly on imaging, particularly endoscopic ultrasound (EUS) and pancreatic magnetic resonance imaging (MRI). The aim of this study was to evaluate the concordance between pancreatic MRI and EUS in detecting *Worrisome Features* and *High-Risk Stigmata* in patients with IPMN.

Methods This study reports results from a prospective, single-center, descriptive and analytical cohort conducted over a 36-month period starting in May 2024. Adult patients (≥ 18 years) who underwent both pancreatic MRI and EUS and who presented imaging features consistent with IPMN were included.

Exclusion criteria were: contraindications to either EUS or MRI, or pancreatic lesions not compatible with IPMN.

Radiological *Worrisome Features* were defined as the presence of at least one of the following: main pancreatic duct (MPD) diameter between 5–9 mm, MPD caliber change with parenchymal atrophy, lymphadenopathy, non-enhancing mural nodule, focal wall thickening.

High-Risk Stigmata were defined as: MPD diameter > 10 mm, presence of an enhancing solid component.

Statistical analysis was performed using JAMOVI software.

Results A total of 17 patients were included: 58.8 % male and 41.2 % female, with a mean age of 70.8 ± 7.96 years. Among them, 52.9 % were diabetic and 23.5 % had undergone cholecystectomy. None had a history of acute pancreatitis.

Indications for performing MRI and EUS were: cholestatic jaundice (58.8 %), abdominal pain (23.5 %), and incidental discovery (17.6 %).

Lesion location: 35.3 % in the pancreatic head on MRI versus 29.4 % on EUS, 23.5 % in the tail on MRI versus 11.8 % on EUS, 11.8 % in the body on MRI versus 5.9 % on EUS. Multifocal lesions were found in 2 patients on MRI and in 7 patients on EUS.

When *Worrisome Features* were absent on MRI, they were also absent on EUS in only 77.8 % of cases, with no statistically significant difference ($p = 0.057$). When *High-Risk Stigmata* were absent on MRI, they were present on EUS in 27.3 % of cases, with a statistically significant difference ($p = 0.009$).

Conclusions Based on these results, EUS appears to be more sensitive than pancreatic MRI for detecting *High-Risk Stigmata* in IPMN. However, diagnostic performance depends greatly on operator expertise, which supports the complementary use of both modalities—at least during the initial evaluation of IPMN and during follow-up, especially when *Worrisome Features* are present on either imaging technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP574 Optimizing Polypectomy Training: Findings From a Prospective Multi-Center Survey

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DOI 10.1055/s-0046-1821901

Aims Colorectal polyps are frequent lesions detected during colonoscopy, and their identification and management can be challenging. Training in polypectomy should be an integral part of the gastroenterology residency curriculum to ensure optimal patient care.

This study aimed to assess, through an anonymous survey, the training needs of endoscopists regarding polypectomy to identify the obstacles encountered and to propose adapted educational programs

Methods This was a cross-sectional, prospective, descriptive, and analytical study conducted using an online questionnaire distributed to several gastroenterologists. Training needs were assessed using the FGP (Frequency, Gravity, Problems) grid for seven items. Each item was evaluated according to its frequency (0, 1, 2), its severity (0, 1, 2), and the difficulties related to knowledge, technical skills, and professional attitudes (0, 2, 4). Statistical analysis was performed using Jamovi software (Version 2.4).

Results Fifty-three responses from 12 countries were analyzed. A total of 60.4 % of participants were women, with a female-to-male ratio of 1.5. Participants aged 30–40 years accounted for 39.6 % of the sample, while those aged 20–30 years comprised 28.3 %. Residents represented 34 % of respondents, and 19 % were physicians.

More than 60 % of participants had been practicing hepatogastroenterology for over 5 years, yet only 37.7 % had received polypectomy training during residency. Six out of ten participants had been trained in polyp characterization and the use of polypectomy devices. Several teaching modalities were reported for these two items, with a predominant role of workshops held during national and international congresses (45.3 % and 41.5 %, respectively) and self-learning (69.8 % and 45.3 %).

More than half of the participants considered the training they received to be insufficient (64.2 %), expressing a preference for hands-on training on models (62.3 %) and on patients (71.7 %).

According to the FGP grid, the main difficulties concerned technical skills (mean score of 13.9 per participant for the seven items), followed by theoretical knowledge (12.6).

87 % of participants reported theoretical difficulties in polyp characterization, 81 % in managing post-resection complications, and 75 % in performing polypectomy.

Regarding technical skills, 94 % of participants reported difficulties in polyp characterization and 91 % in resection and complication management.

Among the variables studied — including status, initial training, training modalities (hands-on, webinar, certification), and years of endoscopic practice — none were significantly associated with the reported difficulties. In contrast, the frequency of performing polypectomies was the only factor associated with a reduction in difficulties (OR = 0.79; 95 % CI: 0.52–0.96; $p = 0.0249$).

Conclusions Endoscopic polypectomy is a common procedure in digestive endoscopy, but it requires specific expertise. This multicentre survey identified several training needs, particularly in the areas of polyp characterisation, resection techniques, and managing complications.

More than half of the participants considered their training to be insufficient, highlighting the need for strengthened continuing education and structured hands-on training programs to optimize polyp management and enhance endoscopists' skills.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP575 VACStent therapy for upper gastrointestinal leaks and perforations: real-world outcomes from a single tertiary gastroenterology center

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DOI 10.1055/s-0046-1821902

Aims Anastomotic leaks and iatrogenic perforations of the upper gastrointestinal tract remain challenging complications associated with significant morbidity and mortality. Current endoscopic management relies mainly on fully covered self-expanding metal stents (SEMS) or endoscopic vacuum therapy (EVT). Although effective, SEMS are limited by high migration rate and lack of active drainage, whereas EVT with a polyurethane sponge may delay oral nutrition. The VACStent, a recent device that combines a fully covered SEMS with a polyurethane sponge-cylinder connected to a vacuum pump, was developed to overcome these limitations. This system enables continuous drainage of purulent material and granulation tissue formation, while reducing the risk of migration and preserving lumen patency. Real-world data regarding its performance remains limited. This study aimed to assess the clinical efficacy and safety of VACStent therapy in the management of upper gastrointestinal defects.

Methods We conducted a retrospective study including all consecutive patients with upper gastrointestinal defects treated with the VACStent between July 2024 and October 2025 at the Digestive Endoscopy Unit of Hospital de Santa Luzia, Viana do Castelo, Portugal. Demographic characteristics, type of defect, procedural details, treatment duration, need for adjunctive therapies and adverse effects were collected using a database based on electronic medical records. The primary outcome was complete closure of the defect. A descriptive statistical analysis was performed, reporting categorical variables as percentages, and continuous variables as means or medians, as appropriate.

Results VACStent was used in 7 patients (mean age 71.7 ± 10.0 years; 71.4% female) for the management of anastomotic leaks (57.1%, all after total gastrectomy) and iatrogenic perforations (42.9%, all occurring during balloon dilation for achalasia treatment). The median time between the index procedure and diagnosis of the defect was 4 days, and the time from diagnosis to VACStent placement was 0 days. The mean defect size was 14.4 ± 6.9 mm. VACStent was used as first-line therapy in 71.4% ($n = 5$) of cases. Technical success was achieved in 100%. The mean duration of VACStent therapy was 8.9 ± 4.0 days, with a median of 2 exchanges per patient. Oral diet was resumed after a median of 4 days of VACStent placement. Complete closure of the defect was achieved in 71.4% of patients; 2 patients required adjunctive therapy (SEMS and EVT, respectively). Among patients in whom closure was not achieved, one presented with severe sepsis and had the largest defect (two with more than 20 mm), while in the other case VACStent was removed due to bleeding from an ulcer at the site of the distal flange of the device; both cases occurred in context of anastomotic leaks in which VACStent was used as first-line therapy.

Device-related adverse events occurred in 42.9% patients – bleeding ($n = 1$), retrosternal pain ($n = 1$) and stenosis ($n = 1$) – all managed endoscopically.

Conclusions VACStent therapy proved to be a safe and effective minimally invasive option for managing upper gastrointestinal anastomotic leaks and perforations, achieving defect closure in most patients and enabling early oral nutritional resumption, with a favorable safety profile. It also demonstrated effectiveness in cases where it was not used as first-line therapy. Therefore, VACStent emerges as an alternative to surgery and other endoscopic methods in these settings, although larger studies are required to validate these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP576 Early Predictive Performance of Pre-Endoscopic Risk Scores for Identifying Patients Requiring Endoscopic Therapy in Suspected Non-Variceal Upper Gastrointestinal Bleeding

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DOI 10.1055/s-0046-1821903

Aims Non-variceal upper gastrointestinal bleeding (NVUGIB) is a frequent emergency requiring early risk stratification to identify patients needing urgent endoscopy and hospitalization. This study evaluated the predictive performance of the AS, modified Glasgow-Blatchford (GBm), AIMS65, and H3B2 scores in suspected NVUGIB [1, 2].

Methods A retrospective observational study included adults undergoing upper endoscopy for suspected NVUGIB between May and December 2024 at Hospital General de México. Clinical, laboratory, and endoscopic data were collected. Pre-endoscopic scores (AS, AIMS65, GBm, H3B2) were calculated. Diagnostic accuracy for predicting endoscopic treatment and hospitalization was assessed using ROC curves and AUC analysis (► **Table 1**).

Results A total of 122 patients were analyzed (63.1% male; mean age 57.7 ± 16.3 years). Melena (54.1%), coffee-ground emesis (25.4%), and hematemesis (16.4%) were the main presenting symptoms. Endoscopic therapy was required in 16.4% of cases, mostly with epinephrine or hemoclips. Gastropathy (40.2%) and peptic ulcer disease (35.3%) were the predominant findings. Hospitalization was required in 38.5% of patients.

For predicting endoscopic therapy, the AS score had the highest AUC (0.636; $p = 0.055$), followed by H3B2 (0.629) and AIMS65 (0.615). For hospitalization prediction, GBm (AUC 0.745; $p < 0.001$) and H3B2 (AUC 0.738; $p < 0.001$) performed best, while AS also showed significant discrimination (AUC 0.664; $p = 0.002$). Optimal cutoffs were $AS > 2$, $AIMS65 > 1$, $H3B2 > 2$, and $GBm > 6$.

Conclusions The AS score, based on clinical variables available at first contact, showed comparable performance to laboratory-dependent scores—particularly for predicting hospitalization. Its simplicity supports its potential use as a practical triage tool in emergency settings. Further validation could consolidate its role in early NVUGIB management.

► Table 1

Outcomes	Scores	AUC (95 % CI)	P value	Cutoff point	Sensitivity	Specificity
Need for endoscopic treatment	AS	0.636 (0.502–0.770)	0.055	>2	0.700	0.578
	AIMS65	0.615 (0.462–0.768)	0.104	>1	0.700	0.657
	H3B2	0.629 (0.509–0.750)	0.068	>2	0.850	0.588
	GBm	0.600 (0.483–0.716)	0.159	>7	0.850	0.608
Need for hospitalization	AS	0.664 (0.564–0.764)	0.002	>2	0.723	0.520
	AIMS65	0.595 (0.492–0.697)	0.079	>1	0.766	0.600
	H3B2	0.738 (0.649–0.827)	<0.001	>2	0.830	0.507
	GBm	0.745 (0.655–0.836)	<0.001	>6	0.894	0.613

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yarkaç A. et al. AS score: a novel score for predicting clinical outcomes in upper gastrointestinal bleeding. *Scand. J. Gastroenterol.* 60: 213–218 2025
- [2] Gralnek I.M. et al. Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021. *Endoscopy* 53: 300–332 2021

eP577 Endoscopic Management of Intrabiliary Rupture of Liver Hydatid Cysts: High Success Rate and Real-World Outcomes

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DOI 10.1055/s-0046-1821904

Aims To assess the diagnostic and therapeutic performance of ERCP in the management of intrabiliary rupture of hepatic hydatid cysts.

Methods We retrospectively included 60 patients with liver hydatid cysts fistulized into the bile ducts, treated between January 2016 and September 2025. Overall success was defined as complete clearance of the common bile duct. Statistical analysis was performed using JAMOVI 2.0.

Results Among all ERCP procedures performed during the study period, 4.6% (n = 60) were indicated for a hydatid cyst communicating with the bile ducts. The median age was 46.1 ± 14.8 years, with a sex ratio of 2. ERCP was performed for acute cholangitis in 44.9% of cases and for persistent external biliary fistula in 34%. The median bile duct diameter was 10 [7–14] mm, and the median cyst diameter was 35 [27–47] mm.

Sphincterotomy was performed in 96% of patients, allowing hydatid material extraction (balloon or Dormia) in 87.8%. Naso-biliary drainage was required in 24% of cases, and biliary stent placement in 8%.

The overall success rate was 93.3% (n = 56), while 4 patients (6.7%) developed complications. Clinical improvement was reflected by resolution of jaundice within 5–10 days in most cases.

Conclusions Our findings confirm that ERCP is a highly effective therapeutic option for intrabiliary rupture of liver hydatid cysts, with a high success rate, low complication rate, and excellent short-term and long-term outcomes. This minimally invasive approach represents a valuable alternative to surgery in appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP578 Exploring the Expanded Use of RADA16 in the Management of Non-Ulcer, Non-Variceal Bleeding

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DOI 10.1055/s-0046-1821905

Aims Non-variceal gastrointestinal bleeding is a common condition worldwide with an annual incidence of between 50 to 150 per 100,000. Despite improvements in diagnosis and treatment, it remains a clinical challenge, with a 30-day mortality of up to 11%. RADA16 is a novel haemostat, with no risk of thermal injury or perforation. It is applied endoscopically as a transparent hydrogel, physically preventing further bleeding. This case series aims to explore the expanded use of RADA16 in the management of non-ulcer, non-variceal bleeding.

Methods A retrospective evaluation was undertaken at a busy, tertiary university hospital, that has a high rate of refractory bleeding. Data were collected from Welsh Clinical Portal and Synapse Clinical Workflow Manager (CWM) in patients who underwent RADA16 treatment for non-ulcer, non-variceal bleeding between 2014 – June 2025. Aetiology of bleeding, haemoglobin level, other haemostatic treatments, number of endoscopies and outcome (haemostasis achieved or rebleeding) were recorded. Endoscopic images were also taken for analysis.

Results RESULTS: A total of eight patients were treated (► Table 1), mean age 69 (SD = 9), male to female ratio 6:2. Initial haemostasis was achieved in eight (100%) patients, five (62.5%) of whom had experienced failure of other haemostatic therapies. Rebleeding occurred in three (37.5%) cases. The average increase in haemoglobin on hospital admission and one month after initial treatment with RADA16 was 25.4g/L. A dependent-samples t-test indicates there was a significant difference between haemoglobin on admission ($M = 80.3$, $SD = 22.8$) and after RADA16 treatment ($M = 105.7$, $SD = 20.2$), $t(6) = 3.6$, $p = .012$. The eta squared statistic (.68) indicated a large effect size. The average decrease in number of endoscopies and treatments was 3.0 and 1.28 respectively.

► **Table 1** Summary of Cases Treated with RADA16

Cases	Age	Sex	Aetiology of bleeding	Procedure type	Co-morbidities
1	51	M	GAVE	Endoscopy	T2DM, Cirrhosis
2	65	F	GAVE	Endoscopy	Liver Steatosis, Liver Fibrosis, Acquired Hypothyroidism, Bilateral Internal Jugular Vein Thrombosis, Portal Vein thrombosis
3	65	F	GAVE	Endoscopy	T2DM, Hypertension, NAFLD
4	66	M	RAVE	Sigmoidoscopy	Malignant Neoplasm of the Prostate
5	68	M	Post-Radiotherapy Angiodysplasia	Endoscopy	T2DM, Hodgkins Lymphoma, Atrial fibrillation, Acute Renal Failure, Gout
6	73	M	GAVE	Endoscopy	Congestive Hepatopathy, Cirrhosis, Epilepsy, Hypertension, Atrial Fibrillation
7	78	M	Post-Endoscopic Therapy Bleed	Endoscopy	Cirrhosis, Oesophageal Varices, Subarachnoid Haemorrhage
8	83	M	GAVE	Endoscopy	NAFLD, Advanced fibrosis, T2DM

GAVE: Gastric Antral Vessel Ectasia, T2DM: Type 2 Diabetes Mellitus, NAFLD: Non-Alcoholic Fatty Liver Disease, RAVE: Radiation-Associated Vascular Ectasia

Conclusions RADA16 is effective in achieving haemostasis in various bleeding aetiologies. Its transparency, low risk and ease of use are advantages, though further prospective studies are required to confirm its efficacy in comparison to other treatments.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP579 Achalasia and Esophageal Diverticula: Comparative Performance of ChatGPT-5 and Gemini in Therapeutic Decision-Making

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DOI 10.1055/s-0046-1821906

Aims Conversational artificial intelligence (AI) models are increasingly used as clinical decision-support tools. This study aimed to compare ChatGPT (GPT-5) and Gemini (Google) in their ability to provide safe, justified, and guideline-compliant therapeutic strategies for esophageal achalasia and diverticula, with particular emphasis on the indication for Per Oral Endoscopic Myotomy (POEM).

Methods Twenty-two simulated clinical cases were developed: 18 achalasia cases (types I, II, III, atypical, post-radiotherapy, post-dilation, or post-POEM) and 4 esophageal diverticula cases (epiphrenic and Zenker, symptomatic and asymptomatic). Cases included complex clinical scenarios such as cardiac or neurological comorbidities, megaesophagus, pre-existing reflux, or post-treatment recurrence.

Each case was independently submitted to both AI models using identical phrasing. The primary question was:

“Is POEM indicated for this patient? Justify your answer.”

Responses were evaluated by a clinical expert using five criteria: therapeutic relevance, clinical justification, safety, clarity, and adherence to guidelines. Each criterion was scored 0–2, except for clarity and guideline references (0–1), for a maximum score of 8 points. Qualitative analyses were conducted to assess overall trends, response structure, and adherence to international recommendations and patient safety.

Results ChatGPT achieved a higher global score (96 %) than Gemini (89.8 %). Both models reached identical performance for therapeutic relevance (90.9 %) and clarity (100 %). ChatGPT outperformed Gemini in safety (100 % vs. 95.5 %) and explicit guideline citation (86 % vs. 27 %).

Integrated examples revealed consistent differences in approach:

- In an elderly patient with megaesophagus and cardiac comorbidity, ChatGPT recommended Botox or pneumatic dilation prior to POEM, demonstrating a risk-adapted, guideline-aligned strategy. In contrast, Gemini suggested POEM directly, acknowledging its efficacy but without referencing guideline-based precautions for fragile patients.
- In a post-fundoplication achalasia recurrence, ChatGPT advised caution due to altered anatomy and emphasized alternative treatments, whereas Gemini proposed POEM as a technically feasible option, illustrating its more procedural and pragmatic orientation. Qualitative trends emerged clearly across cases.

ChatGPT consistently adhered to ACG/ASGE/WGO guidelines, provided structured bullet-point responses, and privileged less invasive or staged approaches in high-risk scenarios. Gemini delivered more detailed, educational explanations of pathophysiology and procedural mechanics but was less concise and occasionally favored aggressive interventions even in complex situations. ChatGPT justified decisions through explicit links between physiology, expected outcomes, and risks, while Gemini relied more on practical reasoning and technical consideration.

Conclusions Both AI models produced clinically relevant and safe recommendations. However, ChatGPT demonstrated superior guideline adherence, structured clarity, and risk-sensitive therapeutic reasoning. Gemini offered richer pedagogical explanations and a pragmatic technical viewpoint. Their complementary strengths suggest potential value in combined use for clinical decision-support and medical training in disorders such as achalasia and esophageal diverticula.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP580 Life Between Endoscopies and Family: Pregnancy and Parenthood Challenges in Gastroenterology Trainees

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DOI 10.1055/s-0046-1821907

Aims Pregnancy and parenthood during gastroenterology training present unique challenges. Long hours, exposure to endoscopic procedures, and workplace expectations can affect wellbeing, career progression, and professional performance. The aim of this study is to evaluate the experiences, challenges, and support systems for gastroenterology trainees during pregnancy or parenthood.

Methods A cross-sectional survey targeted trainees who were pregnant or whose partners were pregnant over the last three years. Data collected included demographics, working hours, perceived support from colleagues and supervisors, exposure to occupational hazards (anesthetic gases, radiation, bloodborne pathogens), pregnancy complications, and postnatal adaptation to work

Results Thirty-four female and three male trainees (mean age 28 ± 3.5 years) participated. Among women, 60 % experienced pregnancy during training. Prior to pregnancy, 80 % worked >40 hours/week; during pregnancy, 70 %, 55 %, and 35 % continued similar workloads in the first, second, and third trimesters, respectively. Over half (53 %) experienced at least one pregnancy complication. Major occupational risks were inadequately addressed: anesthetic gases (45 %), bloodborne pathogens (35 %), radiation (18 %), and prolonged endoscopy sessions (30 %). Postpartum, male trainees were more likely to resume full-time work than females (93 % vs 62 %, $p = 0.03$). Both sexes reported challenges balancing childcare with training and reduced productivity. Women more frequently perceived parenthood as affecting ambition and career progression ($p = 0.02$).

Conclusions Pregnancy and parenthood during gastroenterology training pose significant physical and professional challenges. Training programs should proactively assess occupational risks, implement supportive policies, and promote a culture that normalizes parental responsibilities to ensure trainee wellbeing, professional growth, and gender equity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP581 Endoscopic sedation and monitoring practices in Portugal: a nationwide web-based survey

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DOI 10.1055/s-0046-1821908

Aims National surveys have been used to obtain information on sedation and monitoring practices in endoscopy in several countries. To provide data from Portugal and query the Portuguese endoscopists on nonanesthesiologist administration of propofol.

Methods A 31-item web survey was sent to all 490 members of the Portuguese Society of Gastroenterology.

Results A total of 127 members (26 %) responded the questionnaire; 20 % were residents. 52 % worked in both public and private practice. Most endoscopists performed esophagogastroduodenoscopy (EGD) without propofol in the public sector (68 %), compared to 37 % in the private sector, a trend also observed for colonoscopy without propofol (62 % vs. 30 %, respectively). Propofol provided the best satisfaction against midazolam + /-opioid, both in EGD and Colonoscopies (mean 9.5 and 9.7/10 vs 4.9 and 5.4/10 respectively). Nonanesthesiologist administration of propofol was performed only by seven respondents; however, 52 % reported that they would consider its use, given adequate training. Pulse oximetry is monitored routinely (99 %); oxygen sup-

plementation is administered by 87 % with propofol and 51 % with traditional sedation. 75 % would consider useful the existence of certified courses in Sedation Training in Gastrointestinal Endoscopy in the Gastroenterology Residency curriculum.

Conclusions Propofol is the preferred sedation agent among Portuguese endoscopists, with a possible interest in expanding its use through targeted training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP582 Predisposing Factors for Gastrointestinal Hemorrhage in Cirrhotic Patients

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DOI 10.1055/s-0046-1821909

Aims Gastrointestinal bleeding is a common and potentially life-threatening complication of liver cirrhosis, mainly resulting from portal hypertension. It represents a major cause of morbidity and mortality in this patient population. Early identification of risk factors is essential to prevent this complication and to guide an appropriate management strategy. Through this study, we aimed to describe the clinical, biological, and etiological characteristics of cirrhotic patients presenting with gastrointestinal bleeding, and to analyze the predictive factors associated with its occurrence.

Methods This was a retrospective, descriptive, and analytical monocentric study conducted in the Hepato-Gastroenterology and Proctology Department "Medicine B" of Ibn Sina University Hospital in Rabat. The study included 122 patients with liver cirrhosis over a 6-year period, from July 2018 to November 2025. Predictive factors for gastrointestinal bleeding were assessed using binary logistic regression, performed with JAMOVI software. A p -value < 0.05 was considered statistically significant.

Results Among the 122 included patients, gastrointestinal bleeding occurred in 46 patients (37.7 %). Regarding demographic characteristics, there were 24 men (52.1 %) and 22 women (47.9 %), with a mean age of 52.3 ± 14.9 years. Smoking was reported in 9 patients (19.5 %), type 2 diabetes in 7 patients (15.2 %), and alcohol consumption in 2 patients (4.3 %). The ECOG performance status was 0 in 22 patients (47.8 %), 1 in 13 patients (28.2 %), 2 in 9 patients (19.5 %), and 3 in 2 patients (4.3 %).

According to the Child-Pugh classification, 12 patients (26 %) were Child A, 13 (28.2 %) Child B, and 21 (45 %) Child C.

Platelet count was $< 50,000/\text{mm}^3$ in 12 patients (26.1 %), prothrombin time < 50 % in 18 patients (39.1 %), and the mean serum albumin level was 29.7 ± 8.6 g/L.

Cirrhosis etiologies included HBV in 14 patients, HCV in 12 patients, NASH in 4 patients, alcohol in 3 patients, PBC in 4 patients, AIH in 1 patient, Wilson's disease in 1 patient, and cryptogenic cirrhosis in 4 patients. Three patients were still undergoing etiological assessment.

Upper endoscopy revealed grade III esophageal varices in 18 patients, grade II in 16 patients, and grade I in 11 patients.

Multivariate analysis identified the following as the main predictive factors for gastrointestinal bleeding:

Child-Pugh C score (OR = 2.73, CI = 1.04–7.13, $p = 0.04$)

Neurological decompensation (OR = 4.55, CI = 1.49–13.89, $p = 0.008$)

Portal vein thrombosis (OR = 0.2, CI = 0.06–0.65, $p = 0.008$)

Conclusions This study highlights the principal predictive factors of gastrointestinal bleeding in cirrhotic patients, particularly a high Child-Pugh score, neurological decompensation, and portal vein thrombosis. These findings emphasize the need for close monitoring and optimised management of patients presenting with these risk factors to reduce morbidity and mortality. A preventive strategy combining control of portal hypertension and management of complications may improve outcomes in cirrhotic patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP583 Are guidelines actually improving quality of examinations? A multicenter study shining the light on endosonographic examinations

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DOI 10.1055/s-0046-1821910

Aims In order to keep the quality of diagnostic EUS improving, as it is a dynamic process, the European Society for Gastrointestinal Endoscopy wants to set high standards and review their impact. The aim of this multicenter study is to observe the impact that the publication and implementation of the ESGE guideline on quality improvement in 2017 had on the performance of endoscopists. We can furthermore establish a direct link to the new guidelines from November 2025 to find out whether the key performance measurements can be met [1].

Methods This study is designed as a multicenter study involving three academic teaching hospitals (Warendorf (W), Ibbenbüren (I), and Trier (T)) and three university hospitals (Münster (M), Kiel (K), and Oldenburg (O)) in Germany. The primary endpoint focuses on the frequency of obtaining a diagnostic tissue sample from EUS-FNA/FNB of solid lesions. The secondary endpoint is adequate endosonographic description of landmarks. As a further secondary endpoint in accordance with the ESGE updated Guidelines from 11/2025 we also included the signed informed consent before the examination. Until now we included 812 patients.

Three patient groups were formed:

- Before implementation of the guideline, before 2018 (retrospective, group I)
- After implementation of the guideline, from 10/2018 to 12/2023 (retrospective, group II)
- After implementation of the guideline, from 2024 on (prospective, group III)

For the calculation of the case number planning, it is assumed that the rate in group A is 78 % and in groups B and C 88 %.

The study was approved by the local Ethics Committee of University in Münster and registered at ClinicalTrials.gov (NCT06727851).

Results Preliminary data has been collected in 4/6 hospitals (W, M, I, O) to date. Frequency rates of obtaining a diagnostic tissue sample:

- 77.6 %, 91.7 %, and 85 % for W
- 92.5 %, 84 %, and 82 % for M
- 84 %, 80 %, and 92.9 % for I
- 83 %, 85 % and 85 % for O

Adequate description of EUS landmarks

- 87.8 %, 86.9 %, and 90 % for W
- 71.7 %, 56 %, and 68 % for M
- 58 %, 98 %, and 100 % for I

With regard to the corresponding explanations provided prior to EUS procedures, the mean values were 98.8 %, 97.6 %, and 94 %. The data of the hospitals in Oldenburg and Kiel are under review and are expected to present for ESGE Days 2026.

Conclusions In light of the most recent update to the guidelines, we can conclude that the aim of tissue sampling during EUS-FNA/FNB is met in three of four centers with a key performance measurement of more than 85 %. The frequency of adequate description of landmarks in EUS improved in two of three centers following publication of the quality-improving ESGE guideline, reaching a KPM of 90 %. A high degree of standardization using text building blocks may have been helpful in this regard. The slightly lower values for Center M could be explained by previous endosonographic examinations in other centers or

the performance of CT scans. The rate of obtaining a diagnostic tissue sample improved in three of four centers. The informed consent was generally available. We assume that the slightly lower rates might be due to missed scanning of the documents.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Domagk D, Oppong KW, Aabakken L, Czakó L, Gyökeres T, Manes G, Meier P, Poley JW, Ponchon T, Tringali A, Bellisario C, Minozzi S, Senore C, Bennett C, Bretthauer M, Hassan C, Kaminski MF, Dinis-Ribeiro M, Rees CJ, Spada C, Valori R, Bisschops R, Rutter MD. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy*. 2018; 50 (11): 1116–1127. doi:10.1055/a-0749-8767 Epub 2018 Oct 19 PMID: 30340220

eP584 Endoscopic surveillance and risk factors for colorectal dysplasia in patients with primary sclerosing cholangitis

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DOI 10.1055/s-0046-1821911

Aims The aim of this study was to evaluate the incidence of colorectal neoplasia over time in patients with primary sclerosing cholangitis and inflammatory bowel disease (PSC-IBD) and to identify the risk factors associated with the development of colorectal dysplasia.

Methods This retrospective study included 365 patients with PSC-IBD who were followed between 2007 and 2025, and underwent a total of 2,352 colonoscopies with high-definition white light endoscopy. Demographic and clinical data, endoscopic findings, and histological results were analyzed. Risk factors for dysplasia and carcinoma were assessed using a time-dependent Cox regression model.

Results Dysplasia was detected in 76 patients (20.8 %), with a neoplasia detection rate of 9.18 %. A total of 216 dysplastic lesions were identified (50.9 % from polypectomies and 49.1 % from biopsies). Adenocarcinoma was diagnosed in 13 patients (3.6 %). Statistically significant risk factors included higher age (HR = 1.03; P = 0.008), biologic therapy (HR = 2.48; P = 0.029), and disease duration (P < 0.001). The Mayo endoscopic subscore showed a positive trend toward significance (HR = 1.27; P = 0.051).

Conclusions Our study confirms the high risk of colorectal neoplasia in patients with PSC-IBD, particularly in older individuals, those with longer disease duration, and those receiving biologic therapy. It highlights the importance of annual surveillance colonoscopies with both targeted and random biopsies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP585 Early Complications and Risk Factors After Percutaneous Endoscopic Gastrostomy: A Retrospective Cohort Study

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DOI 10.1055/s-0046-1821912

Aims Percutaneous endoscopic gastrostomy (PEG) is the standard method for long-term enteral nutrition, yet procedure-related complications may occur. This study aimed to determine the incidence of early complications and identify associated risk factors.

Methods We conducted a 10-year retrospective monocentric study (January 2015–March 2024) including 178 consecutive patients who underwent PEG placement using the “pull” technique. Demographic characteristics, indica-

tions, procedural parameters, and early complications (≤ 30 days) were recorded. Univariate and multivariate logistic regression analyses were performed to identify independent predictors of complications.

Results The study included 178 patients (mean age 46.5 years; range 5–88) with a male-to-female ratio of 1.7. Most patients ($\approx 80\%$, $n = 142$) were referred from intensive care units. The main indication was severe neurological impairment ($\approx 86\%$, $n = 153$), predominantly traumatic brain injury ($\approx 53\%$, $n = 94$) and stroke ($\approx 16\%$, $n = 28$). Procedural success was achieved in 99.4% of cases (177/178). Difficult endoscopic transillumination occurred in $\approx 13\%$ ($n = 23$). The overall early complication rate was $\approx 8\%$ ($n = 15$). Complications included abdominal wall infections ($n = 6$; 3.4%), bleeding events ($n = 5$; 2.8%—2 hemoperitoneums and 3 minor gastrointestinal bleeds), and one perforation-related peritonitis (0.6%). In univariate analysis, prior abdominal surgery ($p = 0.004$), abnormal abdominal wall thickness ($p = 0.001$), pre-procedural sepsis ($p = 0.008$), and difficult transillumination ($p < 0.001$) were significantly associated with early complications. On multivariate regression, pre-procedural sepsis remained the only independent predictor ($p = 0.001$).

Conclusions PEG is a safe and effective procedure with a low rate of early complications. Pre-procedural sepsis represents the principal independent risk factor for adverse events. Careful pre-procedural evaluation, particularly of infectious status and abdominal wall characteristics, is essential to optimize patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP586 Biliary obstruction due to ampullary neuroendocrine tumor: the value of endoscopy without imaging mass

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DOI 10.1055/s-0046-1821913

Introduction Neuroendocrine tumors (NETs) of the ampulla of Vater are rare, accounting for $< 1\%$ of ampullary neoplasms. Their presentation is often non-specific, and cross-sectional imaging may miss small or infiltrative lesions, especially when they grow submucosally. Endoscopy plays a critical role when symptoms persist despite unrevealing imaging.

Case Report A 47-year-old woman with a history of cholangiopancreatitis presented with recurrent abdominal pain, nausea, and progressive constitutional symptoms. Previous imaging had shown biliary and pancreatic duct dilation without an identifiable cause. A repeat MRCP demonstrated ampullary obstruction but no mass. ERCP revealed a markedly abnormal papilla, characterized by friability, firmness, erythema, and an unusually en bloc mobility that prevented biliary cannulation. Biopsies were obtained and a prophylactic pancreatic stent was placed [1–5].

Histology demonstrated a well-differentiated grade 3 neuroendocrine tumor (Ki-67 25%, CK19/CK7 positive). Staging found no metastases, but surgical exploration identified multiple small liver lesions consistent with metastatic NET. Resection revealed a 3-cm ampullary NET infiltrating the pancreatic head with lymphovascular and perineural invasion, as well as regional lymph-node involvement, consistent with pT3 N1 M1 disease. A synchronous well-differentiated grade 2 pancreatic tail NET (1 cm) was also identified, suggesting multifocal disease.

Discussion Ampullary NETs tend to behave more aggressively than other gastrointestinal or pancreatic NETs of comparable size. Reported rates of nodal involvement and liver metastases are high, even in small tumors. This case illustrates the diagnostic limitations of MRCP and CT for detecting early or infiltrative ampullary lesions and reinforces the value of endoscopy as the most sensitive tool for identifying abnormal papillary morphology. Immunohistochemistry confirms neuroendocrine differentiation, while Ki-67 remains essential for grading and prognosis. Management typically requires radical surgical

resection. In advanced disease, therapeutic options include somatostatin analogues, targeted agents, peptide receptor radionuclide therapy, or systemic chemotherapy.

Conclusion This case highlights the central diagnostic role of endoscopy in evaluating ampullary lesions that remain occult on imaging. The combination of atypical papillary features, multifocal NETs, and unexpected metastatic disease underscores the aggressive potential of ampullary NETs and the importance of maintaining clinical suspicion in patients with persistent symptoms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ENETS Guidelines 2023 for the management of neuroendocrine neoplasms
- [2] Lee YH et al. Ampullary neuroendocrine tumor diagnosed by endoscopy. *J Surg Case Rep.* 2020;
- [3] Nizam K et al. Ampullary neuroendocrine tumors: epidemiology and clinical behavior. *Cureus.* 2023;
- [4] Sundin A et al. Neuroendocrine neoplasms of the digestive system. *Best Pract Res Clin Gastroenterol.* 2022;
- [5] Randle RW et al. Neuroendocrine tumors of the ampulla of Vater: clinical features and outcomes. *BMC Gastroenterology.* 2017;

eP587 Evaluating The Need for Thermal Ablation of Mucosal Defect Margins After Colonic Piecemeal Underwater Endoscopic Mucosal Resection: A Retrospective Analysis

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DOI 10.1055/s-0046-1821914

Aims Several studies have demonstrated that snare tip soft coagulation (STSC) of the resection margins can significantly reduce recurrence rates after conventional piecemeal endoscopic mucosal resection (EMR). However, there is a lack of data regarding the efficacy of STSC in the context of piecemeal underwater EMR (pU-EMR) of large (≥ 20 mm) nonpedunculated colorectal polyps (LNPCPs).

Methods This study aimed to assess the impact on recurrence rates of thermal ablation of the resection margins following pU-EMR. We conducted a retrospective single-center study including all LNPCPs removed by pU-EMR between 2022 and 2024. The primary outcome was endoscopic recurrence at follow-up colonoscopy. Adverse events, including bleeding and perforation, were also recorded.

Results Among 55 LNPCPs resected by pU-EMR (54 patients), 33 lesions underwent follow-up colonoscopy and were included in the analysis (median size, 25 mm; interquartile range, 25–45 mm; right colon location, 57.6%). Of these, 25 lesions (75.8%) received STSC of the resection margins. At follow-up colonoscopy (median interval, 6 months; interquartile range, 5–7 months), no recurrence was observed in the non-STSC group (0/8), while a single recurrence occurred in the STSC group (1/25; 4.0%). No adverse events were reported. The isolated recurrence was effectively managed with repeat endoscopic resection.

Conclusions Recurrence after pU-EMR was rare overall and notably absent in lesions that did not undergo margin ablation. These findings suggest that, unlike conventional EMR, routine snare tip soft coagulation may not be necessary in the underwater setting. Given the small sample size and low event rate, prospective studies with larger cohorts are warranted to determine the true role of thermal margin ablation after pU-EMR.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP588 Intraoperative FLIP assessment during G-POEM: preliminary results from a prospective single-center cohort

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DOI 10.1055/s-0046-1821915

Aims To assess intraoperative changes in pyloric distensibility during gastric peroral endoscopic myotomy (G-POEM) using the Functional Lumen Imaging Probe (FLIP), and to determine whether FLIP can provide reliable real-time guidance on the adequacy of pyloromyotomy.

Methods A first analysis of a prospectively maintained G-POEM database was performed (n = 9). FLIP measurements at 50-ml balloon volume were obtained immediately before tunnel creation and after completion of the pyloromyotomy. Recorded parameters included distensibility index (DI, mm²/mmHg), minimal luminal diameter (mm) and cross-sectional area (CSA, mm²). All procedures were performed under total intravenous anesthesia. Adverse events and clinical data were documented. Follow-up at 3–6 months included the Gastric Cardinal Symptom Index (GCSI) and the ¹³C-sodium-octanoate breath test.

Results The DI increased from a mean of 4.5 to 7.8 mm²/mmHg (Δ + 3.3 mm²/mmHg). Minimal diameter increased from 12.8 to 15.2 mm (Δ + 2.4 mm), and CSA from 146 to 210 mm² (Δ + 64 mm²). No intraoperative complications occurred. Mean procedure time was 78 minutes. In one patient (11.1 %), balloon positioning was challenging due to a hook-shaped antrum. Early follow-up data (n = 3) indicate symptomatic improvement accompanied by continued increases in FLIP parameters.

Conclusions Intraoperative FLIP assessment provides a reproducible, quantitative evaluation of pyloric distensibility during G-POEM. The observed increase in pyloric compliance confirms the technical effectiveness of the myotomy. Early follow-up findings suggest a consistent trend toward clinical improvement and further distensibility gain. FLIP may serve as an intraoperative guidance tool and help determine the adequate extent of pyloromyotomy during the procedure. Further data, particularly long-term correlations and protocol standardization, are required

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP589 Endoscopic Ultrasound Elastography, Fractal Analysis, and Colorimetric Assessment in predicting Lymph Node Histology

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DOI 10.1055/s-0046-1821916

Aims Accurate lymph node (LN) characterization is crucial for cancer diagnosis and staging. Elastography (E) may improve Endoscopic Ultrasound (EUS) accuracy, while fractal geometry and colorimetric analysis also show promise in oncologic imaging. This study evaluates the diagnostic performance of EUS-E, fractal analysis, and colorimetric analysis in distinguishing malignant from benign LNs [1–4].

Methods In this prospective single-center study (NCT04671784), LNs were evaluated using EUS-E (strain ratio, SR), fractal dimension, and automated colorimetric analysis (mean red, green, blue, RGB, values and channel ratios). Optimal cut-offs were defined by histology, and AUC and accuracy were com-

pared across methods. Final diagnoses were confirmed by cytology, histology, or $\geq$ 24-month follow-up.

Results From September 2019 to January 2023, 100 patients with enlarged mediastinal or abdominal LNs (50 malignant) were prospectively enrolled. Quantitative E (SR cut-off: 8.7) achieved an AUC of 92 % [95 % CI, 80–100], with 100 % sensitivity and 80 % specificity. Colorimetric analysis showed higher accuracy, with an AUC of 94 % [95 % CI, 81–100], 100 % sensitivity, and 87 % specificity ($p < 0.0001$). Combining both E and colorimetric analysis yielded an AUC of 94.5 % [95 % CI, 83–100], with 100 % sensitivity and 93.3 % specificity ($p < 0.0001$). The addition of fractal analysis did not improve the accuracy.

Conclusions Our findings demonstrate that EUS-E is highly effective in differentiating benign from malignant LNs. Incorporating colorimetric analysis of elastographic images further improves diagnostic accuracy, while fractal analysis does not contribute significantly. Nevertheless, each modality offers unique and potentially complementary insights into LN pathology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Grizzi F, Spadaccini M, Chiriva-Internati M, Hegazi MAAA, Bresalier RS, Hassan C, Repici A, Carrara S. Fractal nature of human gastrointestinal system: Exploring a new era. *World J Gastroenterol* 2023; 29 (25): 4036–4052. doi:10.3748/wjg.v29.i25.4036
- [2] Xu W, Shi J, Zeng X, Li X, Xie WF, Guo J, Lin Y. EUS elastography for the differentiation of benign and malignant lymph nodes: a meta-analysis. *Gastrointest Endosc* 2011; 74 (5): 1001–1115. doi:10.1016/j.gie.2011.07.026
- [3] Carrara S, Di Leo M, Grizzi F, Corrales L, Rahal D, Anderloni A, Auriemma F, Fugazza A, Preatoni P, Maselli R, Hassan C, Finati E, Mangiavillano B, Repici A. EUS elastography (strain ratio) and fractal-based quantitative analysis for the diagnosis of solid pancreatic lesions. *Gastrointest Endosc* 2018; 87 (6): 1464–1473. doi:10.1016/j.gie.2017.12.031
- [4] Di Ieva A, Grizzi F, Jelinek H, Pellionisz AJ, Losa GA. Fractals in the Neurosciences, Part I: General Principles and Basic Neurosciences. *Neuroscientist*. 2014; 20 (4): 403–417. doi:10.1177/1073858413513927

eP590 Unconventional Endoscopic Management of a Postoperative Gastrocutaneous Fistula Using PEG and Duodenal Stent – Case report

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DOI 10.1055/s-0046-1821917

Abstract Text

A 70-year-old female patient was undergoing oncological treatment for metastatic, inoperable adenocarcinoma of the antropyloric region of the stomach. Her clinical course was complicated by gastric perforation for which she underwent surgery. In the early postoperative period, the appearance of gastric fluid secretion through the skin sutures raised suspicion of a developing gastrocutaneous fistula. Gastroscopy revealed a fistulous opening at the proximal margin of the pyloric canal and a duodenal bulb stricture that was difficult to traverse, with normal-appearing mucosa distal to the stenosis. A 20 × 60 mm self-expanding metal duodenal stent (SEMS) was placed.

Because the stent did not adequately cover the fistulous opening and the fistula failed to close within a week, an uncommon but practical solution was chosen. Through the external fistula opening, a soft guidewire was introduced into the stomach, allowing placement of a thread for placing a percutaneous endoscopic gastrostomy (PEG) G-tube.

After PEG placement, the patient was given methylene-blue-colored tea to assess for leakage around the PEG insertion site. As no leakage occurred, she began full oral intake (initially enteral formulas and liquids only) and was subsequently discharged home in improved condition. Six months later, the PEG was removed and fistulous tract closed completely.

This case demonstrates how the endoscopist's ingenuity and clinical experience can effectively manage a postoperative complication without the need for surgical intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP591 Esophageal stenosis in eosinophilic esophagitis. A case series from a spanish tertiary hospital

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DOI 10.1055/s-0046-1821918

Aims Eosinophilic esophagitis (EoE) is an immune-mediated inflammatory esophageal disease. In chronic cases, fibrostenotic phenotype manifests, with esophageal stenosis (ES) that benefit from endoscopic dilation as well as optimization of medical treatment. However, recent guidelines do not establish the prevalence of such ES. We wanted to analyze our prevalence of ES, the need of treatment in these patients and how such endoscopic dilation was performed.

Methods We collected retrospective data from our patients with a EoE diagnosis in our hospital since 2020. Their clinical reports and endoscopic reports were reviewed. If an ES was described, the endoscopic report and its images were examined. Patients with Schatzki's rings were excluded, since its pathophysiology and response to treatment differ from ES in the context of EoE [1–3].

Results Out of 186 patients with an EoE diagnosis, 30 patients were initially screened with an ES. After revision, 14 patients were excluded with an endoscopic diagnosis of Schatzki's ring and 16 patients were confirmed to have an ES in the context of EoE (ES-EoE), leading to a prevalence of 8.6 % of patients with EoE in our center. Only 7 patients received endoscopic dilation treatment of their ES, amounting up to 3.7 % of our center's patients.

In 3 of our patients, the diagnosis of EoE was established after the diagnosis and treatment of the ES. Esophageal biopsies were taken after the procedure leading up to EoE diagnosis.

Demographic, clinical and endoscopic characteristics of these patients are summarized in ► **Table 1**. There was a predominance of male patients (71.42 %) with a mean age of 41.85 years of age. Both the median and mode were 1-2 sessions of endoscopic dilation. No complications were described and a subjective clinical improvement was reported in all of our patients. All of our patients had a change of treatment after the treatment, with 14 % of them receiving benralizumab with compassionate intention and 42.85 % of them receiving topical budesonide, while some patients needed an optimization of proton pump inhibitor (PPI) dosage.

Conclusions ES-EoE amount up to 8.6 % of patients with EoE in our center. 3.7 % of patients with ES-EoE need endoscopic treatment, with clinical response and no adverse effects were described. After endoscopic dilation, 57 % of the patients needed a change of treatment. Endoscopic dilation in ES-EoE is a safe procedure with a small rate of complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

► **Table 1**

Pa-tient	Sex	Age	Stenosis	Number of sessions	Dilation method	EoE diagnosis related to ES	Ad-verse effects	Im-prove-ment	Change in treatment
1	M	32	Diffuse Distal < 1cm	1	Balloon	Same time	No	Yes	Started benralizumab
2	M	27	Ringed Proximal < 1cm	6	Savary-Gilliard	EoE after ES treatment	No	Yes	Started budesonide
3	F	52	Diffuse Distal < 1cm	2	Balloon	Same time	No	Yes	Started PPIs
4	M	58	Ringed Medial < 1cm	2	Balloon	EoE after ES treatment	No	Yes	Started PPIs
5	M	62	Ringed Distal < 1cm	1	Balloon	Same time	No	Yes	Optimization of PPI dosage and budesonide started
6	M	48	Ringed Medial < 1cm	1	Balloon	EoE after ES treatment	No	Yes	Started PPIs
7	F	14	Diffuse Proximal > 5cm	2	Savary-Gilliard	Same time	No	Yes	Started budesonide

References

- [1] Yang EJ, Jung KW. Role of endoscopy in eosinophilic esophagitis. *Clin Endosc.* 2025; 58 (1): 1–9. doi:10.5946/ce.2024.023 Epub 2024 Jul 5 PMID: 38965710 PMID: PMC11837575
- [2] Singh AK, Singh A, Kochhar R, Manrai M. Esophageal strictures: Management beyond dilation. *World J Gastrointest Endosc.* 2025; 17 (11): 110024. doi:10.4253/wjge.v17.i11.110024 PMID: 41256305 PMID: PMC12620873
- [3] Dellon ES, Muir AB, Katzka DA, Shah SC, Sauer BG, Aceves SS, Furuta GT, Gonsalves N, Hirano I. ACG Clinical Guideline: Diagnosis and Management of Eosinophilic Esophagitis. *Am J Gastroenterol.* 2025; 120 (1): 31–59. doi:10.14309/ajg.0000000000003194 Epub 2025 Jan 2 PMID: 39745304

eP592 Correlation Between Endoscopic Findings and the Effectiveness of *Helicobacter pylori* Eradication Therapy in a Resource-Limited Setting

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DOI 10.1055/s-0046-1821919

Aims Endoscopic features of *Helicobacter pylori* (*H. pylori*) gastritis may reflect bacterial load and mucosal damage, potentially influencing therapeutic response. This study aimed to evaluate the relationship between endoscopic findings and eradication outcomes among patients receiving empirical quadruple therapy in Kairouan, Tunisia.

Methods A retrospective study was conducted including 89 adults with histologically confirmed *H. pylori* infection who received a 14-day empirical quadruple therapy between January and August 2024. Endoscopic abnormalities (erythema, nodularity, mosaic pattern, erosions, ulcer disease) and histology-based gastritis grading were collected. Eradication was assessed through stool antigen testing, follow-up endoscopy, or clinical improvement. An univariate analysis explored associations between endoscopic features and treatment success.

Results Endoscopy revealed gastric erythema in 92.1 % of patients, nodularity in 21.3 %, mosaic pattern in 15.7 %, erosions in 16.9 %, and gastric or duodenal ulcer in 8.9 %. The overall first-line eradication rate was 69.7 %, and the global eradication rate reached 75.2 %. Patients with ulcer disease showed lower eradication rates (62.5 %) compared with those without ulcers (70.3 %). Nodularity and erosions were more frequently associated with moderate to severe *H. pylori* density on histology ($p = 0.027$ and 0.033 respectively), which was itself linked to a higher rate of therapeutic failure (24.07 % vs 34.03 %). In contrast, isolated erythematous gastritis did not significantly affect eradication outcomes ($p = 0.67$).

Conclusions Specific endoscopic features—particularly nodularity, erosions, and ulcer disease—were associated with lower eradication rates, likely reflecting higher bacterial burden and more advanced mucosal injury. Endoscopic patterns may therefore serve as useful indicators for predicting treatment response and should be considered when tailoring eradication strategies, especially in resource-limited settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP593 Gastric Atrophy and Intestinal Metaplasia in *Helicobacter pylori* Infection: Prevalence and Associated Factors

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DOI 10.1055/s-0046-1821920

Aims *Helicobacter pylori* (*H. pylori*) infection plays a pivotal role in the development of gastric precancerous lesions. Gastric atrophy and intestinal metaplasia (IM) constitute key stages in Correa's cascade leading to gastric adenocarcinoma. This study aimed to determine the prevalence of these lesions and to identify factors associated with their occurrence among patients with histologically confirmed *H. pylori* infection.

Methods We conducted a retrospective descriptive and analytical study in the Department of Hepato-Gastroenterology at Sahloul University Hospital (2020–2024). All patients with *H. pylori* infection confirmed by histology according to the Sydney System were included. Demographic and histologic data were collected. Associated factors were analyzed using Chi-square and Student's *t*-tests, followed by multivariate logistic regression.

Results A total of 339 patients were included (mean age 48.5 ± 16.7 years; sex ratio M/F = 1.2). More than half (56 %) were older than 45 years, and smoking was reported in 14 %. Gastric atrophy was present in 68 % of patients, predominantly in the antrum (72 %), followed by the fundus (20 %) and pangastric involvement (8 %). Atrophy was significantly associated with higher gastritis activity ($p = 0.001$) and age > 50 years ($p = 0.03$). Intestinal metaplasia was identified in 13 % of cases. In multivariate analysis, independent predictors of IM were age > 50 years (OR 1.3; 95 %CI 1.1–1.6; $p = 0.01$) and severe atrophy (OR 2.2; 95 %CI 1.1–4.5; $p = 0.03$).

Conclusions Among patients infected with *H. pylori*, gastric atrophy and intestinal metaplasia are frequent and strongly interrelated precancerous lesions. The severity of atrophy emerges as a key predictor of IM, emphasizing the need for early *H. pylori* eradication and tailored endoscopic surveillance strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP594 Concurrent Detection of Gastric GIST and Dual Aortic Aneurysms During Endoscopic Ultrasound: A Diagnostic Opportunity

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DOI 10.1055/s-0046-1821921

Abstract Text

We report the case of a patient evaluated for a gastric submucosal mass, in whom endoscopic ultrasound (EUS) enabled a comprehensive assessment. Endoscopy revealed a large antral–fundic submucosal lesion. Transgastric EUS identified a 39.5×37 mm hypoechoic tumor arising from the fourth layer, suggestive of a resectable gastric GIST. The examination also revealed two aortic aneurysms: a 41 mm infrarenal aneurysm and a 22 mm supraceliac aneurysm. No additional pancreatic, biliary, hepatic, or hepatic–splenic abnormalities were detected.

This case underscores the broad diagnostic potential of EUS for simultaneous evaluation of gastrointestinal tumors and significant vascular pathology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP595 Gastric Diffuse large B-cell lymphoma (DLBCL) with pancreatic invasion: A case of Outlet Obstruction and Acute Pancreatitis

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DOI 10.1055/s-0046-1821922

Abstract Text

Non-Hodgkin's lymphoma often involves extranodal sites, but pancreatic infiltration remains exceptionally uncommon. Primary pancreatic lymphoma accounts for less than 0.5 % of all pancreatic tumours. Secondary pancreatic involvement, usually by direct extension from gastric or retroperitoneal lymphomas. We present a case of gastric diffuse large B-cell lymphoma (DLBCL) with contiguous pancreatic extension manifesting as gastric outlet obstruction and acute pancreatitis [1–3].

A 48-year-old man with no significant past medical history presented with a 2-month history of epigastric colicky pain radiating to the back worsening over the past 72 hours, associated with nausea, vomiting and unintended 17-kg weight loss. He reported intermittent low-grade fever. Two weeks earlier, an upper endoscopy had been suspended because of large amounts of retained food. Laboratory tests revealed elevated serum amylase and lipase (3x ULN) and eosinophilia. He was initially managed as mild acute pancreatitis. Abdominal ultrasound demonstrated a well-defined 33 × 34 mm rounded hypoechoic pancreatic lesion.

Repeated upper endoscopy identified a large ulcerated, exophytic lesion involving the incisura and antrum, extending along the greater curvature and into the descending part of the duodenum, causing partial gastric outlet obstruction. Biopsies showed diffuse large B-cell lymphoma, germinal-center phenotype. Staging computed tomography (CT) and endoscopic ultrasound (EUS) revealed a 35–40 mm transmural hypoechoic gastric mass infiltrating all wall layers with direct extension into the pancreatic neck, along with several small perigastric and peripancreatic lymph nodes. Fine-needle aspiration of the pancreatic lesion confirmed a clonal B-cell population. Bone marrow biopsy and flow cytometry showed no infiltration. Final diagnosis was gastric DLBCL, germinal-center type, stage IV. The patient received a pre-phase with cyclophosphamide and dexamethasone, followed by R-EDOCH (rituximab, etoposide, doxorubicin, vincristine, cyclophosphamide, prednisone) immunochemotherapy. Treatment was well tolerated. Interim PET-CT demonstrated marked radiologic improvement with complete metabolic response, consistent with clinical remission. Follow-up endoscopies showed progressive ulcer healing and a persistent fibrotic duodenal stenosis. He is currently without active oncologic treatment and undergoing clinical and endoscopic follow-up.

This case illustrates a rare presentation of gastric DLBCL with contiguous pancreatic invasion mimicking acute pancreatitis. Pancreatic involvement by lymphoma may resemble both pancreatitis and pancreatic carcinoma. Diagnosis relies on imaging, endoscopy, EUS-guided sampling, and histopathology. Immunochemotherapy is the standard treatment and typically induces rapid tumor regression. DLBCL should be considered in the differential diagnosis of pancreatic masses or acute pancreatitis-like presentations, especially when gastric lesions or obstructive symptoms are present. Early histologic confirmation and prompt initiation of immunochemotherapy are essential to avoid delays and unnecessary surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Shi L, Wang J, Wei L, Ma Z, Liu X. Pancreatic diffuse large B-cell lymphoma: case report and literature review. *Frontiers in Oncology* 2023; 13:1294385. doi:10.3389/fonc.2023.1294385
- [2] Saif MW, Khubchandani S, Walczak M. Secondary pancreatic involvement by diffuse large B-cell lymphoma presenting as acute pancreatitis. *World Journal of Gastroenterology* 2007; 13 (36): 4909–4911. doi:10.3748/wjg.v13.i36.4909
- [3] Dunphy L, Abbas SH, Al Shoek I, Al-Salti W. Primary pancreatic lymphoma: a rare clinical entity. *BMJ Case Reports* 2020; 13 (1):e231292. doi:10.1136/bcr-2019-231292

eP596 Prediction of significant vascular lesions on pan-intestinal capsule endoscopy in patients with suspected gastrointestinal bleeding

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DOI 10.1055/s-0046-1821923

Aims Pan-intestinal capsule endoscopy (PCE) is increasingly recognized as a valuable diagnostic tool for patients with suspected mid-lower gastrointestinal bleeding (MLGIB). This study aimed to identify clinical predictors of significant vascular findings on PCE that may warrant its early application [1].

Methods The study included 100 consecutive patients who underwent PCE for suspected MLGIB. The primary indications were iron deficiency anemia (81 %) and overt bleeding (19 %). Clinical data collected included laboratory results, comorbidities and regular medication.

Results The median age was 70 years (IQR 60–78), with 65 % female, and a median Charlson Comorbidity Index 4.0 (IQR 2.0–5.0). Complete PCE was achieved in 76 % of cases and 72 % had adequate bowel preparation. Vascular lesions were detected in 32 % of patients, primarily angioectasias, 43.7 % in the colon, 34.4 % in small bowel and 21.9 % in both. In univariate analysis, older age, higher creatinine levels, atrial fibrillation (AF) were significantly associated with the presence of vascular lesions ($p < 0.05$). A multivariable logistic regression model was constructed including variables identified as significant in univariate analysis. In the adjusted model, elevated creatinine showed a trend toward independent association (OR 4.49; 95 % CI: 0.99–20.23; $p = 0.051$), while age (OR 1.04; $p = 0.164$) and AF (OR 0.62; $p = 0.530$) were not statistically significant. The final model demonstrated an overall accuracy of 78.1 %, sensitivity of 52.4 %, specificity of 90.7 %, positive predictive value of 73.3 %, and an area under the ROC curve (AUC) of 0.79.

Conclusions Since the accuracy of predicting models based on clinical features is below 80 %, PCE should be used for the diagnosis of small bowel and/or colonic vascular lesions in patients with suspected MLGIB, regardless of age, medication or comorbidities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rosa B et al. Pan-Intestinal Capsule Endoscopy as First-Line Procedure in Patients with Suspected Mid or Lower Gastrointestinal Bleeding. *Endoscopy* vol. 56 (no. 08): 2024; pp 572–580. doi:10.1055/a-2270-4601

ePosters 08

eP597 Improving Colonoscopy Visualization: Impact of Simethicone on Bowel Prep Quality

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DOI 10.1055/s-0046-1821924

Aims High-quality bowel preparation is crucial for optimal colonoscopy performance. Simethicone, an anti-foaming agent, may enhance endoluminal visibility by reducing bubbles and foam, facilitating lesion detection and procedural efficiency. The Aim of this study is to evaluate the effectiveness of adding simethicone to a standard polyethylene glycol (PEG) bowel preparation on colon cleansing quality, lesion detection, and procedural performance.

Methods A prospective study was conducted from July to December 2024 in our Gastroenterology endoscopic Unit. Eighty patients scheduled for elective colonoscopy were randomly assigned to two groups: Group A (n=40): Standard PEG 4L preparation Group B (n=40): Standard PEG 4L + simethicone 300 mg (administered with the last liter of PEG). Bowel preparation quality was assessed using the Boston Bowel Preparation Scale (BBPS). Secondary outcomes included adenoma detection rate (ADR), number of polyps detected per patient, need for intraprocedural lavage, cecal intubation time, and endoscopist satisfaction (Likert scale).

Results The mean age was 52 ± 13 years, with a sex ratio M/F of 1.2. Adequate bowel preparation (BBPS ≥ 6) was achieved in 33 patients (82.5%) in Group B versus 25 patients (62.5%) in Group A ($p=0.03$). ADR was higher in Group B (28%) compared to Group A (16%) ($p=0.04$), with a greater mean number of polyps detected per patient (1.8 ± 1.1 vs 1.1 ± 0.9 , $p=0.02$). The need for intraprocedural lavage was reduced in Group B (12.5%) versus Group A (30%) ($p=0.02$). Cecal intubation time was slightly shorter in the simethicone group (7.2 ± 2.1 min vs 8.1 ± 2.5 min, $p=0.08$), though not statistically significant. Endoscopist satisfaction scores were higher for Group B (median 4.5/5 vs 3.8/5, $p=0.01$). No serious adverse events related to simethicone were reported.

Conclusions Adding simethicone to standard PEG bowel preparation significantly improves colonic visibility, increases adenoma detection, reduces intraprocedural lavage, and enhances endoscopist satisfaction. This safe, low-cost intervention is recommended for routine colonoscopy protocols to optimize diagnostic outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP598 Development of an Artificial Intelligence Model for Malnutrition Screening in Patients with Inflammatory Bowel Disease

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DOI 10.1055/s-0046-1821925

Aims Malnutrition is a frequent yet under-recognized complication of inflammatory bowel disease (IBD), negatively impacting therapeutic response, disease course, and prognosis. Artificial intelligence (AI) offers new opportunities for early, accurate nutritional risk stratification. This study aimed to determine the prevalence of malnutrition in IBD patients, identify associated clinical and biological factors, and develop a machine-learning model for non-invasive malnutrition screening.

Methods A cross-sectional analytical study was conducted at Sahloul University Hospital including 224 IBD patients. Malnutrition was defined by a Malnutrition Universal Screening Tool (MUST) score ≥ 2 or ESPEN 2015 criteria (BMI < 18.5 kg/m² or significant weight loss with age-adjusted low BMI). Machine-learning models were developed using the CRISP-DM framework. Model performance was assessed using ROC analysis and predictive accuracy.

Results Among the 224 included patients (157 Crohn's disease; 67 ulcerative colitis), median age was 38 years (IQR 29–48) with a sex ratio M/F of 1.26. The overall prevalence of malnutrition was 25.9%, with good agreement between MUST and ESPEN criteria ($\kappa=0.723$). In univariate analysis, malnutrition was significantly associated with smoking ($p=0.018$), ileocolonic Crohn's disease ($p=0.011$), distal ulcerative colitis ($p=0.041$), clinical and endoscopic activity ($p<0.001$), anemia ($p<0.001$), hypoalbuminemia ($p<0.001$), elevated CRP ($p<0.001$), and absence of azathioprine or biologic therapy ($p<0.001$). Multivariate logistic regression identified three independent predictors of malnutrition: clinical disease activity (OR 3.38; 95%CI 1.51–7.58), elevated CRP (OR 2.51; 95%CI 1.14–5.53), and hypoalbuminemia (OR 4.03; 95%CI 1.86–8.70). Among the tested machine-learning models, the Neural Network demonstrated the highest diagnostic performance, with an AUC of 0.90 and a predictive accuracy of 87%.

Conclusions Malnutrition is highly prevalent among IBD patients and strongly associated with disease activity, systemic inflammation, and hypoalbuminemia. The AI-based Neural Network model showed excellent performance in predicting malnutrition, supporting its potential role as a personalized, non-invasive screening tool to optimize nutritional care in IBD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP599 Remimazolam-Esketamine Versus Propofol-Esketamine for Sedation During Gastrointestinal Endoscopy: A Systematic Review and Meta-Analysis of Efficacy and Safety

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DOI 10.1055/s-0046-1821926

Aims The optimal sedation regimen for gastrointestinal endoscopy that balances efficacy with patient safety remains undecided. We conduct a systematic review and meta-analysis aimed to compare the efficacy and safety of remimazolam combined with esketamine (RE) versus propofol combined with esketamine (PE) for sedation during gastrointestinal endoscopy.

Methods A systematic literature search was conducted in four search engines including PubMed, Cochrane Library, Scopus, and Web of Science using the keywords "remimazolam," "propofol," "esketamine," and "gastrointestinal endoscopy." We included only randomized controlled trials (RCTs) comparing RE with PE. The primary outcomes were sedation success rate and induction time and the incidence of adverse events, including hypotension, bradycardia, respiratory depression, tachycardia, injection pain, and nausea/vomiting. Data were pooled using a random-effects model.

Results Four RCTs involving a total of 1219 patients (617 in the RE group and 602 in the PE group) were included in the meta-analysis. The sedation success rate was comparable between the two groups (Risk Ratio [RR] 1.00; 95% CI [0.98, 1.01]).

Compared to the PE group, the RE group showed a significantly longer induction time (Mean Difference 10.97 seconds; 95% CI [3.12, 18.82]). However, the RE group was associated with a significantly lower incidence of several adverse events. The risk of bradycardia (RR 0.32; 95% CI [0.11, 0.94]), respiratory depression (RR 0.33; 95% CI [0.18, 0.58]), and injection pain (RR 0.03; 95% CI [0.00, 1.05]) was significantly lower in the remimazolam group.

There were no statistically significant differences between the groups in the incidence of hypotension (RR 0.60; 95% CI [0.34, 1.07]), nausea and vomiting (RR 0.95; 95% CI [0.53, 1.70]), or tachycardia (RR 0.95; 95% CI [0.09, 10.39]).

Conclusions When combined with esketamine for gastrointestinal endoscopy, remimazolam demonstrates comparable sedative efficacy to propofol. While remimazolam has a longer induction time, it offers a superior safety profile, with significantly lower risks of bradycardia, respiratory depression, and injection pain. These findings suggest that remimazolam combined with esketamine is a safe and effective alternative to the propofol-based regimen.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP600 Fundoplication for GERD: Outcomes beyond symptoms control

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DOI 10.1055/s-0046-1821927

Aims Gastroesophageal reflux disease (GERD) is frequently managed surgically with fundoplication in patients with persistent symptoms or abnormal reflux testing. High-resolution manometry (HRM) and pH-impedance monitoring provide objective assessment before and after surgery. This study aimed to

evaluate clinical outcomes, symptoms, and physiological parameters in patients undergoing antireflux surgery

Methods We prospectively analyzed 16 patients (37.5% female, mean age 56.4 ± 12.5 years, mean BMI 28.1 ± 3.4) who underwent antireflux surgery (62.5% Nissen, 37.5% Toupet). Preoperative and postoperative assessments included symptoms, GERD-HRQL score, HRM, and pH-impedance monitoring [1–3].

Results Preoperatively, heartburn (81%), regurgitation (63%), and cough (50%) were most common. At follow-up, heartburn (19%) and cough (6%) improved significantly ($p = 0.006$ and $p = 0.016$). Hiatal hernia was identified in 69% on endoscopy (mean size 2.1 cm) and 56% on HRM. Barrett's esophagus was present in 12.5%. GERD-HRQL score improved from 21.6 ± 11.2 to 3.4 ± 7.6 ($p < 0.001$). LES pressure and EGJ-CI increased modestly, while distal latency increased (trend, $p = 0.057$). Total AET (acid exposure time) decreased from 6.2% to 3.3% (trend, $p = 0.088$). DeMeester score decreased from 30 (median) to 5.4 ($p = 0.092$), with abnormal values (> 14.8) dropping from 62.5% to 31.2%. MNBI improved from 1.95 to 2.40 kQ, with 43% of abnormal values normalizing. The number of reflux episodes decreased (trend, $p = 0.055$) and bolus clearance improved significantly ($p = 0.034$). MNBI correlated strongly with AET both pre- and post-operatively ($r = -0.49$ and -0.47). SI and SAP positivity decreased from 7 and 5 patients pre-op to only 2 patients post-op, indicating loss of symptom–reflux association. Correlation analysis showed that EGJ-CI correlated moderately with reductions in acid exposure, suggesting it may better reflect postoperative reflux control.

Conclusions Fundoplication resulted in substantial improvement in physiological, anatomical, and symptomatic markers of GERD. These findings support comprehensive pre-operative physiological assessment for optimizing patient selection and predicting outcomes in antireflux surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Katz PO, Dunbar KB, Schnoll-Sussman FH, Greer KB, Yadlapati RH, Spechler SJ. ACG Clinical Guideline for the diagnosis and management of gastroesophageal reflux disease. *Am J Gastroenterol* 2022; 117 (1): 27–56
- [2] Frazzoni M, de Bortoli N, Frazzoni L, Tolone S, Furnari M, Savarino E. Impedance-pH monitoring for diagnosis of reflux disease: new perspectives. *Dig Dis Sci* 2020; 65 (2): 344–53
- [3] Gyawali CP, Kahrilas PJ, Savarino E, Zerbib F, Mion F, Smout AJ et al. Modern diagnosis of GERD: the Lyon Consensus. *Gut*. 2018; 67 (7): 1351–62

eP601 Digestive hemorrhage secondary to Petersen's hernia

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DOI 10.1055/s-0046-1821928

Abstract Text

Petersen's hernia is a complication that occurs after gastric bypass surgery and consists of a protrusion of intestinal loops through a defect formed between the alimentary limb and the transverse mesocolon. It has a low incidence, estimated between 0.2% and 3% of patients undergoing this surgery. Symptoms are very nonspecific (abdominal pain, vomiting, intestinal obstruction) and are often diagnosed during exploratory laparotomy. Treatment is always surgical [1–4].

We present the case of a 42-year-old woman with a history of gastric bypass surgery 7 years earlier, who presents to the emergency department with a 5-day history of epigastric pain associated with vomiting of food content and one bowel movement containing fresh blood. Upon arrival at the emergency department, she presents with overt rectal bleeding and associated arterial hypotension (BP 60/40 mmHg). Given the suspicion of a rapid transit source, an

urgent gastroscopy is performed, which shows no blood residue or lesions likely to bleed. The following day, a colonoscopy is performed, revealing blood remnants throughout all explored segments, appearing more abundant in the left colon and rectum, where some diverticula are observed, although no active bleeding site is identified. Subsequently, the patient develops new rectal bleeding with hemodynamic instability and increased abdominal pain. A CT angiography is performed, showing enterocolitis (jejunum, ileum, and right hemicolon) of probable ischemic etiology in the context of congestion caused by venous thrombosis (portal vein and the ileocolic, middle colic, and right colic branches of the superior mesenteric vein) secondary to a Petersen's hernia. The patient ultimately undergoes surgical intervention with adequate reduction of the herniated contents and closure of the Petersen's space, with good postoperative evolution.

Although presentation as digestive hemorrhage in this condition is rare, in a patient with a history of gastric bypass, inconclusive endoscopic studies, and lack of clinical improvement, this entity must be considered in the differential diagnosis. Delayed diagnosis increases morbidity and mortality in these patients. A multidisciplinary approach with surgeons and radiologists can be useful in guiding management of this condition.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fournier S.D. et al. "Petersen's hernia: Case report and review of the literature." *Hernia* 13 (6): 2009; 607–609
- [2] Koh C.H. et al. "Petersen's hernia: A rare complication after gastric bypass surgery." *The American Surgeon* 73 (3): 2007; 301–303
- [3] Kim J.H. et al. "Petersen's hernia following laparoscopic Roux-en-Y gastric bypass: A case report." *Journal of Laparoendoscopic & Advanced Surgical Techniques* 18 (1): 2008; 49–51
- [4] Bauer J. et al. "Petersen's hernia after laparoscopic Roux-en-Y gastric bypass: A case report and review of the literature. *Surgical Endoscopy* 20 (4): 2006; 615–617

eP602V Multimodal Management of a Complex Post-Hepatectomy Bile Leak With Bilio-Pulmonary Fistula

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DOI 10.1055/s-0046-1821929

Background: Post-hepatectomy bile leaks are significant causes of morbidity and may rarely progress to complex fistulas, including uncommon bronchobiliary fistulas.

Case: A 52-year-old developed a post operative bile leak with a biloma and a biliobronchial fistula. Initial ERCP with sphincterotomy, stenting, and nasobiliary drainage failed to reduce output (> 500 mL/day), leading to repeat ERCPs with additional drainage and stents placement. Persistent leakage required percutaneous and IR intervention, including transhepatic access, tract dilation, and closure with an 18-mm vascular plug and a glue. A 12-Fr pigtail drain was left for controlled biloma drainage.

Conclusion: A hybrid endoscopic–percutaneous–IR strategy successfully treated this rare post-hepatectomy bronchobiliary fistula.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/5b552d7a-82e7-463d-8e8f-1c0b5df74559/Uploads/19978_1539.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP603 Abdominal Corsets in Colonoscopy: A Systematic Review and Meta-Analysis on Cecal Intubation Time and Pain Reduction

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DOI 10.1055/s-0046-1821930

Aims Colonoscopy is a critical procedure for colorectal disease screening and diagnosis, but it can be challenging, often causing patient discomfort and procedural difficulties like scope looping. Abdominal corsets have been proposed as a simple, non-invasive intervention to improve procedural efficiency and patient tolerance. This systematic review and meta-analysis aims to synthesize the current evidence on the effectiveness of abdominal corsets in improving key colonoscopy outcomes

Methods A comprehensive systematic literature search was conducted across four major electronic databases: PubMed, Scopus, Web of Science, and Cochrane. We included randomized controlled trials (RCTs) comparing the use of an abdominal corset (experimental group) to standard colonoscopy without a corset (control group). The primary outcomes analyzed were the need for manual compression, cecal intubation time, patient-reported pain scores, and the need for a change in patient position. Four separate meta-analyses were performed using a random-effects model

Results Four RCTs, with a total of 580 patients (283 experimental, 297 control), were included in the final analysis. The use of an abdominal corset did not significantly reduce the need for manual compression (Risk Ratio [RR] 0.46; 95% CI [0.16, 1.33]; $P=0.15$), although significant heterogeneity was present ($I^2=92\%$). However, the meta-analysis demonstrated that corsets significantly shortened the cecal intubation time (Mean Difference [MD] -0.99 minutes; 95% CI [-1.93, -0.05]; $P=0.04$) and significantly reduced patient-reported pain scores (MD -1.55; 95% CI [-2.35, -0.75]; $P=0.0001$). There was no statistically significant effect on the need for changing the patient's position (RR 0.88; 95% CI [0.36, 2.15]; $P=0.78$).

Conclusions This meta-analysis suggests that the use of an abdominal corset during colonoscopy is an effective intervention for reducing cecal intubation time and patient pain. While a definitive effect on reducing the need for manual compression or position changes was not established, the observed benefits support its consideration as a tool to enhance both the efficiency of the procedure and the patient's experience

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP604 Gastric Ulcer as the Initial Presentation of Metastatic Invasive Lobular Breast Carcinoma

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DOI 10.1055/s-0046-1821931

Introduction Breast cancer is the most common malignancy in women, with invasive lobular carcinoma (ILC) accounting for up to 20% of cases. Gastrointestinal metastases are rare, reported in 0.04–18% of cases, with the stomach being the most frequently affected site, followed by colon and rectum. Non-specific symptoms often lead to delayed diagnosis, particularly years after the primary tumor [1–5].

Case Report A 62-year-old woman with a history of right breast ILC (T2N1M0), treated over 10 years ago with surgery, radiotherapy, chemotherapy, and hormone therapy for hormone receptor-positive disease, had previously developed bone and liver metastases managed with systemic therapy. She presented with epigastric pain radiating retrosternally and associated autonomic symptoms. Laboratory tests showed microcytic hypochromic anemia and elevated tumor markers (CA 15-3, CEA).

Gastroscopy revealed a 1-cm excavated ulcer on the greater curvature of the gastric body, posterior wall, with a fibrin-covered base and edematous, congestive borders. Biopsies demonstrated atypical cells positive for estrogen and progesterone receptors, confirming metastatic breast carcinoma.

Discussion Gastric metastases from breast cancer, especially ILC, can occur months to decades after initial diagnosis (reported intervals 3 months–30 years). Clinical manifestations are often subtle, including abdominal discomfort, dyspepsia, or GI bleeding, and mimic primary gastric cancer. Endoscopic evaluation combined with histopathology and immunohistochemistry (ER/PR, GATA-3) is essential for diagnosis. Recent literature confirms the rarity of this entity (~0.04–0.3% in large cohorts) but highlights its relevance for guiding systemic therapy rather than surgical management. Awareness is crucial to differentiate metastatic lesions from primary gastric malignancies, avoid unnecessary surgery, and initiate appropriate systemic treatment.

Conclusion This case underscores the importance of considering gastric metastases in patients with a history of invasive lobular breast carcinoma presenting with upper GI symptoms, even many years after the primary tumor. Endoscopic biopsy with immunohistochemical confirmation enables accurate diagnosis and informs optimal systemic management, preventing unnecessary surgical interventions and improving patient care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Oda I et al. Endoscopic and pathologic features of gastric metastases from breast carcinoma. *Med (Baltimore)* 2018; 97: e10937
- [2] Taal BG et al. Incidence and prognosis of gastric metastases from breast cancer. *Ann Oncol* 2000; 11: 85–90
- [3] Ambroggi M et al. Gastrointestinal metastases from breast cancer: a case report and review of literature. *Front Oncol* 2025; 15:1596207
- [4] McLemore EC et al. Metastatic breast cancer to the stomach: clinico-pathologic features and outcomes. *Clin Exp Metastasis* 2005; 22: 787–795
- [5] Gennari A et al. Gastrointestinal metastases from invasive lobular breast carcinoma: case report and literature review. *BMC Womens Health* 2023; 23: 276

eP605V Cyanoacrylate Injection for High-Risk Fundal Varices: A Case of Effective Early Endoscopic Intervention

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DOI 10.1055/s-0046-1821932

Abstract Text

Gastric fundal varices are a less common but potentially severe cause of upper gastrointestinal bleeding. A 50-year-old woman with chronic alcohol use presented with hematemesis and melena. She was hemodynamically stable but had acute anemia. Laboratory tests revealed newly diagnosed cirrhosis with acute alcoholic hepatitis. Initial gastroscopy showed a large fundal varix without active bleeding. The patient underwent endoscopic cyanoacrylate injection. Follow-up gastroscopy and endoscopic ultrasound confirmed complete thrombosis of the treated GOV2 varix, with stable other gastric varices. Cyanoacrylate injection provided effective hemostasis for high-risk fundal varices, and early intervention with careful monitoring ensured a positive clinical outcome [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/9639af1f-d073-4919-9dc0-5fbf1aec1613/Uploads/19978_Variz_f%C3%BAAndica.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaplan DE, Ripoll C, Thiele M, Fortune BE, Simonetto DA, Garcia-Tsao G, Bosch J. AASLD Practice Guidance on risk stratification and management of portal hypertension and varices in cirrhosis. *Hepatology* 79 (5): p 1180–1211 2024
- [2] Oleas R., Robles-Medrand C. 2022; Endoscopic Treatment of Gastric and Ectopic Varices. *Clinics in liver disease* 26 (1): 39–50

eP606 Living With Celiac Disease: Impact on Quality of Life and Determinants of Adherence to a Gluten-Free Diet

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DOI 10.1055/s-0046-1821933

Aims Celiac disease (CD) is a chronic autoimmune disorder whose impact extends beyond the gastrointestinal tract, significantly affecting quality of life (QoL). Adherence to a gluten-free diet (GFD)—the cornerstone of treatment—is essential to prevent complications and improve well-being, yet maintaining strict adherence remains challenging. This study aimed to evaluate QoL in adult patients with CD, assess adherence to a GFD, and identify factors influencing both outcomes.

Methods A cross-sectional descriptive and analytical study was conducted over a three-month period (October–December 2023) among 100 adult members of the Tunisian Celiac Disease Association. QoL was assessed using two validated Arabic questionnaires: the generic SF-12 and the disease-specific Celiac Disease Questionnaire (CDQ). Adherence was evaluated using the Biagi Score, classifying patients into good (score 3–4) versus poor adherence (score 0–2). Sociodemographic, clinical, and socioeconomic factors associated with impaired QoL and poor adherence were analyzed using uni- and multivariate regression.

Results The cohort included 100 patients (mean age 34.5 ± 9.5 years; sex ratio M/F = 0.39). Median age at diagnosis was 11 years and the median disease duration was 21.5 years. Only 27% reported strict adherence to a GFD (Biagi Score 3–4). QoL was globally impaired, with a mean SF-12 score of 26.0 ± 4.0 and a mean CDQ score of 123.9 ± 29.6 . In univariate analysis, impaired QoL was associated with female sex ($p = 0.02$), low educational level ($p < 0.001$), low socioeconomic status ($p = 0.01$), and autoimmune comorbidities ($p = 0.04$). After adjustment, low educational level ($\beta = 0.21$; $p = 0.03$) and low socioeconomic status ($\beta = 0.25$; $p = 0.04$) remained independent predictors of impaired QoL. Good adherence to the GFD was more frequent in older patients (> 40 years; $p = 0.025$) and women ($p = 0.04$), although no independent predictors were confirmed in multivariate analysis. Reported barriers included gluten-rich dietary habits, high cost of gluten-free products, limited food availability, and low socioeconomic and educational levels.

Conclusions Celiac disease exerts a substantial impact on quality of life, particularly among patients with low socioeconomic and educational backgrounds. Adherence to a gluten-free diet remains low and is hindered by economic, cultural, and accessibility constraints. These findings underscore the need for a comprehensive care strategy integrating nutritional education, psychological support, and socioeconomic assistance to improve both QoL and long-term therapeutic adherence in patients with CD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP607 Back pain to massive GI bleeding: the unexpected discovery of primary gastric squamous cell carcinoma

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DOI 10.1055/s-0046-1821934

Abstract Text

Primary gastric squamous cell carcinoma (SCC) is extremely rare and can resemble adenocarcinoma or submucosal tumors such as GIST, making diagnosis difficult. We report a case that began with isolated back pain and progressed to massive upper GI bleeding, ultimately revealing a primary gastric SCC.

A 66-year-old man presented with several months of thoracolumbar back pain. A CT scan performed for musculoskeletal evaluation incidentally revealed a large gastric mass at the lesser curvature. Upper endoscopy showed an extensive infiltrative, exulcerated lesion with deep ulcerations and a small active bleed. Biopsy was deferred due to dual antiplatelet therapy. Endoscopic ultrasound demonstrated a large heterogeneous lesion arising from the muscularis propria, suggesting a GIST-like submucosal tumor. EUS-guided sampling was performed. After cessation of antiplatelet therapy, repeat endoscopy showed an infiltrating carcinoma, and biopsies confirmed poorly differentiated SCC (CK5/6 positive, p63 positive, CK7 negative). The esophagus appeared normal [1–3].

The clinical course was marked by recurrent malignant bleeding requiring several urgent endoscopies. One procedure showed interval tumor progression without active hemorrhage, whereas later examinations revealed large amounts of hematin and multiple arterial bleeding points. Injection therapy, coagulation and hemostatic powder (TC-325/HaemoSpray) achieved only temporary control. The final endoscopy, performed under intubation, showed the stomach filled with a large volume of blood and a deep necrotic cavity with persistent arterial bleeding. The patient died from hemorrhagic shock.

Further staging with PET-CT showed no evidence of another SCC primary and no esophageal involvement. Together with the extra-cardiac location of the tumor, these findings fulfilled Parks' criteria and supported the diagnosis of primary gastric SCC. The multidisciplinary tumor board classified the tumor as unresectable, and palliative systemic chemotherapy was initiated, but recurrent bleeding ultimately led to a fatal outcome.

This case highlights how primary gastric SCC may present with atypical symptoms and a deceptive GIST-like EUS appearance. It underscores the importance of multimodal evaluation including EGD, EUS, imaging and targeted biopsy in diagnosing rare gastric tumors. The case also demonstrates the limited durability of endoscopic hemostasis in advanced malignant bleeding and the need to consider gastric SCC in ulcerated, subepithelial-appearing lesions when endoscopic, imaging and histologic findings are discordant.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Monti M et al. Squamous cell carcinoma of the stomach: focus on a heterogeneous disease at diagnosis. Case report and literature review. *Front Oncol* 2024; 14:1419923
- [2] Callacondo-Riva D, Chávez S et al. Primary squamous cell carcinoma of the stomach with paraneoplastic leukocytosis: a case report and review of the literature. *Hum Pathol* 2009; 40: 1494–1498
- [3] Dong C, Jiang M, Tan Y et al. The clinicopathological features and prognostic factors of gastric squamous cell carcinoma. *Medicine*. 2016; 95 (34): e4720

eP608 Overweight in Crohn's Disease: A Hidden Driver of Escalation Toward Anti-TNF α Therapy?

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DOI 10.1055/s-0046-1821935

Aims Crohn's disease (CD) has long been associated with malnutrition, yet the rising prevalence of overweight challenges this traditional paradigm. Adipose tissue is now recognized as a metabolically active organ capable of amplifying systemic and intestinal inflammation, potentially altering disease course and therapeutic requirements. This study aimed to assess the prevalence of overweight among CD patients and determine whether higher BMI is associated with disease severity, complications, and escalation to anti-TNF α therapy.

Methods A cross-sectional study was conducted at Sahloul University Hospital including 157 adults with confirmed CD. Demographic, clinical, Montreal classification, perianal disease, and biological parameters (BMI, CRP, albumin) were collected. Patients were stratified into overweight (BMI ≥ 25 kg/m²) and non-overweight (< 25 kg/m²). Disease complications (strictures, abscesses,

fistulas, perianal disease), digestive surgery, and treatment strategies (5-ASA, thiopurines, anti-TNF α monotherapy, combination therapy, and optimization) were compared. Logistic regression identified independent determinants of anti-TNF α use.

Results The cohort included 157 CD patients (mean age 38.4 ± 12.7 years; sex ratio 1.2). Mean BMI was 22.1 ± 4.3 kg/m 2 , and 24.2% were overweight. Overweight patients were older at inclusion (44.7 ± 10.9 vs 36.5 ± 13.0 years; $p = 0.03$) and more frequently diagnosed after age 40 (Montreal A3; $p = 0.01$). Disease location (L1/L2/L3), behavior (B1/B2/B3), perianal involvement, CRP, albumin, and digestive complications did not differ significantly between groups ($p > 0.05$). However, overweight patients had significantly higher use of anti-TNF α agents (38.9% vs 19.4%; $p = 0.03$), with more frequent therapeutic optimization (22.2% vs 8.7%; $p = 0.02$). In multivariate analysis, overweight was the *only* independent predictor of anti-TNF α initiation (OR 2.45; 95%CI 1.10–5.46; $p = 0.028$). No association was found between BMI and inflammatory biomarkers.

Conclusions Overweight affects nearly one-quarter of CD patients and is independently associated with increased need for anti-TNF α therapy and more frequent treatment optimization, despite comparable inflammatory markers and complication rates. These findings suggest that adiposity may modulate therapeutic thresholds in CD and highlight the importance of integrating metabolic status into treatment decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP609 Flushing-Assisted Saline Immersion ESD (Flushing ESD) Improves Haemostasis with Minimal Haemostatic Forceps Usage

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DOI 10.1055/s-0046-1821936

Aims Controlling intraoperative bleeding is imperative for effective ESD. Flushing-assisted under-saline ESD (Flushing ESD) is a novel adjunct technique in saline immersion therapeutic endoscopy, designed to enhance bleeding prevention and improve haemostatic control. It provides concurrent, energy-synchronised flushing from the endoscopic knife, where effective vessel sealing and coagulation can be achieved with high radiofrequency forced coagulation. We aimed to compare haemostatic performance, bleeding events, and coagulation grasper utilisation between flushing and non-flushing rectal ESD in a UK tertiary referral centre (► **Table 1**).

Methods We conducted a single-centre retrospective study comparing 10 rectal flushing with 5 non-flushing ESDs (3 CO $_2$ and 2 SITE). The Flushing Forced Method used an electrosurgical knife with integrated flushing (FlushKnife BTs, FUJIFILM Corp, Japan) connected to an endoscopic irrigation pump (EIP2, ERBE Corp, Germany). Videos were analysed to document visible vessels, minor bleeding (ooze), major bleeding (red-out), and coagulation grasper activations. Demographic, procedural and histological data were obtained from electronic records. Student's t-tests were used for continuous variables, logistic regression for categorical variables, and Poisson regression for rate outcomes.

Results Baseline demographics, lesion characteristics, and resection outcomes were comparable between groups. Flushing ESD demonstrated significantly higher oozing (rate ratio [RR] 1.55, 95%CI 1.09–2.23) when scaled per vessel, but not when scaled per lesion area. All oozing events were easily treated with further applications of Flushing Forced coagulation with the knife tip. It required markedly fewer coagulation grasper applications for active bleeding per vessel (RR 0.07, 95%CI 0.00–0.43, $p = 0.02$) and per cm 2 (RR 0.04, 95%CI 0.00–0.25, $p < 0.01$). Rates of major bleeding did not differ significantly.

Conclusions Although rates of major bleeding did not differ significantly between flushing and non-flushing ESD, Flushing ESD demonstrated improved haemostatic efficiency, with markedly fewer coagulation grasper activations. Minor bleeding was more frequent when normalised per vessel, but this did not translate into a greater clinical bleeding burden. All minor bleeding episodes were readily controlled with further Flushing Forced coagulation applications. Overall, Flushing ESD facilitated more controlled and efficient intraprocedural haemostasis for rectal ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP610 Endoscopic rescue of malignant afferent loop syndrome after Pancreaticoduodenectomy using double-pigtail stents across gastrojejunal stenosis

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► **Table 1**

	Flushing ESD (n = 10) Median (IQR)	Non-Flushing ESD (n = 5) Median (IQR)	Stat.
Lesion (mm)	55 (40-69.5)	50 (35-50)	$p = 0.48$
Vessels/cm 2	1.04 (0.6-1.7)	1.27 (1.06-1.27)	RR:0.90, $p = 0.72$
Ooze/Vessel	0.7 (0.6-1)	0.5 (0.5-0.6)	RR:1.55, $p = 0.02^*$
Ooze/cm 2	0.8 (0.6-1.2)	0.6 (0.4-0.8)	RR:1.55, $p = 0.22$
Red Out/Vess.	0.15 (0.11-0.26)	0.06 (0-0.13)	RR:2.06, $p = 0.06$
Red Out/cm 2	0.2 (0.11-0.23)	0.05 (0-0.23)	RR:2.1, $p = 0.19$
Coag Grasp (Bleed)/Vessel	0, 0 (0-0)	0.03 (0.03-0.06)	RR:0.07, $p = 0.02^*$
Coag Grasp (Bleed)/cm 2	0, 0 (0-0)	0.07 (0.03-0.08)	RR:0.04, $p < 0.01^*$

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Abstract Text

A 72-year-old woman with pancreatic adenocarcinoma (pT2N1) treated by pancreaticoduodenectomy with single-loop reconstruction two years earlier developed local recurrence and received chemoradiotherapy. She presented with jaundice, acholic stools, and dark urine. Laboratory tests showed total bilirubin 11.5 mg/dL, direct bilirubin 7.8 mg/dL, and alkaline phosphatase 711 U/L. Magnetic resonance imaging revealed infiltrative recurrence encasing the coeliac trunk and superior mesenteric artery with moderate biliary dilatation secondary to narrowing of the hepaticojejunostomy [1, 2].

Upper endoscopy identified severe malignant stenosis at the gastrojejunal anastomosis with oedematous, infiltrative mucosa. Under fluoroscopic guidance, a 0.035-inch guidewire was negotiated across the pinpoint stenosis. Contrast injection confirmed position in the afferent loop. An ultrathin 4.9-mm gastroscope was advanced through the stenosis, revealing an intact but compressed hepaticojejunostomy with abundant biliary drainage and no intraductal tumour. Two 7-Fr × 7-cm double-pigtail plastic stents were successfully deployed side-by-side across the gastrojejunal stenosis. No biliary stent was placed.

At 7-day follow-up the patient was asymptomatic, bilirubin had fallen to 2.1 mg/dL, and liver enzymes normalised. She was discharged home.

This case demonstrates that endoscopic transmural drainage of malignant afferent loop syndrome using double-pigtail stents across the gastrojejunal anastomosis is feasible, safe, and rapidly effective. The ultrathin gastroscope was key to confirming hepaticojejunostomy patency and avoiding unnecessary biliary intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wu CCH, Brindise E, El Abiad R, Khashab MA. The role of endoscopic management in afferent loop syndrome. *Gut Liver* 2023; 17 (3): 351–359. doi:10.5009/gnl220205
- [2] Termsinsuk P, Chantarojanasiri T, Pausawasdi N. Diagnosis and treatment of the afferent loop syndrome. *Clin J Gastroenterol* 2020; 13 (5): 660–668. doi:10.1007/s12328-020-01170-z

eP611 Ulcerative Colitis-like Crohn's Disease: Endoscopic Diagnostic Challenges and Clinical Characteristics

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DOI 10.1055/s-0046-1821938

Aims Crohn's disease (CD) occasionally presents with continuous colonic involvement and endoscopic features resembling ulcerative colitis (UC). This UC-like colonic CD subtype has been reported in a minority of Crohn's colitis cases, yet understanding its endoscopic patterns and clinical characteristics is essential to improve early recognition and guide appropriate therapy.

Methods We conducted a retrospective study including inflammatory bowel disease (IBD) patients followed in our center between 2011 and 2023.

Results Among 106 IBD patients (19 UC and 87 CD), UC-like CD was identified in 27 patients, accounting for 39% of colonic CD. There was a slight male predominance (M/F ratio = 1.25). The mean age at disease onset was 28.9 years, not significantly different from UC (27.9 years) or other CD (25.5 years). Endoscopically, all UC-like CD patients showed continuous mucosal inflammation without skip lesions. Granularity, friability, and/or spontaneous bleeding were observed in 78% of cases. Pancolitis was present in 22 patients (81.5%), while 5 (18.5%) had left-sided colitis; the right colon was spared in 37%.

Histopathology favored UC in 44.4% of colonic biopsies, while 55.6% were equivocal. Ten patients underwent colectomy: histologic examination of specimens demonstrated UC features in 6 and CD features in 4 cases.

All 27 cases were ultimately diagnosed as CD rather than UC after a median delay of 53 months (IQR 3–111). Supporting arguments included the development of perianal disease (70%), ileal involvement (30%), and subsequent changes in endoscopic (52%) and histological (37%) features consistent with CD.

Active smoking was less frequent in UC-like CD than in other CD patients (3.8% vs 25%, $p = 0.016$). However, UC-like CD patients were more prone to develop acute severe colitis (ASC) than other colonic CD patients (55.6% vs 19%, $p = 0.002$). The rate of ASC was comparable between UC-like CD and UC (57.9%, $p = 0.875$). There was no significant difference in treatment response or surgery rates between ASC associated with UC-like CD and other ASC cases.

Conclusions UC-like colonic Crohn's disease represents a distinct subtype that closely mimics ulcerative colitis both endoscopically and histologically. Recognition of this subtype is essential, as it may evolve toward typical Crohn's disease features over time and shows a similar risk of acute severe colitis to UC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP612 Ergonomy in Endoscopy: Time to think

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Aims Musculoskeletal disorders (MSDs) are caused by repetitive and non-physiological constraints. The primary objective of this study was to determine the prevalence and localization of MSDs among health care professionals (HCPs) in endoscopy units; the secondary objective was to identify risk factors.

Methods Questionnaires were distributed in French-speaking hospitals in Belgium—one for physicians and one for nurses. Collected data included demographics, occupational background, and self-reported MSDs. Correlation tests were performed to assess the association between potential risk factors (sex, hand size, physical and endoscopic activity) and the presence of MSDs.

Results A total of 63 physicians and 42 nurses participated, representing a variety of work settings (university hospitals, private practices, retired professionals, and trainees). Among physicians, 84.1% reported at least one MSD. The most affected anatomical region was the thumb (55.6%), followed by the lower back (54%), and hands (42.9%). Among nurses, 97.6% reported MSDs, with the lumbar region most affected (85.7%), followed by the upper back (73.8%), and the neck and shoulder (69%).

These symptoms affected work performance, leading to temporary work interruptions. In the physician group, 17.5% had taken sick leave due to MSDs, mainly attributed to lower-back pain (7.9%). In the nursing group, 54.8% reported temporary interruptions, again with the lumbar region being the most frequently involved (35.7%).

Chi-square correlation tests were performed to evaluate the association between the occurrence of MSD and some risk factors but no statistically significant correlations were identified, probably due to the limited sample size.

Conclusions This observational study reveals a high prevalence of MSDs among HCPs in endoscopy units, leading to a significant impact on work performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP613 Endoscopic Management of Gastrointestinal Foreign Bodies: Outcomes and Independent Predictors of Surgical Intervention

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DOI 10.1055/s-0046-1821940

Aims Foreign body ingestion is a common emergency. While endoscopy is the primary treatment, some cases require surgery. This study evaluated endoscopic outcomes and predictors of surgical intervention.

Methods We performed a retrospective study (January 2019–July 2025) including all patients undergoing endoscopic removal of gastrointestinal foreign bodies. Demographic, clinical, radiologic, and endoscopic data were collected. Associations were analyzed using Chi-square and t-tests, and independent predictors of surgical intervention were identified through multivariate logistic regression.

Results A total of 63 patients were included (mean age 47.2 ± 13.1 years; range 18–82; sex ratio M/F = 0.9). Urban residence was documented in 80.9% of cases; 19% were incarcerated, and 11% had chronic psychotic disorders. The most frequent symptoms were epigastric pain (61.9%), dysphagia (38.1%), hypersalivation (25.4%), vomiting (14.3%), and respiratory symptoms (6.4%). Hematemesis occurred in two cases (3.2%). Almost all patients underwent preliminary abdominal radiography. The mean delay between ingestion and endoscopic intervention was 9.6 ± 7.9 hours (range 4–26). Foreign bodies included hard bread boluses (22.2%), plastic objects (20.6%), chicken bones (14.3%), poorly chewed food (14.3%), and sharp or bulky items (12.6%) such as lighters, metal clips, or dental prostheses. Endoscopic removal was performed via upper endoscopy in 95.2% of cases and rectosigmoidoscopy in 4.8%. Common extraction tools included rat-tooth forceps (31.7%) and snares (27%). Surgery was required in 6 patients (9.5%). In multivariate analysis, surgical intervention was independently associated with the presence of a sharp or bulky foreign body (OR 5.84; 95%CI 1.21–28.13; $p = 0.028$) and with an extraction delay exceeding 12 hours (OR 4.76; 95%CI 1.05–21.60; $p = 0.042$).

Conclusions Endoscopy safely removes over 90% of gastrointestinal foreign bodies. Sharp or bulky objects and delays > 12 hours independently predict the need for surgery. Early identification and timely endoscopic retrieval are key to reducing complications and improving outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP614 Relationship Between Endoscopic Patterns and Gastric Precancerous Staging (OLGA/OLGIM) in Patients with Helicobacter pylori Infection

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DOI 10.1055/s-0046-1821941

Aims The OLGA (Operative Link for Gastritis Assessment) and OLGIM (Operative Link on Gastric Intestinal Metaplasia) staging systems stratify gastric cancer risk based on the severity and topography of atrophy and intestinal metaplasia. Endoscopic patterns such as nodularity, mosaic mucosa, erosions, or ulcer disease may correlate with underlying histological severity. This study evaluated the association between endoscopic findings and OLGA/OLGIM histological stages in patients with Helicobacter pylori (H. pylori) infection in Kairouan, Tunisia.

Methods We conducted a retrospective study including 89 adults with histologically confirmed H. pylori infection who underwent upper gastrointestinal endoscopy between January and August 2024. Endoscopic findings (erythema,

nodularity, mosaic pattern, erosions, ulcer disease) were collected. Histopathology assessed chronic inflammation, activity, glandular atrophy, intestinal metaplasia, and H. pylori density according to the Sydney system, allowing indirect categorization into OLGA and OLGIM stages. Associations between endoscopic abnormalities and histological severity markers were analyzed descriptively.

Results Erythematous gastritis was the most common endoscopic finding (92.1%), followed by nodularity (21.3%), mosaic pattern (15.7%), erosions (16.9%), and ulcer disease (8.9%). Histology showed chronic gastritis in 98.9%, mild-to-severe inflammatory activity in 91%, glandular atrophy in 13.5%, and intestinal metaplasia in 6.7%. Nodularity and mosaic patterns were predominantly associated with higher H. pylori density and active inflammation—corresponding to early OLGA stages (I–II). Erosions and ulcer disease were more frequently associated with moderate activity and early atrophy, suggesting progression toward intermediate OLGA stage II. Patients with glandular atrophy or intestinal metaplasia (compatible with OLGA/OLGIM II–III) more often exhibited mucosal pallor, loss of folds, or mosaic patterns rather than nodularity. No high-risk OLGA/OLGIM stage IV lesions were identified.

Conclusions Endoscopic findings correlate with key histological components of the OLGA/OLGIM systems. Nodularity reflects high bacterial load and early-stage gastritis, while mosaic patterns, erosions, and mucosal thinning are more frequently associated with atrophy or intestinal metaplasia. Integrating endoscopic patterns with OLGA/OLGIM staging may enhance early risk stratification for gastric cancer in H. pylori-infected patients, particularly in resource-limited settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP615 Predictors of development and endoscopic treatment of achalasia

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DOI 10.1055/s-0046-1821942

Aims In the last years, with the improvement of diagnostics and understanding of the pathogenesis of Achalasia, scientists have been considering a personalised approach to the treatment of esophageal dysmotility [1, 2].

AIM: To identify predictors of Achalasia and evaluate the results of endoscopic treatment.

Methods In the Department of Surgery of Digestive organs of the Institute in may 2024 – september 2025, 29 patients diagnosed with Achalasia were examined and treated. There were 12 men and 17 women. The average age was 28–68 years (39.6 ± 5.3). All patients underwent Eckardt score (dysphagia (0–5), regurgitation (0–5), chest pain (0–5)), X-ray (time barium swallows), endoscopic, EUS and HRM examination, and endoscopic treatment.

Results According to HRM, Achalasia type I ($n = 10 / 34.5\%$), type II ($n = 14 / 48.3\%$), type III ($n = 2 / 6.9\%$), EGJOO ($n = 3 / 10.3\%$) were established. According to EUS with compression elastography, thickening of the lower third of the esophagus ≥ 3 mm and LES ≥ 5 mm were diagnosed in all cases. According to EUS-elastography of the LES, a blue pattern (fibrosis) was determined in 5 (17.2%) cases, and a green-yellow pattern (hypertrophy) was determined in 24 (82.8%) cases. Endoscopically, all patients showed esophageal dilation, congestive contents, and resistance to the endoscope when passing through the LES. All patients underwent pneumatic dilation (PD) using 3.5 cm Rigiflex II balloons. The ineffectiveness of the PD course within 12 months was determined in 31.0%: Achalasia type I ($n = 2$), type II ($n = 3$), type III ($n = 1$), EGJOO ($n = 3$). In these cases, per oral endoscopic myotomy (POEM) was performed. Histologically, fibrosis was confirmed in cases of type I ($n = 2$) and type II ($n = 3$) Achalasia, and muscle hypertrophy was confirmed in cases of type III ($n = 1$) and EGJOO ($n = 3$). During the 12-month follow-up period, all patients showed clinical improvement according to the Eckardt score ($p < 0.01$); according to the time barium swallows assessment after 1 min, 2 min, and 5 min, a decrease in

the diameter of the esophagus ($p < 0.01$), acceleration of passage ($p < 0.01$), and the appearance of a gastric gas bubble ($p < 0.01$) were noted.

Conclusions EUS allows differentiation between LES and esophageal muscle hypertrophy and their fibrotic transformation in Achalasia, which requires myotomy. HRM allows assessment of LES relaxation and esophageal motility, which influences the staging of PD or primary POEM. Reduction in esophageal diameter and LES relaxation are screening criteria in assessing the effectiveness of Achalasia treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Stepanov Yu M., Prolom N.V., Tarabarov S.O. The latest diagnostic methodologies for examining the oesophagus and stomach. High-resolution manometry is now available in Ukraine. *Gastroenterology* 4 (59): 2024; 182–190. doi:10.22141/2308-2097.58.4.2024.644
- [2] Stepanov Yu M., Prolom N.V., Tarabarov S.O., Babii O.M., Adamska I.M. The role of high-resolution manometry in the diagnosis of oesophageal pathology (literature review and own clinical observations). *Gastroenterology* 2 (59): 2025; 129–137. doi:10.22141/2308-2097.59.2.2025.677

eP616 Risk Factors For Inadequate Bowel Preparation In Patients With Ulcerative Colitis In Endoscopic And Clinical Remission: A Multicenter Cross-Sectional Study

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DOI 10.1055/s-0046-1821943

Aims Adequate bowel preparation (BP) is crucial for high-quality colonoscopy surveillance in ulcerative colitis (UC), because an inadequate one leads to incomplete colonoscopy and higher rate of missing precancerous lesions, which are usually flat or subtle in this setting. There is conflicting evidence regarding risk factors for inadequate BP when UC patients are in endoscopic and clinical remission; furthermore, data on the optimal PEG-regimen which should be used in this setting are scarce. The aim of this study was to assess which factors influence the quality of BP in this specific setting.

Methods This is a multicentre, cross-sectional, retrospective study carry out it eight centres between January-2021 and December-2022, including UC patients with endoscopic and clinical remission (Mayo endoscopic score = 0) who underwent colonoscopy. Patients with colonic, ileal or abdominal surgery were excluded. The primary outcomes were the rate of adequate preparation, defined as total Boston Bowel Preparation Scale (BBPS) ≥ 6 with all segments scoring ≥ 2 and overall BBPS scores of patients undergoing BP with 1L-PEG-ASC (Plenvu) and 2L-PEG (Moviprep, Clensia), without any specific allocation or instructions. Secondary endpoint was the evaluation of risk factors of cleans-

ing quality with a multivariable ordinal logistic regression, the right colon cleansing adequacy rate and exam completion rate.

Results Overall, 379 patients (mean age 52 ± 15 years, 159 female) with quiescent UC undergoing colonoscopy stratified by preparation type: 1L-PEG ($n = 216$) and 2L-PEG ($n = 163$). Baseline clinical and demographic characteristics were compared. 1L-PEG yielded higher overall BP quality, with a significantly higher median total BBPS compared to 2L-PEG (8, IQR 7–9 vs 6, IQR 6–8, $p < 0.001$). Although rate of adequate preparation was higher in the 1L-PEG group, this difference did not reach statistical significance (92.6% vs 87.7%, $p = 0.12$). The 1L-PEG group demonstrated higher rates of exam completion (99.5% vs. 95.7%; $p = 0.02$) compared to 2L-PEG, but no differences in overall right colon cleansing adequacy (96.3% vs 94.5%, $p = 0.46$). At multivariate ordinal logistic regression adjusted for age, sex, and disease extension, the use of 2L-PEG was associated with significantly lower odds of achieving higher BBPS scores (OR 0.30, 95% CI 0.20–0.45) compared to 1L-PEG.

Conversely, patient demographics, smoking status, maximum disease extension, history of advanced therapy or presence of pseudopolyps did not significantly affect BP quality ($p > 0.05$).

Conclusions In a relatively unbiased setting, such as UC patients in endoscopic and clinical remission, 1L-PEG demonstrated better BP quality cleansing and higher procedural completion rates. Moreover, it was the primary determinant of BP quality, with neither disease extent nor a history of advanced therapy affecting BP. These findings suggest that 1L-PEG-ASC preparation may be the preferred option for colonoscopy BP in UC patients when not contraindicated.

Conflicts of Interest Scalvini Davide: Norgine srl

eP617 Hiatal herniation of the duodenal limb after total laparoscopic gastrectomy: A case report

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Background: Total gastrectomy with Roux-en-Y esophagojejunostomy is a standard surgical treatment for gastric cancer. While internal hernias are known complications following Roux reconstructions, hiatal herniation of the biliopancreatic (afferent/duodenal) limb is exceptionally rare. Only a few cases have been described in the literature. We present a case of intrathoracic herniation of the duodenal limb causing obstructive symptoms 10 months after total gastrectomy.

Case presentation: A 70-year-old woman with a history of locally advanced gastric cancer treated with neoadjuvant chemotherapy underwent total laparoscopic gastrectomy with Roux-en-Y reconstruction 10 months before presentation. She presented with progressive abdominal pain and unintentional weight loss over one month. Physical examination revealed mild epigastric tenderness without signs of peritonitis. Laboratory results were unremarkable. Contrast-enhanced CT revealed a markedly dilated duodenal (biliopancreatic) limb filled with fluid, herniating through the esophageal hiatus into the thoracic cavity, findings consistent with afferent limb obstruction due to hiatal herniation. An upper endoscopy was performed in an attempt to decompress and reduce the limb. Although endoscopic detorsion has been reported to be successful in selected cases of Roux limb obstruction post-gastrectomy, in this patient, the afferent limb was fixed within the hiatus, and reduction was not possible. After that, the patient was under surgical intervention. A laparoscopic approach was attempted and revealed a grossly dilated afferent limb incarcerated at the hiatus. A hernia detorsion was not possible due to gentle manipulation, so needle decompression with aspiration of enteric contents was performed, allowing successful reduction of the limb back into the abdomen.

The hiatal defect was repaired, and no intestinal resection was required. The patient recovered uneventfully and was discharged on postoperative day 10 [1–3].

Conclusion: Hiatal herniation of the biliopancreatic limb is a rare but important cause of small bowel obstruction following total gastrectomy with Roux-en-Y reconstruction. Non-specific symptoms such as abdominal pain and weight loss may delay diagnosis. In post-gastrectomy patients presenting with such symptoms, even months after surgery, clinicians should consider this entity in the differential diagnosis. Prompt surgical reduction and defect repair can avoid severe complications, provide good outcomes, and prevent further morbidity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ezzy M, Heinz P, Kraus TW, Elshafei M. Incarcerated hiatal hernia – A rare postoperative complication following gastrectomy for stomach cancer. A case report and literature review. *Int J Surg Case Rep* 2021; 79: 219–221
- [2] Miyagaki H, Takiguchi S, Kurokawa Y, Hirao M, Tamura S, Nishida T, Kimura Y, Fujiwara Y, Mori M, Doki Y. Recent trend of internal hernia occurrence after gastrectomy for gastric cancer. *World J Surg* 2012; 36 (4): 851–7
- [3] Murata S, Yamazaki M, Kosugi C, Hirano A, Yoshimura Y, Shiragami R, Suzuki M, Shuto K, Koda K. Hiatal hernia following total gastrectomy with Roux-en-Y reconstruction. *Hernia*. 2014; 18 (6): 889–91. doi:10.1007/s10029-013-1142-3 Epub 2013 Aug 6 PMID: 23918277

eP618 Role of EUS in diagnosis of retroperitoneal masses

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DOI 10.1055/s-0046-1821945

Aims The retroperitoneum (RP) is an anatomical space located behind the abdominal or peritoneal cavity. Abdominal organs that are not suspended by the mesentery and lie between the abdominal wall and parietal peritoneum are said to lie within the RP (kidneys, adrenal glands, pancreas, and parts of the aorta, inferior vena cava, duodenum, and colon). Several individual spaces make up the RP. These spaces are the anterior pararenal space, posterior pararenal space, and the perirenal space [1]. Methods for retroperitoneal biopsy include open/laparoscopic surgery, or CT-guided biopsy. We present using of EUS-FNA/FNB through the duodenum as a new route for accessing the retroperitoneum

Methods We present diagnostic procedure in patient with abdominal pain, diabetes mellitus, weight loss, and excessive consumption of alcohol. MSCT scan show retroperitoneal mass (RPM) dorsal to the pancreas, which has been pushed ventrally, and partly with infiltration of the head and the initial part of the body of the pancreas, a large expansive infiltrative formation (AP×LL×CC – 51×81×71 mm). The formation was heterogeneous with cystic lesions, some of which contain calcifications. Transduodenal endoscopic ultrasound (FujiFilm Arietta 850) -guided fine-needle biopsy (EUS-FNB – 22 ga) was second step. Pathohistological finding show a regular pancreatic glands and pieces of squamous epithelium without malignant tissue.

Results After consultation with the multidisciplinary team, surgery was performed as follows – pancreatoduodenotomy sec Whipple, pancreatojejunostomy, hepaticojejunostomy, GEA, EEA sec. Roux, cholecystectomy, VAC drainage. Pathohistological finding show a regular and irregular pancreatic glands without malignant tissue – conclusion – changes caused by recurrent chronic pancreatitis of ethylic etiology.

Conclusions Transduodenal endoscopic ultrasound FNA/FNB for diagnosis of RPM is still only sporadically mentioned in the literature. But this is a powerful diagnostic tool in the hands of an experienced endoscopist.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lambert G, Samra NS. Anatomy, Abdomen and Pelvis, Retroperitoneum. 2023. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025

eP619 Diagnostic Accuracy of EUS-Guided Tissue Acquisition for Pancreatic Lesions in a High-Volume Center Without Rapid On-Site Evaluation (ROSE): A Real-World Comparison of FNA versus FNB

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DOI 10.1055/s-0046-1821946

Aims This study aimed to evaluate the diagnostic accuracy of Endoscopic Ultrasound-guided Tissue Acquisition (EUS-TA) for pancreatic lesions in a tertiary referral center without Rapid On-Site Evaluation (ROSE). Secondary objectives pointed to assess the influence of specific variables (lesion size, location, needle gauge, number of passes, and needle type) on the diagnostic yield.

Methods We conducted a retrospective single-center study on 129 patients with 134 pancreatic lesions undergoing EUS-TA between 2020 and 2024. All procedures were performed by experienced endoscopists. Diagnostic yield was calculated based on the definitive result of the most recent procedure; indeterminate cases (Papanicolaou C3/H3) were reclassified based on KRAS mutation analysis. A composite gold-standard (GS) was defined as histological confirmation from surgery or minimum 6-month clinical-radiological follow-up consistent with disease evolution. Univariate analysis (Chi-square test) was performed to evaluate the impact of lesion size, location, needle gauge, number of passes, and needle type (FNA vs FNB) on diagnostic accuracy. McNemar's test was used to analyse the efficacy of repeat biopsies.

Results Out of 134 included lesions, 130 yielded a conclusive result and were included in the performance analysis. Comparison with the GS revealed 107 True Positives, 15 False Negatives, 7 True Negatives, and 1 False Positive. Overall accuracy was 87.7 % (95 % CI: 80.9–92.3). Sensitivity was 87.7 % (95 % CI: 82.1–93.3), Specificity 87.5 % (95 % CI: 65–100) and Positive Predictive Value (PPV) 99.1 % (95 % CI: 94.9–99.8). The Negative Predictive Value (NPV) was 32.0 % (95 % CI: 12.4–52.1). Univariate analysis revealed no significant correlations with lesion location, size, needle gauge, or number of passes. Specifically, no significant difference in failure rates was observed between FNA (9.6 %) and FNB (14.1 %) (p = 0.43). However, repeat biopsy significantly improved the diagnostic yield in initially inconclusive cases (p < 0.001).

Conclusions EUS-TA without ROSE demonstrates high diagnostic accuracy and an excellent PPV (99.1 %) for pancreatic lesions. Our analysis confirms that diagnostic performance is not significantly influenced by needle type (FNA vs FNB) or other technical variables in this setting. However, in a tertiary setting with a high pre-test probability of disease, the low NPV highlights that EUS-TA does not reliably exclude malignancy, therefore requiring careful evaluation and repeated EUS-TA to resolve diagnostic uncertainty.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP620 Double Balloon Enteroscopy: a 20-year single centre experience and preliminary data on the performance of the new EN840T

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DOI 10.1055/s-0046-1821947

Aims The aim of this study was to evaluate the performance of double balloon enteroscopy (DBE) in general and according to patients' age. Furthermore, preliminary results on the use of the new EN840T enteroscope model were assessed

Methods We conducted a retrospective study of prospectively collected data on patients who underwent DBE in our endoscopy unit between January 2006 and August 2025

Results A total of 592 DBE procedures were included. The overall diagnostic yield was 60 %; vascular lesions were the predominant endoscopic findings (24.8 %), followed by polyps or neoplastic masses (17.4 %). Older patients (≥ 65 years) showed higher rates of clinically relevant findings compared to adult patients (< 65 years) ($p = 0.01$). Crohn's disease and polyps or neoplastic masses were more frequent in the younger group ($p = 0.02$ and $p = 0.04$, respectively), while vascular lesions were the most common findings in the older group ($p < 0.001$). The rate of endoscopic treatment rates was higher in the older group ($p < 0.001$). Complications occurred in eight procedures (1.4 %). Sixteen DBE procedures were performed using the EN840T enteroscope. No complications were observed. In transoral procedures, the length of small bowel visualized was greater than with previous models (234 cm vs. 217 cm from the pylorus). The diagnostic yield was 81.2 %, compared to 55 % ($p = 0.03$) with older enteroscopes.

Conclusions DBE is an effective tool with a high safety profile, particularly in the elderly population. The new EN840T enteroscope, although evaluated in a limited number of procedures, appears to provide improved diagnostic performance with an excellent safety profile

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP621 Pancreatic metastasis of urothelial neoplasia as the origin of upper gastrointestinal bleeding

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DOI 10.1055/s-0046-1821948

Abstract Text

A 72-year-old male patient with a history of urothelial carcinoma treated with chemotherapy. During follow-up, a nonspecific hypodense nodular image measuring 26 mm was observed on CT scan at the posterior margin of the pancreatic head. Concurrent with this finding, the patient developed intermittent melena and anemia. Gastroscopy revealed a 20 mm excavated ulcer in the second portion of the duodenum, oozing blood in a sheet-like pattern, with an infiltrative appearance [1].

An endoscopic ultrasound was performed, revealing a 27 mm heterogeneous, rounded, hypoechoic lesion in the pancreatic head, adjacent to the papilla. Ultrasound visualization showed a duodenal ulcer embedded within the pancreatic lesion. A 22G biopsy needle was used to puncture the lesion, and the histopathological examination was suggestive of urothelial carcinoma metastasis. Following the endoscopic ultrasound examination, adrenaline was injected into the ulcer. At the end of the procedure, an adherent clot was observed without active bleeding. Based on these findings, the treatment was modified. Gastrointestinal bleeding is an uncommon manifestation of pancreatic lesions that is usually associated with a poor prognosis and is refractory to endoscopic treatment. In our case, no further endoscopic treatments were necessary and no complications arose despite the puncture being performed through the infiltrative duodenal ulcer. Furthermore, although pancreatic metastases are becoming increasingly frequent, they remain a very uncommon site of metastasis for urothelial carcinoma; endoscopic ultrasound with biopsy is a fundamental tool for the proper management of these patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Romanish M, Naous R. Metastatic tumors to the pancreas: An institutional experience. *Ann Diagn Pathol*. 2025; 79: 152528. doi:10.1016/j.anndiag-path.2025.152528 Epub 2025 Jul 8 PMID: 40638990

eP622 Efficacy of antireflux mucoplasty (ARM-P) and antireflux mucoplasty with valve (ARM-PV), and feasibility of a modified ARM-PV approach in patients with PPI-refractory GERD

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DOI 10.1055/s-0046-1821949

Problem to solve Proton pump inhibitor (PPI) refractory gastroesophageal reflux disease (GERD) remains a therapeutic challenge, and there is an increasing demand for minimally invasive endoscopic options that provide durable symptom relief. Antireflux mucoplasty (ARM-P) is an endoscopic anti-reflux procedure in which mucosal resection is performed at the gastric cardia, followed by immediate endoscopic closure, thereby reshaping the esophagogastric junction. Antireflux mucoplasty with valve (ARM-PV) further incorporates a valvuloplasty concept by creating a mucosal flap and fixing it to the underlying muscle layer with clips before closing the defect, enabling the construction of an antireflux valve. However, in conventional ARM-PV, mucosal flap fixation clips may be embedded and potentially interfere with subsequent endoscopic suturing. Clinical data on ARM-P and ARM-PV, as well as strategies to overcome these clip-related issues, are still limited. We therefore aimed to evaluate the clinical outcomes of ARM-P and ARM-PV for PPI refractory GERD and to assess the feasibility of a modified ARM-PV approach developed to reduce problems related to flap fixation clips.

Innovation To address these clip-related issues, we developed a modified ARM-PV technique that omits clip fixation of the mucosal flap to the muscle layer. This modification was designed to simplify the procedure while preserving the antireflux valve mechanism. We retrospectively reviewed consecutive patients with PPI-refractory GERD who underwent ARM-P or ARM-PV at a single tertiary center. Clinical outcomes, including technical success, adverse events, changes in GERD-related symptoms, and use of acid-suppressive medication, were analyzed. Symptom severity was assessed before treatment and at 1 month using the GERD-Health Related Quality of Life Questionnaire (GERD-HRQL) and the Frequency Scale for the Symptoms of GERD (FSSG).

Results Thirteen consecutive patients with PPI-refractory GERD were treated, including 6 who underwent ARM-P and 7 who underwent ARM-PV, of whom 6 received the modified ARM-PV technique. All procedures were completed successfully without major adverse events (bleeding, perforation, or stricture). In the overall cohort, GERD-HRQL improved from a median of 23 at baseline to 5 at 1 month, and FSSG improved from 29 to 13, all of which were statistically significant. In the subgroup treated with the modified ARM-PV approach, GERD-HRQL improved from 27.5 to 6.5 and FSSG from 31 to 12, also showing statistically significant symptom relief comparable to that observed in the full cohort. Regarding acid-suppressive therapy, all 13 patients were receiving full-dose PPI or P-CAB at baseline. At 1 month, 4 patients (31 %) remained on full dose, 3 patients (23 %) were maintained on half dose, and 6 patients (46 %) were able to discontinue or switch to on-demand use, with a similar pattern seen in the modified ARM-PV subgroup.

Conclusions In this single-center retrospective series, ARM-P and ARM-PV provided significant improvement in GERD-related symptoms and allowed reduction of acid-suppressive medication in patients with PPI-refractory GERD, without major adverse events such as bleeding, perforation, or stricture. The modified ARM-PV technique, which omits mucosal flap clip fixation to the muscle layer, appeared to be a feasible and safe endoscopic innovation that maintained clinical efficacy while potentially mitigating clip-related issues. Larger prospective studies with longer follow-up are warranted to confirm the durability of these outcomes and to further define the role of the modified ARM-PV approach among endoscopic treatments for refractory GERD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP623 POEM with preserving of the sling fibers and minimizing the length of esophageal myotomy is an effective method to prevent GERD in patients after peroral endoscopic myotomy. The first study outcomes of the single center of Ukraine

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DOI 10.1055/s-0046-1821950

Aims POEM is the first line of treatment for patients with esophageal achalasia, but the development of postoperative GERD remains an actual problem today. To prevent the development of reflux, we modified the conventional technique of peroral endoscopic myotomy which is that we preservation of the sliding fibers of the stomach and the length of the esophageal myotomy [1–3].

Methods 32 patients with achalasia were included in the study. The studied group consisted of 16 men (50.0%) and 16 women (50.0%), the average age was 47.72 ± 2.88 (95%-CI 41.95–53.49) years, the average duration of the disease was 4.33 ± 1.07 (95%-CI 2.18–6.47) years. All patients were operated on by the modified method of peroral endoscopy myotomy with preservation of sliding fibers and minimizing length of esophageal myotomy. To diagnose postoperative reflux, we used daily esophageal impedance-24pH monitoring and the GerdQ questionnaire (GastroEsophageal Reflux Disease Questionnaire). The effectiveness of treatment results was assessed using the Eckard symptom scale. Assessment of quality of the life parameters (questionnaires ASQ, QLQ-C30 and QLQ-OES18) and the effectiveness of the performed modified peroral endoscopic myotomy of the esophagus.

Results All patients of the study group were operated on by a modified method of oral endoscopic myotomy (POEM). Esophageal myotomy was performed along the back wall, the length of the myotomy was 6–8 cm, and the crossing of the LES with preservation of the sliding fibers was mandatory. The result of the operation was evaluated 3 months after the operation.

According to the assessment of 24-hour pH-metry, based on the quantitative assessment of intraesophageal pH, the performance of POEM is associated with less pronounced manifestations of reflux, although the total time of residence of pH < 4 in this group was implausibly greater than the norm. At that time, the overall average score according to the GerdQ questionnaire in the studied group was 0.78 ± 0.25 (range 0.28–1.29). The obtained results indicate a low severity of GERD symptoms in patients 3 months after modified POEM, which confirms the effectiveness of the procedure in reducing the manifestations of reflux pathology and improving the quality of life of patients.

Conclusions Modified peroral endoscopic myotomy is an effective minimally invasive endoscopic method of treating patients with esophageal achalasia, with a significantly reduced development of reflux disease. The dynamics of changes in quality of the life indicators in patients with achalasia of the cardia 3 months after modified peroral endoscopic myotomy according to the Eckard symptom scales, achalasia-DS QoL (ASQ), EORTC QLQ-C30, EORTC QLQ-OES18 indicate a low percentage of reflux, a statistically reliable positive trend of improvement in quality of life parameters and work capacity

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Grimes K.L., Bechara R., Shimamura Y. Gastric myotomy length affects severity but not rate of post-procedure reflux: 3-year follow-up of a prospective randomized controlled trial of double-scope per-oral endoscopic myotomy (POEM) for esophageal achalasia. *Surg Endosc* 2020; 34: 2963–2968. doi:10.1007/s00464-019-07079-0.
- [2] Tanaka S., Toyonaga T., Kawara F. The novel per-oral endoscopic myotomy method preserving oblique muscle using two penetrating vessels as anatomic landmarks reduces postoperative gastroesophageal reflux. *J Gastroenterol Hepatol* 2019; 34: 2158–2163. doi:10.1111/jgh.14814

- [3] Tate DJ, Rodriguez de Santiago E, Montori M, Lala V, Debels LK, Albéniz E, Araujo IK, de Moura EGH, Ebigo A, Familiari P, Fockens P, Heinrich H, Kiosov O, Messmann H, Nagl S, Santos-Antunes J, Sethi A, Tantau M, Vackova Z, Martinek J, Soetikno RM, Gralnek IM, Tham TC. Curriculum for training in peroral endoscopic myotomy (POEM) in Europe (Part II)–Best Practice Techniques: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2025; 57 (8): 912–941. doi:10.1055/a-2569-7634

eP624 Submucosal Injection of Rectal Lesions Followed by Timed MRI: A Technique to Identify the Submucosal Plane and More Accurately Assess Depth of Invasion

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DOI 10.1055/s-0046-1821951

Problem to solve Choosing the optimal resection strategy for colorectal lesions depends on morphology/Paris classification, optical diagnosis to characterize the surface pattern (JNET and/or Kudo), and lesion size. However, despite these classification systems in expert hands, there remains a large degree of uncertainty in accurately characterizing the depth of invasion of a lesion, particularly superficial or deep submucosal invasive cancer (SMIC). [1] Notably, both EUS and contrast enhanced MRI have limited reliability in staging rectal lesions (i.e. T1a/T1b vs T2). [2]

Our aim is to determine whether MRI after submucosal injection improves accuracy of differentiating T1 (presence of superficial or deep SMIC) from T2 rectal lesions compared with standard MRI, using histopathology as a reference. This crucial differentiation remains a challenging task and could drastically affect resection strategies and patient outcomes.

Innovation After a rectal lesion is identified on initial colonoscopy that may carry a higher risk of SMIC (size > 2 cm, JNET 2A and/or 2B), patients undergo a baseline MRI followed by submucosal normal saline injection of the lesion during endoscopy. The procedure is to be performed underwater without the use of CO2 to prevent an air-filled colon on imaging. A repeat MRI within 45 minutes provides a clearer view of the submucosal layer, allowing direct comparison with the baseline study.

Results Three rectal lesions (20–45 mm, Paris 0-IIa + Is, JNET 2A–2B) were evaluated and resected via ESD. The post-lift MRI was able to clearly highlight the submucosal plane for the radiologist, allowing them to determine absence of invasion into the submucosal layer or underlying muscularis propria. In comparison, the submucosal layer was not clearly visible in the pre-lift MRI, making the determination of SMIC not possible. Histology after ESD of all three lesions ranged from tubulovillous adenoma with either low- or high-grade dysplasia. Our results reveal that submucosal injection allowed the radiologist to more accurately stage these lesions based on their histology as a reference.

Conclusions Submucosal injection of rectal lesions followed by a timed MRI highlighted a clearly visible submucosal layer, improving staging accuracy in terms of presence of SMIC. In this series, the post-lift MRI correctly identified the absence of submucosal invasion, using histology as a reference. This technique may aid decision making for high-risk lesions where endoscopic (EMR or ESD) versus surgical resection remains in question.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Barral M, Eveno C, Hoeffel C et al. Diffusion-weighted magnetic resonance imaging in colorectal cancer. *J Visc Surg.* 2016; 153 (5): 361–369. doi:10.1016/j.jvisurg.2016.08.004
- [2] Vosko S et al. Optical Evaluation for Predicting Cancer in Large Non-pedunculated Colorectal Polyps Is Accurate for Flat Lesions. *Clinical Gastroenterology and Hepatology Volume 19 (Issue 11): 2425–2434.e4*

eP625 Clinical Practice Patterns in the Pre-Endoscopic Management of Individuals Presenting with Acute Upper Gastrointestinal Bleeding: Results of an International Survey

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DOI 10.1055/s-0046-1821952

Aims Despite recent guideline recommendations on managing acute upper gastrointestinal bleeding (AUGIB), mortality rates have not substantially improved over the years. We aimed to understand real-life pre-endoscopic assessment and management practices in AUGIB.

Methods We conducted an international survey from April to November 2023. Key domains captured respondents' demographics and clinical practice location, definitions of hemodynamic instability, and pre-endoscopic assessment. We provided descriptive proportions of responses. Secondary analyses explored differences in responses based on years of clinical experience.

Results Among the 533 clinicians who completed the survey, 47.1 % reported using a triage system for AUGIB, and only 60.4 % applied risk stratification scores at the time of presentation. Normal saline and balanced crystalloid fluids were almost equally preferred for initial fluid resuscitation. Hemodynamically unstable patients were typically managed in emergency departments and/or intensive care units. Over 85 % of respondents followed a restrictive blood transfusion strategy in stable patients, but this dropped to 50.3 % in hemodynamically unstable cases. Among respondents, 34.3 % did not routinely use prokinetics, and 27.6 % avoided their use, even in cases of severe bleeding or suspected gastric emptying disorders. The majority (87.1 %) prescribed proton pump inhibitors before endoscopy. For suspected variceal bleeding, 83.7 % reported using vasoactive agents, and 74.3 % reported administering prophylactic antibiotics. Younger clinicians were more likely to follow recent guidelines than those with over 15 years of clinical experience.

Conclusions We found considerable variation in the pre-endoscopic management of individuals with AUGIB. Overall adherence to international guidelines was not uniform, which may adversely impact patient outcomes

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP626 Video quality does not affect submucosal invasive cancer detection in large colorectal polyps: a prospective multicentre study

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Aims Accurate detection of submucosal invasive cancer (SMIC) in large non-pedunculated colorectal polyps (LNPCPs) is essential for risk stratification. Pre-resection videos are increasingly used for expert review and triage, but it is unknown whether video quality influences diagnostic performance. This prospective multicentre study evaluated the impact of video quality on SMIC detection in LNPCPs by trained endoscopists.

Methods In four tertiary centres, high-definition pre-resection videos of consecutive LNPCPs were recorded by expert endoscopists and optically trained interventional fellows. Videos were uploaded to a web platform and independently reviewed by 9 blinded raters (experts and fellows) not involved in the original procedures. Raters were randomly assigned to videos and classified each lesion for SMIC presence.

Video quality was scored on a 5-point Likert scale (1 = poor, 5 = excellent) following a standardisation meeting defining structural criteria (global white-light overview, systematic inspection with virtual chromoendoscopy, close-up of suspicious areas) and technical criteria (clean lens, adequate washing, steady images). All recording endoscopists had received a brief educational intervention on standardised LNCP video acquisition to ensure a basic proficiency in pre-resection imaging.

The primary outcome was the association between video quality and diagnostic performance (sensitivity, specificity, accuracy) for SMIC detection as defined by blinded histopathological assessment. Video quality was analysed as ordinal (1–5) and categorically as low (1–3) versus high (4–5). Sensitivity, specificity and accuracy were calculated with 95 % confidence intervals (CI). A mixed-effects logistic regression model with correct SMIC classification as dependent variable and random intercepts for lesion and rater assessed quality impact.

Results We included 268 LNPCPs, yielding 667 video assessments. SMIC was present in 53/268 (19.8 %), HGD in 76/268 (28.4 %), and LGD in 129/268 (48.1 %). Videos were rated as low-quality in 184/667 (27.6 %) and high-quality in 483/667 (72.4 %).

Overall sensitivity, specificity and accuracy for SMIC detection were 70.0 % (95 %CI 61.7–77.4), 83.8 % (95 %CI 80.4–86.7) and 81.0 % (95 %CI 77.9–83.8), respectively. Stratified by quality category, sensitivity was 67.0 % (95 %CI 56.7–76.2) for high-quality versus 73.0 % (95 %CI 55.9–86.2) for low-quality videos (P=0.648). Specificity was 84.5 % (95 %CI 80.4–87.9) vs 81.0 % (95 %CI 73.7–87.0) (P=0.399), and accuracy 81.0 % (95 %CI 77.2–84.4) vs 79.3 % (95 %CI 72.8–85.0) (P=0.720). Lesion demographics are presented for high- and low-quality videos in the table. In the mixed-effects model, each 1-point increase in quality score yielded OR 1.07 (95 %CI 0.70–1.65; P=0.76) for correct classification, indicating no significant effect (► Table 1).

► Table 1

Characteristic	High quality (Likert 4–5, n = 483)	Low quality (Likert 1–3, n = 184)	P-value
Lesion size (mm), median (IQR)	35 (20)	35 (12.5)	0.647
Non-granular morphology, n (%, 95 % CI)	199 (41.2, 36.8–45.7)	74 (40.2, 33.1–47.7)	0.886
Paris classifica- tion, n (%, 95 % CI)			
- Paris 0-IIa	212 (43.9, 39.4–48.4)	55 (29.9, 23.4–37.1)	0.001
- Paris 0-IIa + Is	124 (25.7, 21.8–29.8)	67 (36.4, 29.5–43.8)	0.008
- Paris 0-IIa + c	45 (9.3, 6.9–12.3)	15 (8.2, 4.6–13.1)	0.750
- Paris 0-Is	94 (19.5, 16.0–23.3)	43 (23.4, 17.5–30.2)	0.313
- Paris 0-Is + c	8 (1.7, 0.7–3.2)	4 (2.2, 0.6–5.5)	0.902

Conclusions In this multicentre study, SMIC detection on pre-resection LNPCP videos was highly accurate and did not differ significantly between low- and high-quality videos when basic structural and technical criteria were met. These findings support the use of routine pre-resection videos of varying quality for risk stratification and MDT triage by trained endoscopists.

Conflicts of Interest DJT: consulting fees and research support from Olympus Medical and research support from FujiFilm and Pentax Medical. The remaining authors have no competing interests to disclose.

eP627 Strengthening Endoscopic Practice in Ukraine Through Training: Insights from Pre-/Post-Test Results

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DOI 10.1055/s-0046-1821954

Aims Effective professional education is critical for enhancing the quality and safety of endoscopic practice. This study aimed to objectively evaluate the immediate efficacy of seven distinct specialized endoscopic training courses by comparing participants' knowledge assessment scores before (pre-test) and immediately after (post-test) the educational intervention. The courses covered a broad range of clinically relevant topics, including diagnostic Upper GI endoscopy with separate modules on the stomach and the esophagus, screening colonoscopy, inflammatory bowel diseases (IBD) with an emphasis on endoscopic management, and two advanced endoscopic trainings: one focused on endoscopic submucosal dissection (ESD) and another on endoscopic ultrasound (EUS).

Methods Seven one-day specialized endoscopy trainings were conducted between 25 January 2025 and 25 October 2025 as part of the EndoAcademy continuous medical education program in Ukraine. Each training followed a unified structure that included: a diagnostic pre-test; theoretical sessions with case sharing and discussion led by expert faculty, covering updated diagnostic criteria and pathology correlation; small-group hands-on training using modern equipment focused on key interventional techniques such as polypectomy, EMR, endoscopic hemostasis, as well as other essential procedural skills; and a post-test to measure immediate learning gains. Only participants who completed both assessments were included, yielding 76 paired data sets. For each group, a paired t-test assessed statistical significance, and Cohen's *d* quantified the effect size.

Results 76 participants had completed both tests. Five of the seven trainings demonstrated a statistically significant increase in mean post-training scores ($p \leq 0.003$), with mean improvements ranging from 3.35 to 4.22 points. These five trainings also showed a very large effect size ($d \geq 1.52$), confirming the strong practical impact of the educational intervention.

Two trainings did not show statistically significant improvement ($p > 0.05$), and one of them exhibited a small, non-significant decrease in mean score.

Conclusions The majority of the specialized endoscopic trainings (5 of 7) were highly effective in immediately improving participants' knowledge based on paired test results. These findings support the value of structured, targeted educational interventions. For the trainings that did not demonstrate a significant effect, several factors may have contributed, including a notably smaller sample size in one group and a higher level of difficulty of the test questions, which may have limited measurable score improvement. These aspects warrant further evaluation to refine both the training content and the assessment methodology for future iterations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP628 Diffuse Endoscopic Involvement of the Gastrointestinal Tract by Metastatic Melanoma: A Case Report

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DOI 10.1055/s-0046-1821955

Abstract Text

Gastrointestinal (GI) metastases from skin melanoma are rare and often diagnosed lately. Endoscopic identification of lesions in both upper and lower GI tracts is quite exceptional. We present the case of a 63-year-old man with a history of acral melanoma of the right foot (Breslow thickness 3.5 mm, BRAF wild-type) and known hepatic and cerebral metastases on computed tomography imaging. The patient underwent ileocecal resection with regional lymphadenectomy, followed by adjuvant and sequential immunotherapies including interferon- α , nivolumab, ipilimumab, and pembrolizumab. The patient subsequently underwent surgery due to ileal intussusception with creation of an ileostomy. He was admitted to our unit for anemia and vomiting. Therefore the patient underwent upper endoscopy which revealed multiple black-pigmented, vegetating lesions up to 4 cm in the gastric antrum and smaller lesions in the duodenum. Colonoscopy, performed both transanally and via ileostomy, showed dark, sessile lesions in the ileum and a small pigmented plaque in the colon. Histology confirmed metastatic melanoma (Melan-A, HMB-45, S100 positive).

Conclusion. Melanoma may metastasize diffusely to the GI tract even years after primary tumor excision. The endoscopic appearance of pigmented mucosal lesions should always prompt biopsy.

Simultaneous gastric, duodenal, ileal, and colonic metastases from melanoma are remarkably uncommon. This case underlines the crucial role of endoscopy

for diagnosis and staging of disseminated melanoma, even in advanced disease, guiding treatment decisions in complex oncologic scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP629 Obscure gastrointestinal bleeding: a diagnostic uncertainty

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DOI 10.1055/s-0046-1821956

Abstract Text

Identifying the bleeding source in obscure gastrointestinal bleeding is often challenging, particularly when endoscopic, radiologic, and surgical explorations yield discordant results. We present a case of recurrent bleeding of uncertain etiology, despite extensive investigation and therapeutic interventions.

A 73-year-old male with atrial fibrillation (previously anticoagulated), Child A cirrhosis, and recurrent C. Difficile colitis presented with repeated episodes of hematochezia and melena and moderate microcytic anemia.

Initial EGD revealed only small esophageal varices without signs of recent bleeding. Colonoscopy identified a cecal polyp which was resected, and no evidence of active bleeding. During an episode of hematochezia, we performed emergency videocapsule endoscopy, which showed the presence of blood in the terminal ileum but subsequent angio-CT was negative.

Due to recurrent episodes of clinically significant bleeding, we opted for intra-operative enteroscopy, which identified several small-bowel angiodysplasias, subsequently treated with APC and clipping. However, these lesions were small, of limited bleeding potential, and did not fully correlate with the severity and recurrence of overt bleeding. Recurrent melena persisted despite therapy, requiring multiple transfusions.

Bleeding gradually decreased after supportive management and repeated procedures, and the patient was discharged clinically stable. However, the definitive source of bleeding remained unclear.

Although multiple angiodysplasias were identified, their significance as the primary bleeding source is uncertain. A small-bowel Dieulafoy-type lesion – intermittent and difficult to capture – remains a strong alternative explanation. This case highlights the inherent limitations of current diagnostic modalities in obscure GI bleeding and the need for repeated, multimodal evaluation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP630 Age-Stratified Adenoma and Cancer Detection in the Middle East: Results from the First Large Screening Cohort of Asymptomatic Adults in Saudi Arabia

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Aims Colorectal cancer (CRC) incidence is rising globally, with a notable shift toward younger-age onset in several regions [1]. However, real-world screening data from the Middle East are almost non-existent. There is currently no national colorectal cancer screening program in Saudi Arabia or, more broadly, across most of the Middle East. Our hospital is one of the few centres offering open-access screening colonoscopy for adults aged ≥45 years. This study aims to describe the screening colonoscopy outcomes in asymptomatic adults over four years, quantify adenoma and cancer detection across age groups, and provide foundational data to inform future CRC screening recommendations for Middle Eastern populations [2].

Methods This was a retrospective cohort analysis conducted at a single tertiary centre in Saudi Arabia. All screening colonoscopies performed between January 2022 and January 2025 were included. Eligible participants were asymptomatic

adults undergoing screening, with a routine lower age threshold of 45 years. Data collected included demographics, caecal intubation rates (CIR), Boston Bowel Preparation Scale (BBPS) scores, withdrawal times, polyp and adenoma detection, polyp type, and complications. Colonoscopy quality indicators were evaluated according to ESGE standards [3]. Descriptive statistics were used for analysis, and outcomes were stratified by age groups: <45, 45–60, and >60 years. Individuals <45 who underwent colonoscopy likely did so for non-documented opportunistic or external indications (e.g., FIT done elsewhere, incidental imaging findings, or family history).

Results A total of 3,397 screening colonoscopies were included. The mean age was 56.2 years; 61.8 % were male. The overall CIR was 98.1 %. Bowel preparation quality was high, with a mean BBPS of 7.28 and adequate preparation (BBPS ≥6) in 93.6 % of procedures. The mean withdrawal time was 9.5 minutes, with 92 % ≥6 minutes. The overall polyp detection rate was 37.9 %. Adenoma Detection Rate (ADR) was 15.6 %, varying across age groups as follows: <45 years (10.4 %), 45–60 years (16.3 %), and >60 years (14.9 %). Adenomas were identified from age 27 onward. Twenty-two malignant lesions were detected: 1 in <45 years, 14 in 45–60 years, and 7 in >60 years, with the earliest cancer detected at age 43. The overall clinical complication rate was 0.06 %, significantly below international benchmarks (► **Table 1**).

► **Table 1**

Parameter	Result
Total screening colonoscopies	3,397
Mean age (years)	56.2
Gender distribution	61.8 % male, 37.2 % female
Caecal intubation rate (CIR)	98.1 %
Mean BBPS score	7.28
Adequate bowel prep (BBPS ≥6)	93.6 %
Mean withdrawal time (minutes)	9.5
Withdrawal time ≥6 min	92 %
Polyp Detection Rate (PDR)	37.9 %
Adenoma Detection Rate (ADR)	15.6 %
ADR by age group	<45: 10.4 % 45–60: 16.3 % >60: 14.9 %
Earliest adenoma detection	Age 27
Total cancers detected	22
Cancer distribution by age	<45: 1 45–60: 14 >60: 7
Earliest cancer detection	Age 43

Conclusions This represents the first large-scale dataset describing screening colonoscopy outcomes from the Middle East. High-quality indicators and very low complication rates demonstrate the feasibility of effective screening delivery in this region. The presence of adenomas and cancers in adults younger than 45 years raises important questions regarding the onset age of colorectal neoplasia in Middle Eastern populations. These findings highlight the need for prospective, population-based studies to determine optimal CRC screening strategies and age thresholds for the region.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaminski MF, Thomas-Gibson S, Bugajski M, Bretthauer M, Rees CJ, Dekker E et al. Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy*. 2017; 49 (4): 378–397
- [2] Alrubaiy L, El-Sayed A., Kapila D., Akintimehin A., Wijeyendram P. Colorectal Cancer Screening in the Middle East and North Africa: Current Practices, Challenges, and Insights from the British Society of Gastroenterol-

ogy (BSG) International Section. *Gastrointest. Disord.* 2025; 7: 56. doi:10.3390/gidord7030056

[3] Sung H et al. Colorectal cancer incidence trends in younger versus older adults: an analysis of population-based cancer registry data. *The Lancet Oncology*. Volume 26 (Issue 1): 51–63

eP631 A rare case of pancreatic Schwannoma of the uncinate process

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DOI 10.1055/s-0046-1821958

Abstract Text

Pancreatic schwannomas are extremely rare benign nerve-sheath tumors. Fewer than ~70 cases have been reported, and diagnostic accuracy prior to surgery is low. Therapeutic approaches remain highly heterogeneous in the literature. We present the case of a 64-year-old female, who presented with left hypochondrial pain radiating posteriorly. MRI and EUS revealed a ~20 mm, well-circumscribed, hypoechoic, firm lesion at elastography in the pancreatic uncinate process. EUS-FNB biopsy demonstrated spindle-cell proliferation with typical Antoni A/B areas. Immunohistochemistry showed S100 and SOX10 positivity, with CD34, DOG1, GFAP, SMA, AE1/AE3 and chromogranin negativity, Ki-67 < 1 %, consistent with a pancreatic schwannoma.

Given the lesion's small size, its benign histologic profile, and the absence of high-risk features, and considering that the only surgical option is a pancreaticoduodenectomy (Whipple procedure), the patient declined the surgical approach and instead opted to pursue structured imagistic and EUS surveillance. Pancreatic schwannomas show variable imaging appearances and often mimic neuroendocrine tumors or solid-pseudopapillary neoplasms. Management strategies described in case series range from observation and enucleation to major resections, reflecting a lack of consensus.

This case highlights the rarity of pancreatic schwannoma and the discordance in therapeutic approaches. When histology confirms benign features, close imagistic and EUS follow-up may be a safe alternative to radical surgery, especially for small, well-delimited lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP632V Obscure Gastrointestinal Bleeding Secondary to Jejunal Lymphangiectasia Bleeding: Diagnostic and therapeutic management by single-balloon enteroscopy

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DOI 10.1055/s-0046-1821959

Abstract Text

Obscure gastrointestinal bleeding can present a diagnostic challenge.

We report the case of an 84-year-old male with chronic kidney disease and anticoagulated atrial fibrillation, presenting with anemia and recurrent melena [1–4].

Initial endoscopic evaluation, including gastroscopy and colonoscopy, revealed no findings. Capsule endoscopy subsequently identified fresh blood in the proximal jejunum.

Anterograde single-balloon enteroscopy was performed, revealing a 5 mm lymphangiectasia in the proximal jejunum, approximately two meters from the dental arcade, with active oozing at its base, which was treated with the placement of a hemoclip, with good results.

This case highlights the importance of advanced endoscopic techniques in the diagnosis and treatment of obscure gastrointestinal bleeding.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/d81bda97-d7c9-4a56-8c3a-517b8c943aad/Uploads/19978_Enteroscopia.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Teshima CW. Small Bowel Endoscopy for Obscure GI Bleeding. *Best Practice & Research. Clinical Gastroenterology* 2012; 26 (3): 247–61. doi:10.1016/j.bpg.2012.01.020

[2] Vetter M, Gebhardt S, Kessler G et al. Relevance of Capsule Endoscopy in Patients With Obscure Gastrointestinal Bleeding – A Comprehensive Real-World Study. *Journal of Physiology and Pharmacology : An Official Journal of the Polish Physiological Society*. 2024; 75 (6):. doi:10.26402/jpp.2024.6.07

[3] Sakai E, Ohata K, Nakajima A, Matsuhashi N. Diagnosis and Therapeutic Strategies for Small Bowel Vascular Lesions. *World Journal of Gastroenterology* 2019; 25 (22): 2720–2733. doi:10.3748/wjg.v25.i22.2720

[4] Otani K, Watanabe T, Shimada S et al. Clinical Utility of Capsule Endoscopy and Double-Balloon Enteroscopy in the Management of Obscure Gastrointestinal Bleeding. *Digestion* 2018; 97 (1): 52–58. doi:10.1159/000484218

eP633 Tolerability of Sedation with Remimazolam versus Midazolam in Outpatients Undergoing Upper GI or Biliopancreatic Endoscopic Ultrasound in a Non-Anesthesiologist Setting: preliminary results of A Prospective Observational Study (REM-EUS Study)

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DOI 10.1055/s-0046-1821960

Aims Remimazolam (REM) and midazolam (MID) are currently used interchangeably for sedation in digestive endoscopy, with available literature indicating comparable safety profiles. However, data on patient-reported procedural tolerability are heterogeneous and largely derived from studies in which tolerability was a secondary outcome. Moreover, most evidence comes from anesthesiologist-led settings. The primary aim of this monocentric, prospective observational study was to evaluate and compare patient-reported tolerability of REM versus MID (both administered with fentanyl) during outpatient diagnostic endoscopic ultrasound (EUS) performed in a non-anesthesiological setting [1–3].

Methods Consecutive outpatients undergoing diagnostic EUS under moderate sedation and with American Society of Anesthesiologists class 1 to 3 were enrolled. The choice between REM and MID was made according to routine clinical practice, also considering drug availability. Demographic data were collected. The Modified Observational Alertness/Sedation Assessment (MOAA/S) scale was used to monitor sedation depth and determine the need for supplemental dosing. Vital signs were recorded every 5 minutes throughout the procedure. Recovery time was assessed using the Modified Aldrete score, while procedural tolerability was evaluated with the PRO-STEP scale. Operator satisfaction was measured using a Numeric Rating Scale. The study protocol was approved and endorsed by the anesthesiology department.

Results At the time of this preliminary analysis, 63 patients (46 biliopancreatic and 17 upper GI EUS) had been enrolled (median age 69 years, 44 % female, 63 % ASA class 2), with 31 (49 %) receiving REM. Patients in the REM and MID groups, respectively, did not differ significantly in age (69 vs. 68 median years, $p = 0.99$), sex (52 % vs. 38 % female, $p = 0.81$), BMI (24.04 vs. 24.01, $p = 0.76$), or ASA class distribution ($p = 0.54$). Supplemental dosing was required in 74 % of REM cases and 63 % of MID cases ($p = 0.15$). Total fentanyl dose did not differ significantly between groups. Median procedural time was also comparable (25 minutes vs. 18 minutes, $p = 0.14$). Patient tolerability, as measured by the PRO-STEP score, was similar between REM and MID (1.50 vs. 1.67, $p = 0.77$), as was operator satisfaction (NRS 9 vs. 9). Awakening and recovery times were significantly shorter in the REM group ($p < 0.001$). No adverse events were recorded.

Conclusions These preliminary findings suggest that REM and MID, when combined with fentanyl for moderate sedation in diagnostic EUS in a non-anesthesiological setting, provide comparable patient tolerability and operator satisfaction, with excellent safety profiles. REM is associated with a significantly faster post-procedure recovery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Forbes N, Chau M, Koury HF, Lethebe BC, Smith ZL, Wani S, Keswani RN, Elmunzer BJ, Anderson JT, Heitman SJ, Hilsden RJ. Development and validation of a patient-reported scale for tolerability of endoscopic procedures using conscious sedation. *Gastrointest Endosc* 2021; 94 (1): 103–110.e2. doi:10.1016/j.gie.2020.12.038 Epub 2020 Dec 30 PMID: 33385464 PMID: PMC8761529
- [2] Choe JW, Chung MJ, Park SW et al. Safety and efficacy of remimazolam versus propofol during EUS: a multicenter randomized controlled study [published correction appears in. *Gastrointest Endosc* 2024 S0016-5107(24)03401-1. doi:10.1016/j.gie.2024.07.025 *Gastrointest Endosc*. 2024;100(2):183-191.e1. doi:10.1016/j.gie.2024.04.001
- [3] Dahiya DS, Kumar G, Parsa S et al. Remimazolam for sedation in gastrointestinal endoscopy: A comprehensive review. *World J Gastrointest Endosc* 2024; 16 (7): 385–395. doi:10.4253/wjge.v16.i7.385

eP634 The Hidden Burden of Endoscopy: Burnout, Work-Related Injuries, and Emotional Impact of Complications Among Endoscopists in Saudi Arabia

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DOI 10.1055/s-0046-1821961

Aims Endoscopy is a cornerstone of gastrointestinal healthcare, yet the well-being of endoscopists remains largely unexamined, particularly in the Middle East. Burnout, physical strain, and psychological distress after procedure-related complications can have significant implications for clinicians and patient safety [1, 2]. This study the *first of its kind in Saudi Arabia* aimed to determine the prevalence of burnout, musculoskeletal injuries, and emotional consequences following major endoscopic complications among practicing endoscopists. The objective was to quantify the occupational burden, identify contributing factors, and highlight gaps in institutional support systems.

Methods A national cross-sectional survey was conducted from October 2025 to November 2025 among licensed endoscopists across Saudi Arabia. The questionnaire captured demographic information, institutional practice characteristics, workload, burnout indicators, musculoskeletal symptoms, experiences with endoscopic complications, emotional impact, safety culture, and coping strategies. Data were analysed using descriptive statistical methods in Microsoft Excel.

Results A total of 76 endoscopists were included. Most participants were male and between 30–59 years of age, with consultants forming the largest professional group. Endoscopists practiced across all regions of the Kingdom, with Ministry of Health hospitals representing the most common workplace, followed by private and military institutions. High procedural burden was evident, with the majority performing close to 20 procedures weekly and working 41 hours or more. Musculoskeletal discomfort lasting over 24 hours was reported by 65 % of respondents, affecting predominantly the back, shoulders, and neck. Despite high symptom burden, only a small proportion sought medical evaluation or required absence from work. Burnout indicators were common, with 29 % often feeling tired and 17 % reporting emotional exhaustion or feelings of burnout. A significant procedural complication within the previous year was reported by 65 % of participants, most commonly bleeding or perforation. Emotional effects included intrusive thoughts, sleep disturbance, and transient loss of confidence. Over one-third avoided similar procedures after the complication. Formal debriefing or institutional support was inconsistently available, with nearly 60 % reporting no structured response following adverse events. A majority strongly supported the development of a national peer-support program for endoscopists.

Conclusions Endoscopists in Saudi Arabia face substantial physical, emotional, and psychological demands associated with high workloads, musculoskeletal strain, and significant complication-related distress. The lack of ergonomic training and limited debriefing structures underscores important gaps in institutional support. As the first study of its kind in the region, these findings highlight the urgent need for national ergonomic standards, structured debriefing pathways, peer-support systems, and comprehensive wellbeing strategies to safeguard clinician health and ensure sustainable endoscopy services.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Holzwanger EA, Silva-Santisteban A, Tsuchiyose E, Bilal M, Chhoda A, Asombang AW et al. Psychosocial Impact of Endoscopic Procedural Complications on Gastroenterologists: The Second Victims. *Gastroenterology [Internet]*. 2025;[cited 2025 Nov 26] 169 (7): Available from: <https://pubmed.ncbi.nlm.nih.gov/40721035/>
- [2] Wu AW. Medical error: the second victim. *BMJ [Internet]* 2000;[cited 2025 Nov 26] 320 (7237): 726–7. Available from: <https://www.bmj.com/content/320/7237/726>

eP635 Salvage Hemostasis With a Self-Assembling Peptide (Purastat) in Bleeding Duodenal Tumors: A Four-Case Series from Oman Cancer Center

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DOI 10.1055/s-0046-1821962

Aims Purastat, is a novel transparent absorbent localized hemostatic agent [1]. It is self-assembling peptide hydrogel, has been increasingly recognized as a helpful tool in controlling non-variceal gastrointestinal bleeding [2], particularly in postprocedural oozing and bleeding from small blood vessels in the gastrointestinal tract [3]. Many studies have documented its effectiveness in spontaneous acute gastrointestinal bleeding [4–6], post-sphincterotomy bleeding, post-papillectomy bleeding [3]. However, evidence supporting its role in malignant upper GI bleeding remains scarce.

Bleeding due to primary or metastatic gastrointestinal (GI) tumors remains clinically challenging. GI-related tumor bleeding accounts for 12–15 % of cases of acute GI hemorrhage [7]

Herein, we report a case series of endoscopic hemostasis using PuraStat as a rescue therapy for bleeding duodenal tumors when standard endoscopic techniques were unsuccessful.

Methods We reviewed four patients who presented with active bleeding from duodenal malignant tumors. In all cases, standard endoscopic techniques including thermal coagulation or mechanical clipping along with epinephrine injection either failed to control the bleeding or were not feasible because of the friable tumor surface. Purastat was then applied as a salvage therapy. The main outcomes evaluated were immediate hemostasis, early rebleeding within 7 days, the need for additional interventions, changes in transfusion requirements, and any procedure-related complications.

Results Diffuse oozing and extremely friable tumor surfaces were present in all lesions, significantly reducing the efficacy of standard endoscopic modalities including epinephrine injection, thermal coagulation, and mechanical techniques. When application of Purastat, immediate hemostasis was achieved without any procedure-related complications. Transfusion requirements decreased after treatment, none of the patients experienced early rebleeding as well as the needed for radiologic or surgical intervention.

Conclusions Our experience indicates that Purastat may be a useful salvage option for Gastrointestinal tumors bleeding, including duodenal tumor bleeding when conventional techniques fails. Purastat was easy to apply, safe, and consistently effective at achieving hemostasis in this small series. These preliminary results support the need for larger prospective studies for Purastat potential role in malignant upper gastrointestinal bleeding

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yamaguchi D, Tominaga N, Mori G et al. Efficacy and safety of endoscopic hemostasis with a self-assembling peptide solution in patients with colonic diverticular bleeding: a multicenter pilot study (with video). *Gastrointest Endosc* 2025; 101 (2): 193–202. doi:10.1016/j.gie.2024.10.023
- [2] Branchi F, Klingenberg-Noftz R, Friedrich K et al. PuraStat in gastrointestinal bleeding: results of a prospective multicentre observational pilot study. *Surg Endosc*. 2021;
- [3] Maselli R, Da Rio L, Manno M, Soriani P, Andrisani G, Di Matteo FM et al. A. Efficacy of novel endoscopic hemostatic agent for bleeding control and prevention: Results from a prospective, multicenter national registry. *Endosc Int Open* 2024; 12 (10): E1220–E1229. doi:10.1055/a-2406-7492
- [4] Murakami T, Kamba E, Haga K et al. Emergency endoscopic hemostasis for gastrointestinal bleeding using a self-assembling peptide: a case series. *Medicina*. 2023; 59 (5): 931
- [5] De Nucci G, Reati R, Arena I et al. Efficacy of a novel self-assembling peptide hemostatic gel as rescue therapy for refractory acute gastrointestinal bleeding. *Endoscopy* 2020; 52: 773–779. doi:10.1055/a1145-3412
- [6] Kubo K, Hayasaka S, Tanaka I. Endoscopic hemostatic treatment for acute gastrointestinal bleeding by combined modality therapy with PuraStat and endoscopic hemoclips. *Case Rep Gastroenterol* 2023; 17: 89–95. doi:10.1159/000528896
- [7] Ofosu A, Ramai D, Latson W, Adler DG. Endoscopic management of bleeding gastrointestinal tumors. *Ann Gastroenterol* 2019; 32 (4): 346–351. doi:10.20524/aog.2019.0391

eP636 Precision in the Ducts: Diagnostic Yield of Cholangioscopy-Guided Biopsies for Imaging-Suspected Malignant Biliary Strictures

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DOI 10.1055/s-0046-1821963

Aims Diagnosing 'indeterminate' biliary strictures remains a clinical challenge. The gold standard is a histological or cytological diagnosis. Conventional endoscopic sampling methods include brush cytology, fluoroscopy-guided endobiliary biopsies, and bile aspiration. These are limited by low sensitivity with frequent false-negative results. These limitations often delay definitive diagnosis and appropriate management. Cholangioscopy-guided biopsies using digital single-operator systems offer direct visual targeting of abnormal mucosa and may improve diagnostic accuracy. This study evaluates the diagnostic performance of cholangioscopy-guided biopsies in patients with biliary strictures previously deemed suspicious for malignancy on cross-sectional imaging [1–3].

Methods This was a retrospective, single-center study including consecutive patients who underwent Endoscopic Retrograde Cholangiopancreatography (ERCP) and cholangioscopy with biopsy between January 2024 and November 2025. All patients had biliary strictures considered suspicious for malignancy based on cross-sectional imaging. Cholangioscopy was performed using the SpyGlass DS II system (Boston Scientific), and all biopsies were obtained under direct visual guidance. Final diagnosis was based on histopathology from cholangioscopy-guided biopsies, or in cases of negative endoscopic sampling, from tissue obtained intraoperatively or through image-guided percutaneous biopsy.

Results A total of 44 patients were included, with a median age of 62 years. 30 (68%) were male and 14 (32%) were female. The majority had hilar strictures (n = 30, 68%), followed by common hepatic duct (CHD) strictures (n = 11, 25%) and common bile duct (CBD) strictures (n = 3, 7%). All strictures appeared suspicious for malignancy on cross-sectional imaging. All patients were discussed in malignant Hepatopancreatobiliary multidisciplinary team (HPB MDT). Cholangioscopy with targeted biopsies was performed using the SpyGlass DS II system (with the use of SpyBite Max Biopsy Forceps). Final diagnosis was available for 42 patients; two were excluded due to unknown outcome. Among the 29 patients with a final diagnosis of cholangiocarcinoma, cholangioscopy-guided biopsy confirmed malignancy in 20 cases, yielding a sensitivity of 69%.

5 cases were falsely negative, with malignancy confirmed later via surgical or other sampling. The remaining 4 cases were considered to have malignancy from progressive changes on imaging.

Of the 13 patients without malignancy, biopsy was negative in all, corresponding to complete concordance with the final diagnosis. Median surveillance for patients that were diagnosed with benign disease was 15.3 months.

The overall clinical diagnostic accuracy of cholangioscopy-guided biopsies in this case series was 78.6% with a sensitivity of 69% and a specificity of 100%. These figures compare favorably with conventional ERCP brush cytology, for which large series and meta-analyses consistently report pooled sensitivities in the order of 40–45% and specificities approaching 100% for malignant biliary strictures [1–3].

These findings reflect a consistently high diagnostic yield for visually targeted cholangioscopy-guided biopsy in the evaluation of extrahepatic biliary strictures.

Conclusions Cholangioscopy-guided biopsies demonstrate a good diagnostic yield and accuracy in the evaluation of biliary strictures that are suspicious for malignancy. Our findings support the routine use of cholangioscopy-guided biopsy as a reliable tissue acquisition method in the diagnostic work-up of suspected cholangiocarcinoma, while acknowledging that cholangioscopy is likely to be best used as one component of a multimodality endoscopic work-up for indeterminate biliary strictures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Navaneethan U, Njei B, Lourdasamy V, Konjeti R, Vargo JJ, Parsi MA. Comparative effectiveness of biliary brush cytology and intraductal biopsy for detection of malignant biliary strictures: a systematic review and meta-analysis. *Gastrointest Endosc* 2015; 81 (1): 168–176
- [2] Nehring P, Ciszewska M, Przybyłkowski A. Indeterminate biliary strictures: a retrospective study. *J Clin Med* 2025; 14 (11): 3797
- [3] Nakai Y, Hakuta R, Shimamatsu Y, Otsuka N, Takayama Y. Endoscopic approach to indeterminate biliary strictures. *Clin Endosc*. 2025. doi:10.5946/ce.2025.052

eP637 Risk-Stratified Safety of Propofol Sedation for Outpatient Colonoscopy in Older Adults: Insights From a 20,041-Case Cohort

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DOI 10.1055/s-0046-1821964

Aims With the growing elderly population, ensuring the safety of non-anesthesiologist-administered propofol (NAAP) for colonoscopy is increasingly important; however, real-world data in older adults remain limited. This study aimed to identify independent predictors of adverse events and delayed recovery during NAAP-sedated outpatient colonoscopy, particularly in patients aged ≥ 75 years.

Methods This retrospective study evaluated 20,041 consecutive outpatients who underwent colonoscopy with propofol sedation administered exclusively by non-anesthesiologist endoscopists between December 2015 and March 2024. Patients were stratified into three age groups (< 50, 50–74, and ≥ 75 years). Adverse events included hypoxemia (SpO₂ < 90%), hypotension (sBP < 80 mmHg), bradycardia (HR < 50/min), and delayed recovery, defined as a resting time exceeding 32 minutes. Multivariable logistic regression was performed using age, sex, BMI, cardiovascular disease, procedure duration, and propofol dose as covariates.

Results A total of 20,041 colonoscopies were included (4,766 < 50 years; 11,449 aged 50–74; 3,826 aged ≥ 75). Adverse events increased with age, with hypoxemia, hypotension, and bradycardia occurring most frequently in patients aged ≥ 75 years (6.2%, 2.6%, and 2.8%, respectively; all p < 0.01). In multivariable analysis of the entire cohort, hypoxemia was independently associated with age (OR 1.03 per 1-year increase), BMI (OR 1.12 per 1 kg/m²

increase), and procedure duration (OR 1.02 per 1-minute increase). Hypotension was independently associated with age (OR 1.05 per 1-year increase) and procedure duration (OR 1.03 per 1-minute increase). Bradycardia was associated with lower BMI (OR 0.93 per 1 kg/m²), cardiovascular disease (OR 2.47), and procedure duration (OR 1.02 per 1-minute increase). Delayed recovery was associated with cardiovascular disease (OR 1.13).

Despite increasing adverse event rates with age, mean recovery time did not differ significantly among the three age groups (26.8, 26.6, and 26.1 minutes; $p = 0.909$).

Among patients aged ≥ 75 years, hypoxemia was independently associated with higher BMI and longer procedure duration (OR 1.10 per 1 kg/m², 95 % CI 1.07–1.14; and OR 1.02 per minute, 95 % CI 1.01–1.03, respectively). Bradycardia was associated with cardiovascular disease, female sex, and procedure duration (OR 2.72, 95 % CI 1.95–3.79; OR 1.66, 95 % CI 1.02–2.72; and OR 1.02 per minute, 95 % CI 1.01–1.04). Hypotension was associated with cardiovascular disease and procedure duration (OR 1.60, 95 % CI 1.03–2.48; and OR 1.03 per minute, 95 % CI 1.00–1.06). No independent predictors of delayed recovery were identified in this age stratum.

Conclusions In NAAP-sedated colonoscopy, advancing age contributed to an increased risk of cardiopulmonary events; however, physiological and procedural factors—including BMI, cardiovascular disease, sex, and procedure duration—also played important roles in determining overall vulnerability. Despite higher event rates in older adults, patients aged ≥ 75 years demonstrated recovery times comparable to those of younger individuals. These findings highlight the need to assess sedation risk comprehensively, incorporating both age and patient-specific physiological factors, and to apply individualized dosing and monitoring strategies to optimize the safety of NAAP in aging populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP638 Assessing Negative PillSense for Safe Discharge in Patients with Positive Hemoccult and/or Unexplained Anemia

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DOI 10.1055/s-0046-1821965

Aims This study aims to evaluate the safety and diagnostic performance of the PillSense optical blood-detection capsule as a triage tool for hospitalized patients with anemia or positive FOBT but no overt gastrointestinal bleeding. The primary objective was to determine the negative predictive value of a negative PillSense result for excluding active GI bleeding. We hypothesized that a negative PillSense reading would reliably identify patients who could be safely discharged without the need for urgent inpatient endoscopy [1–6].

Methods This was a prospective, single-center, blinded study at a tertiary U.S. hospital. Hospitalized adults with anemia and/or positive FOBT, without overt GI bleeding and without capsule contraindications, were enrolled. After informed consent, patients ingested the PillSense capsule, and results (“Blood Detected” vs “No Blood Detected”) were collected by a research team member. Treating endoscopists were blinded to capsule results. Endoscopic evaluation (EGD, enteroscopy, and/or colonoscopy) was performed per standard clinical care. Primary outcome was safety and ability of a negative PillSense result to predict the safe discharge of hospitalized patients with positive hemoccult tests and/or anaemia.

Results Ten patients were enrolled, with a mean age of 59.1 years and 70 % female. PillSense generated a negative signal within the first 10 minutes in 9 of 10 patients (90 %). Among these nine patients, extended monitoring was performed in eight between 4 and 6 hours. Five of these eight patients (62.5 %) later developed a positive signal, while three patients (37.5 %) remained negative throughout prolonged monitoring. In all three cases with persistently

negative signals, subsequent endoscopic evaluation confirmed the absence of any identifiable bleeding source, supporting the reliability of the negative result.

Among the five patients who transitioned from an early negative to a delayed positive signal, endoscopic evaluation demonstrated non-actively bleeding lesions. These included a gastric ulcer in the upper gastrointestinal tract, a small-bowel arteriovenous malformation, and a hemorrhoidal source in the lower gastrointestinal tract. In one additional patient who was initially negative at 10 minutes, no further PillSense data could be obtained; endoscopy revealed a non-bleeding gastric polyp and diverticulosis.

Importantly, across all nine patients with a negative PillSense result at 10 minutes, no cases of active upper gastrointestinal bleeding were identified endoscopically, yielding a negative predictive value of 100 % for active UGI bleeding in this cohort. No patient required an endoscopic hemostatic intervention, and no capsule-related adverse events occurred. One patient required an unrelated readmission.

Conclusions In hospitalized patients with anemia or positive FOBT but no overt gastrointestinal bleeding, a negative PillSense result reliably excluded active upper GI bleeding, with an observed negative predictive value of 100 % in this cohort. These findings support the safety of using PillSense as a rapid triage tool to identify patients who may not require urgent inpatient EGD and who can instead be deferred to outpatient evaluation. Because several patients in this study remained admitted solely while awaiting endoscopy, the ability to confidently rule out active upper GI bleeding has the potential to meaningfully reduce unnecessary hospital days, decrease costs, and improve bed utilization in resource-constrained settings.

PillSense also accurately detected the single case of active bleeding and demonstrated that a delayed positive signal, occurring after 4–6 hours, corresponded to clinically relevant lesions in the upper GI tract, small bowel, and even the lower GI tract that had ceased active bleeding. Together, these observations highlight the promise of PillSense as a point-of-care technology capable of both safely ruling out active bleeding early and identifying occult lesions over time, ultimately streamlining care pathways and optimizing resource allocation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rezapour M, Amadi C, Gerson LB. Retention associated with video capsule endoscopy: systematic review and meta-analysis. *Gastrointestinal Endoscopy* 2017; 85 (6): 1157–1168.e2. doi:10.1016/j.gie.2016.12.024
- [2] Akiki K, Mahmoud T, Alqaisieh MH et al. A novel blood-sensing capsule for rapid detection of upper GI bleeding: a prospective clinical trial. *Gastrointestinal Endoscopy* 2024; 99 (5): 712–720. doi:10.1016/j.gie.2023.11.051
- [3] Stray N, Weberg R. A prospective study of same day bi-directional endoscopy in the evaluation of patients with occult gastrointestinal bleeding. *Scandinavian Journal of Gastroenterology* 2006; 41 (7): 844–850. doi:10.1080/00365520500495789
- [4] Urquhart J, Eisen G, Faigel DO, Mattek N, Holub J, Lieberman DA. A closer look at same-day bidirectional endoscopy. *Gastrointestinal Endoscopy* 2009; 69 (2): 271–277. doi:10.1016/j.gie.2008.04.063
- [5] Lin K, Linn S, Ramai D et al. Clinical Features and Outcomes in Hospitalized Patients With Positive FOBT Undergoing Bidirectional Endoscopy – A Single-Center Experience: 2736. *American Journal of Gastroenterology* 2018; 113: S1523. doi:10.14309/00000434-201810001-02735
- [6] Barakat M, Aloreidi K, Gujjula S et al. Overutilization of Fecal Occult Blood Test in the Acute Hospital Setting and its Impact on Clinical Management and Outcomes. *Gastroenterology* 2020; 159 (2): e21–e22. doi:10.1053/j.gastro.2020.06.059

eP639 Disposable Elevator-Cap Duodenoscopes and the Risk of Post-ERCP Cholangitis: Results from a Prospective Cohort

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DOI 10.1055/s-0046-1821966

Aims Disposable elevator-cap (DEC) duodenoscopes were designed to reduce residual contamination after reprocessing and thereby lower the risk of infection transmission. We compared clinical outcomes of DEC versus conventional duodenoscopes, focusing on post-ERCP cholangitis and multidrug-resistant (MDR) cholangitis in routine practice [1, 2].

Methods In a prospective, single-center cohort, consecutive ERCP patients were followed for post-procedural outcomes. Routine post-high-level disinfection (HLD) surveillance cultures were also performed during the study period.

Results Interim analysis was conducted after enrollment of 1,039 patients (318 in the DEC group and 721 in the conventional group). Technical success was similar (DEC 98.7 % vs conventional 98.2 %), while mean procedure time was shorter with DEC (15.7 ± 9.0 vs 17.5 ± 9.8 minutes; $p = 0.003$). The incidence of overall post-ERCP cholangitis was comparable between groups (10.1 % in DEC vs 8.0 % in conventional, $p = 0.20$). After adjustment, no significant difference was observed (OR, 1.28; 95 % CI, 0.80–2.06; $p = 0.31$). DEC tended to be more protective for MDR cholangitis without statistical significance (OR, 0.74; 95 % CI, 0.27–1.99; $p = 0.55$). In parallel, post-HLD surveillance cultures revealed microbial contamination only in conventional duodenoscopes, whereas no growth was detected in DEC-equipped duodenoscopes.

Conclusions This interim analysis showed no significant difference in post-ERCP or MDR cholangitis between DEC and conventional duodenoscopes, leading to early study termination. The absence of microbial growth during surveillance in the DEC group supports a potential infection-prevention advantage of the device.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rauwers AW, Voor In 't Holt AF, Buijs JG et al. Nationwide risk analysis of duodenoscope and linear echoendoscope contamination. *Gastrointest Endosc* 2020; 92 (4): 681–691
- [2] Ofstead CL, Buro BL, Hopkins KM et al. Duodenoscope-associated infection prevention: a call for evidence-based decision making. *Endosc Int Open* 2020; 8: E1769–E1781

eP640 Outcomes of self-expandable metallic stents (SEMS) in post-cholecystectomy biliary strictures – a single-arm meta-analysis

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DOI 10.1055/s-0046-1821967

Aims Endoscopic placement of multiple plastic stents (MPS) is considered first-line therapy for benign biliary strictures. Emerging evidence however, suggests that SEMS may offer advantages, including fewer endoscopic re-interventions (e.g., stent exchanges) needed to achieve clinical success (stricture resolution). However, stratified data on the various specific etiologies of benign biliary strictures such as iatrogenic injury during surgery (most common), chronic inflammatory and infectious conditions, trauma, chemotherapy-induced injury, and autoimmune diseases remain limited. The aim of this meta-analysis was to pool available published data specifically on post-cholecystectomy biliary strictures in order to evaluate the efficacy and safety of SEMS placement for this specific clinical indication (► Table 1).

Methods This study protocol was published in PROSPERO under the register CRD420251239366. After a systematic review of studies identified from MEDLINE, Embase and Cochrane, we performed a single-arm proportion meta-analysis analyzing the rate of stricture resolution, stricture recurrence, adverse events, stent migration and successful stent removal with SEMS. We excluded studies that did not provide stratified data on the specific etiology of the benign biliary stricture. We used a random-effects model to calculate the combined proportion with 95 % confidence interval (CI). Between-study heterogeneity was assessed using I^2 statistics.

► Table 1

Outcome Evaluated	Number of Patients	Pooled Effect (95 % CI)	Heterogeneity (I^2)
Stricture Resolution	46	82.6 % (68.9–91.1 %)	0 %
Stricture Recurrence	44	20.5 % (11.0–34.9 %)	0 %
Adverse Event	48	30.4 % (16.1–49.8 %)	0 %
Stent Migration	46	3.8 % (0.0–15.7 %)	0 %
Successful Stent Removal	38	94.2 % (53.0–99.6 %)	0 %

Results We included 6 studies, comprising 54 patients with a post-cholecystectomy biliary stricture. The rate of SEMS stricture resolution was 82.6 % (95 % CI 68.9–91.1 %; $I^2 = 0$ %), and the stricture recurrence rate was 20.5 % (95 % CI 11.0–34.9 %; $I^2 = 0$ %). The adverse event rate was 30.4 % (95 % CI 16.1–49.8 %; $I^2 = 0$ %), and included cholangitis ($n = 10$), pancreatitis ($n = 1$), solid debris in lumen ($n = 1$), and abdominal pain ($n = 1$). The rate of stent migration was 3.8 % (95 % CI 0.0–15.7 %; $I^2 = 0$ %). Successful SEMS removal rate was 94.2 % (95 % CI 53.0–99.6 %; $I^2 = 0$ %).

Conclusions Previous systematic reviews / meta-analyses have reported that long-term biliary stricture resolution rates with MPS for benign etiologies range from 84 % to 90 %, with stricture recurrence rates varying by underlying cause. In our study, we observed a stricture resolution rate of 82.6 % and a stricture recurrence rate of 20.5 %. Given the non-negligible rate of adverse events (30.4 %), our findings highlight the need for etiology-specific analyses before generalizing the non-inferiority of SEMS across all benign biliary strictures, as the mechanisms and pathogenesis differ and each stricture etiology may require an individualized therapeutic approach. Additionally, it must be mentioned that the included studies analysed different types of SEMS. Although there was no identified between-study heterogeneity, differences in the mechanism of each stent may have played a role in our findings, which should be interpreted with caution. Unfortunately, due to lack of data it was not possible to perform subgroup analyses stratified by SEMS type. Further studies should be conducted that are stratified by benign biliary stricture etiology in order to draw more definitive conclusions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP641 Sixteen years single-center experience in flexible endoscopic septotomy for Zenker's diverticulum: a traditional technique in the modern era

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DOI 10.1055/s-0046-1821968

Aims To evaluate clinical and technical efficacy, safety profile, and recurrence rate of flexible endoscopic septotomy (FES) for Zenker's Diverticulum (ZD) in a high-volume referral center.

Methods This retrospective single-center study included all consecutive adults undergoing FES for symptomatic ZD from January 2010 to November 2025. Clinical, endoscopic, and procedural data were collected from electronic records. Septotomy was performed using either a diverticuloscope-assisted or free-hand approach using IT-Knife 2. Clinical follow-up at 1, 6, and 12 months, and thereafter until recurrence, assessed symptom resolution using the Dakkak and Bennett score. Primary outcome was clinical success (score = 0). Secondary outcomes included technical success, recurrence and adverse events rates [1–10]

Results A total of 55 procedures were performed in 50 patients (median age 74 years; 70 % male). Median diverticulum size was 30 mm (range 25–50). Median follow-up was 84 months (range 6–144). Clinical success was achieved in 45/50 patients (90 %). Five patients experienced recurrence at 8, 11, 96, 96, and 144 months; all of these underwent successful re-septotomy with no further recurrence. Technical success was achieved in all cases (100 %), with a mean procedure time of 17 ± 4 minutes. Intraprocedural bleeding occurred in three patients, all managed endoscopically by clip apposing; no post-procedural or late adverse events were observed. Forty-nine patients (98 %) were discharged within 48 hours

Conclusions FES is a highly effective and safe treatment for ZD, offering excellent long-term symptom-free period. Even in cases of recurrence, repeat endoscopic treatment can be successfully and safely performed. These findings support FES as a first-line therapy, while highlighting its robust long-term performance in the era of emerging endoscopic techniques

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Spadaccini M, Maselli R, Chandrasekar VT et al. Submucosal tunnelling techniques for Zenker's diverticulum: a systematic review of early outcomes with pooled analysis. *Eur J Gastroenterol Hepatol.* 2021;
- [2] Repici A, Spadaccini M, Belletrutti PJ et al. Peroral endoscopic septotomy for short-septum Zenker's diverticulum. *Endoscopy.* 2020;
- [3] Zhang H, Huang S, Xia H. et al. The role of peroral endoscopic myotomy for Zenker's diverticulum: a systematic review and meta-analysis. *Surg Endosc.* 2022;
- [4] Kaminski MF, Budnicka A, Przybysz A, Pilonis ND. Traditional septotomy or Z-POEM for Zenker's diverticulum. *Best Pract Res Clin Gastroenterol.* 2024;
- [5] Kaminski MF, Budnicka A, Przybysz A, Pilonis ND. Traditional septotomy or Z-POEM for Zenker's diverticulum. *Best Pract Res Clin Gastroenterol.* 2024;
- [6] Kaminski MF, Budnicka A, Przybysz A, Pilonis ND. Traditional septotomy or Z-POEM for Zenker's diverticulum. *Best Pract Res Clin Gastroenterol.* 2024;
- [7] Kaminski MF, Budnicka A, Przybysz A, Pilonis ND. Traditional septotomy or Z-POEM for Zenker's diverticulum. *Best Pract Res Clin Gastroenterol.* 2024;
- [8] Delgado LM, Meine GC, Santo P et al. Endoscopic submucosal tunneling techniques versus flexible endoscopic septotomy for Zenker's diverticulum: a systematic review and meta-analysis. *Gastrointest Endosc.* 2025;
- [9] Weusten Bas L.A.M, Barret M, Bredenoord AJ et al. Endoscopic management of gastrointestinal motility disorders. Part 2: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy.* 2020;
- [10] Manno M., Manta R., Caruso A. et al Alternative endoscopic treatment of Zenker's diverticulum: a case series (with video). *Gastrointest Endosc.* 2014;

eP642V Endoscopic Submucosal Dissection for removal of OTSC in the rectum

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DOI 10.1055/s-0046-1821969

Abstract Text

Over-the-Scope Clips (OTSC) are commonly used for haemostasis and defect closure, but removal may occasionally be required. The standard method is the bipolar cutter system, though no formal guidelines exist. We describe an alternative ESD-based technique when conventional removal fails [1, 2].

An 81-year-old male patient underwent piecemeal EMR for a 35 mm rectal lesion after ESD aborted due to severe bleeding, requiring OTSC placement. Two years later, recurrence was detected around and within the clip, with biopsies showing adenoma with low-grade dysplasia. Attempts to remove the OTSC with the bipolar cutter system were unsuccessful.

An ESD approach was performed under conscious sedation, using, allowing complete OTSC removal without adverse events. Three-month follow-up confirmed no recurrence.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/6749f31d-fcdc-4298-8a94-f83233dc0ea0/Uploads/19978_OTC_ESGE.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] 2017;5(4):479–484. 10.1177/2050640616671846
- [2] PMC5446147

eP643 Dieulafoy's Lesion of the Right Colon: Report of Two Cases

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DOI 10.1055/s-0046-1821970

Background Dieulafoy's lesion (DL) is an uncommon vascular anomaly capable of causing severe gastrointestinal bleeding. Although it most frequently occurs in the stomach, colonic localization—particularly in the right colon—is rare and may delay diagnosis and management. We describe two patients, recently diagnosed and treated in our department [1].

Case Reports

Case 1: A 77-year-old woman with a history of atrial fibrillation receiving acenocoumarol presented with anemia (Hgb 9.3 g/dL; Hct 28.7 %; MCV 97 fL) and dark red stools. Acenocoumarol was discontinued, and fluid resuscitation along with PPI therapy was initiated. Upper endoscopy identified a small prepyloric Forrest III ulcer (0.6 cm), deemed insufficient to explain the bleeding. Due to ongoing gastrointestinal bleeding and transfusion requirements, colonoscopy was performed and revealed a capillary bleeding point in the ascending colon consistent with a Dieulafoy's lesion. Argon plasma coagulation (APC) achieved successful hemostasis.

Case 2: An 80-year-old woman with coronary artery disease and atrial fibrillation, on daily clopidogrel and apixaban, presented with severe anemia (Hgb 3.3 g/dL; Hct 10.3 %; MCV 93.7 fL) and dark red stools. Management included PPI therapy, transfusion of red blood cells, fresh frozen plasma, and temporary suspension of anticoagulation. Upper endoscopy showed no source of bleeding. Because symptoms persisted, colonoscopy was performed and revealed a Dieulafoy's lesion in the ascending colon. Hemostasis was achieved using three endoscopic clips. Low-molecular-weight heparin was later restarted without hemorrhagic recurrence.

Conclusion Both patients recovered uneventfully and were discharged in stable condition. These cases illustrate that in patients with ongoing gastrointestinal bleeding and negative upper endoscopy, early colonoscopy should be strongly considered. Prompt evaluation can prevent unnecessary repeated procedures and allows timely diagnosis and effective endoscopic treatment of rare but clinically significant colonic Dieulafoy's lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Inayat F, Ullah W, Hussain Q, Abdullah HMA. Dieulafoy's lesion of the colon and rectum: a case series and literature review. *BMJ Case Rep.* 2017; 2017: bcr2017220431. doi:10.1136/bcr-2017-220431 PMID: 29070617 PMID: PMC5665348

eP644 Dysphagia in Ineffective Esophageal Motility is Not Explained by Evidence of Obstruction or Poorer Peristalsis at High-resolution Esophageal Manometry: Results from a Prospective Study

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DOI 10.1055/s-0046-1821971

Aims Ineffective esophageal motility (IEM) is a rare motility disorder characterized by weak or failed peristalsis at high-resolution manometry (HRM). There is an established association between IEM and gastroesophageal reflux-disease (GERD) symptoms. However, it is unclear why some patients present with dysphagia. In this study we aimed to investigate whether dysphagia in IEM is associated with specific HRM or pH-impedance monitoring (MII-pH) findings.

Methods Adults (≥ 18 y) who underwent HRM for upper gastrointestinal symptoms who were diagnosed with IEM according to Chicago v4.0 between January 2021 and November 2024 were included. Patients' gender, age, symptoms (dysphagia, chest pain, heartburn, regurgitation, belching), response to proton pump inhibitor (PPI) treatment, and HRM data were recorded. All patients underwent MII-pH. Wilcoxon rank sum test, Pearson's chi-squared test and Fisher's exact test were used for comparisons. Significance was set at $p < 0.05$.

Results In the study period, 54 patients were diagnosed with IEM. Of them, 33 (61 %) did not report dysphagia (IEM-GERD), while 21 (39 %) had dysphagia (IEM-DYSPHAGIA). Of note, patients with or without dysphagia had a comparable prevalence of heartburn, chest pain, regurgitation, and erosive esophagitis. In addition, IEM-GERD and IEM-DYSPHAGIA were comparable in age and response to PPI treatment. IEM-GERD and IEM-DYSPHAGIA did not show significant differences in EGJ type, EGJ contractile integral (EGJ-CI), integrated relaxation pressure (IRP), percentage of ineffective or failed swallows, or the rapid drinking challenge (RDC) findings ($p > 0.05$ for all), demonstrating an overall similar pathophysiology of peristalsis and EGJ opening. In terms of MII-pH, there was no statistical difference in GERD-related parameters between IEM-GERD and IEM-DYSPHAGIA, who showed comparable values of acid exposure time (AET), mean nocturnal baseline impedance (MNBI), symptom association indexes, and post-reflux swallow-induced peristaltic wave index (PSPW-I) ($p > 0.05$ for all).

Conclusions We showed that dysphagia in IEM is not explained by impaired EGJ outflow or worse peristalsis. IEM with and without dysphagia have a similar proportion of GERD symptoms, comparable MII-pH findings, and respond similarly to PPI treatment. Our findings suggest that dysphagia in IEM could be a symptomatic manifestation of GERD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP645V Combining Advanced Submucosal Technologies for a Fibrotic Tattooed Colonic Recurrence

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DOI 10.1055/s-0046-1821972

Abstract Text

Recurrent or previously manipulated lesions, especially those involving tattoo ink, are technically challenging due to submucosal fibrosis, obscured dissection planes, and poor lifting, increasing the risk of incomplete resection and adverse events. We present an 82-year-old woman with a 30 mm hemi-circumferential recurrent hepatic-flexure lesion after two prior hot EMRs, with dense tattoo infiltration. Underwater ESD was performed using continuous saline immersion for improved visualization, supported by a thin needle knife with high-pressure waterjet and double rubber-band traction. Amber-Red Color imaging enhanced plane delineation despite heavy pigmentation. Despite an intraprocedural perforation, closed endoscopically, en bloc R0 resection was achieved. This case highlights how combining underwater dissection, waterjet knives, traction, and ACI can enable safe curative ESD in fibrotic tattooed recurrences.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/dc537e56-5d24-415a-92c3-20ae7b5a3cce/Uploads/19978_ESGE.mp4

Conflicts of Interest A. Capogreco is a consultant for ERBE and Boston Scientific. C. Hassan is a consultant for Fujifilm, Erbe, and Medtronic. R. Maselli is a consultant for Fujifilm, Erbe, Boston Scientific, and 3DMatrix. A. Repici is a consultant for Fujifilm, Erbe, Boston Scientific, 3DMatrix, and Medtronic. All other authors have nothing to disclose.

eP646V EUS-Guided Right-liver HepaticoGastrostomy and antegrade stenting combined with Gastroenterostomy in malignant double obstruction

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DOI 10.1055/s-0046-1821973

Abstract Text

An 80 year-old man with prior left hepatic lobectomy for hepatocellular carcinoma presented with cholangitis due to biliary stent occlusion. CT scan showed biliary dilation and duodenal stenosis due to progression of a known ampullary adenocarcinoma. ERCP was unfeasible. After placement of an orojejunal tube and distension of the jejunal loop, EUS-GE was created using a 20mm LAMS. Due to the left hepatectomy, a standard transgastric operative window for EUS-HGS was not found. Hence, a more prepyloric access was selected to access a mildly dilated right intrahepatic biliary tree. EUS-HGS was completed deploying a 10 × 80 mm partially covered metal stent. HGS access was further used to extract stones from the common bile duct (CBD) and to promote antegrade SEMS-in-SEMS stenting. The patient recovered uneventfully, and no further cholangitis occurred during a 3-month follow up.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/141ce681-7864-4bbe-8fff-8f464bdc0443/Uploads/19978_DAAvideo.mp4

Conflicts of Interest G. Vanella has received lecture and consultancy fees from Boston Scientific.

eP647 5 years tertiary experience in button battery ingestions – Children continue to die from button batteries

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DOI 10.1055/s-0046-1821974

Aims Button battery ingestion (BBI) in children can lead to lifethreatening complications including death. In 2021, the European Society for Pediatric Gastroenterology Hepatology and Nutrition (ESPGHAN) published guidance, aiming to unify the management for better outcomes and to assess the compliance to ESPGHAN guidance and the impact of this problem in our community including the long term complications [1].

Methods Retrospective data collection looking at all pediatric patient who presented with button battery ingestion in our children's hospital from 2018 – 2023.

Results From April 2018 till November 2024, 40 patients presented with BBI. In our data noticed increase in number of cases per year, in 2022 we had 18 patients (Fig. 1.A). The button battery mainly was in esophagus (52 %, n = 21), and 37 % (n = 15) were in stomach. ESPGHAN recommends removing button battery in esophagus within 2 hours. 14 patients who met the criteria, underwent endoscopy removal within average of 1.5 hours. According to endoscopic classification of corrosive injuries (Zargar classification) 9 patients had 0 score, but 14 had class IIIa (Fig. 1.B). 82 % (n = 33) of patients recovered fully, 3 patients had short term complications: fever, and one had esophageal perforation. 3 patients had long term complications including esophageal stricture requiring multiple dilatations and tracheoesophageal fistula and one died (Fig. 1.C). Out of 32 patients who presented < 12h, 14 received honey in emergency department. 15 patients met the indications for further imaging, but 13 of them had either CT or MRI done during the admission. In 18 patients who underwent endoscopic removal of button battery in esophagus, 13 patients had acetic acid irrigation during endoscopy (Fig. 1.D).

Conclusions Overall, the majority of patients after 2021 received management as per ESPGHAN guidance, most of the patients recovered but the long term complications can be life threatening and cause significant morbidity and mortality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Mubarak et al, JPGN 2022

eP648 Endoscopic intermuscular dissection of possibly submucosa invasive rectal lesions – a prospective register study

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DOI 10.1055/s-0046-1821975

Aims Endoscopic intermuscular dissection (EID) is an evolving method allowing resection of submucosal invasive rectal neoplasms. In this unicenter prospective register study from a tertiary endoscopy centre we examined the oncological outcomes, procedure associated data also regarding safety under nurse administered sedation and assessed structural requirements for this procedure.

Methods All patients treated with EID for rectal lesions from November 2024 to November 2025 at Evangelisches Krankenhaus Düsseldorf, Germany were included. The primary endpoints were en-bloc-, R0- and curative resection rate. Secondary endpoints were, periprocedural complications and sedation related complications as well as resection speed and duration of hospital stay.

Results A total of 8 patients with an average age of 64,9 years were included in this analysis (male/female 6/2). 3 lesions were previously treated by EMR. All lesions were resected en-bloc. Histopathologically the resected lesions were 5 adenocarcinoma- 3 pT1 with submucosal invasion (1 sm1, 2 sm3) and 2 pT2, 1 high grade dysplasia, 1 low grade dysplasia (with severe submucosal fibrosis) and 1 non- neoplastic lesion (secondary resection after pmEMR of an adenocarcinoma). The R0 resection rate was 83,3 % whereas the curative resection rate was 50 %. Not curatively resected patients underwent surgery in 2/3 cases. In one case there were no vital tumor cells in the specimen and the other one resulted to be a pT3 lesion. The procedures were performed under nurse administered sedation with propofol and midazolam. There were no intra-procedural or sedation associated complications. 1 post procedural bleeding occurred

that required endoscopic treatment. The average procedure time was 136 minutes. The average specimen size was 1350mm² and the resection speed 9,9mm²/min. Patients stayed in the hospital for an average of 3,25 nights. Compared to our prospective ESD data (17,8mm²/min for rectal lesions) the dissection speed was slower among these first EID cases and there was no difference in length of hospital stay.

Conclusions EID appears to be a feasible method, easy to establish in ESD experienced endoscopy centers to treat possibly submucosa invasive rectal lesions or lesions with submucosal fibrosis. The method does not require additional measures and can be performed under nurse administered sedation. Continuous prospective assessment of the method is necessary to further evaluate its safety profile and long term oncologic outcomes.

Conflicts of Interest Boston scientific- consultation; Falk Pharma GmbH- lecture fees

eP649 Safety of anti-foaming agents with or without mucolytic substances in patients undergoing sedated upper gastrointestinal endoscopy: a systematic review and a pooled analysis

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DOI 10.1055/s-0046-1821976

Aims Cleanliness of the mucosa has been recently recognized as a key quality indicator of esophagogastroduodenoscopy (EGD). Pre-medication with mucolytic and defoaming agents is an effective method for improving visibility during EGD. One of the possible obstacles in routine pre-medication implementation is the safety concern related to sedation. We aimed to synthesize the available evidence regarding the safety of pre-medication with anti-foaming agents, with or without mucolytic substances, in patients scheduled to undergo sedated upper gastrointestinal endoscopy.

Methods A systematic review across MEDLINE and Cochrane Central Register from 01/01/2019 until 31/12/2024 was performed for all types of trials evaluating the safety of pre-medication with an anti-foaming agent with or without mucolytic substances in patients undergoing sedated upper GI endoscopy. We pooled the AE detected in the two arms: intervention (up to 100 ml of anti-foaming-mucolytic solution) and comparator (either up to 100 ml of water or nil per mouth), and presented the effect size on study outcomes either as the total rate of AE or Odds Ratio (OR) with 95 % confidence interval (CI). The

certainty of evidence was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results Nine studies (eight RCTs and one cohort) with 10283 subjects were included. Overall, there were 27 and 39 AEs in the intervention and the control group, respectively, with a total AEs rate of 0%, 95% CI (0-0.01); $I^2 = 93\%$; there was moderate certainty in the estimates. Focusing only on the studies with nil per os as a comparator (3 studies with 1012 patients), no excess of AEs rate in the premedication group was found [OR 0.55, 95% CI (0.11-2.72); $I^2 = 86\%$].

Conclusions Utilization of premedication with anti-foaming/mucolytic agents before routine upper GI endoscopy is not associated with an increased rate of AEs during sedated upper GI endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP650 ERCP in patients over 80 years old: experience from a tertiary hospital

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DOI 10.1055/s-0046-1821977

Aims To present clinical and procedural data of patients over 80 years of age who underwent ERCP.

Methods We retrospectively reviewed a prospectively collected single-center database of adult patients who underwent ERCP between 1/1/2022 and 31/5/2025 in a tertiary Greek public hospital. Data collected included demographic characteristics, indications for ERCP, clinical outcomes, and complications rates both immediate and within 2-weeks post procedure. These data were compared with an historical cohort from the same center, consisting of patients under 80 years of age who underwent ERCP between 9/2021 and 12/2023.

Results A total of 1729 ERCP were performed during the study period. Among these 31.1% (n = 538) were performed in patients aged >80 years (54.1% female) and 5.03% (n = 87). In patients aged >90 years. These were compared with 695 patients under 80 years from the historical cohort.

The most common indication for ERCP in patients >80 years was choledocholithiasis 53.5% (n = 288) percentage similar to the historic cohort 42% (n = 292), (p > 0.05). The second most common indication was malignant biliary obstruction 19.9% (n = 107) compared with 28.6% (n = 199), (p > 0.05). in the younger cohort (p > 0.05). The third commonest indication was acute cholangitis 17.7% (n = 95) compared with 13.4% (n = 79), (p > 0.05).

Sphincterotomy was performed in 61.5% (n = 331) of older patients and 27.1% (n = 146) had a prior sphincterotomy.

Post ERCP bleeding occurred in 4.87% (n = 25), including 4 delayed cases, vs 2.73% in the historic group (p = 0.048). Post ERCP pancreatitis occurred in 1.95% (n = 10) vs 0.72% (p > 0.05), cholangitis 1.36% (n = 7) vs 0.29% (p = 0.033), cardiopulmonary complications 0.59% (n = 3) vs 0.83% (n = 6) (p > 0.05) and death 0.39% (n = 2).

Completeness of procedure of ERCP was 96.5% (n = 494). Causes of incomplete ERCP included anatomical reasons (duodenal diverticula, altered anatomy) 56.3% (n = 9), malignant infiltration 25% (n = 4) and patient/anesthesia related complications 18.7% (n = 3).

Conclusions In a tertiary reference center approximately one third of all ERCP procedures were performed in patients over 80 years of age. One quarter of these patients over 80 years had previously undergone sphincterotomy. The most common indication, (>50%) is choledocholithiasis did not differ between

age groups. Complications rates were generally comparable between patients above and below 80 years, indicating that ERCP is a safe and effective procedure in very elderly patients when performed in an experienced center.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP651 Endoscopic Intermuscular Dissection at the Anal Verge: Optimizing Oncological and Functional Outcomes Using a Novel Bipolar Scissor Device – a Case Study

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DOI 10.1055/s-0046-1821978

Abstract Text

Endoscopic techniques have emerged as a pivotal component in the treatment of early gastrointestinal cancer. Endoscopic intermuscular dissection (EID) serves as a technique facilitating deeper resection in the rectum to achieve R0 resection of advanced dysplasia, scar tissue adjacent to dysplasia, or T1 cancer [1, 2]. In this case study, we used a novel bipolar endoscopic scissor device to enhance patient outcomes.

Case Presentation: An 89-year-old female presented with lower gastrointestinal bleeding under Apixaban, due to atrial fibrillation and chronic heart failure. Colonoscopy revealed an eroded broad-based 2.5 cm polyp in the distal rectum. During initial intervention, a snare resection was performed. Conventional histology revealed rectal cancer extending to the resection margin (R1). Further immunohistochemical staining confirmed a malignant melanoma. Clinical examination and imaging studies yielded no evidence of additional manifestations. After MDT discussion, we opted for an endoscopic approach to avoid colonostomy for the elderly patient with significant comorbidities. For the second intervention, we used a novel bipolar scissor device „SpydrBlade Flex“ by CreoMedical, to facilitate deep intermuscular dissection within fibrotic tissue adjacent to the anal verge. A tapered cap and water irrigation were employed to establish close contact with muscular vessels. After injection of saline and indigo carmine, we started with a circular incision around the former resection ulcer with open jaws. Subsequently, a layer-by-layer underwater dissection was performed, utilizing a grasping, lifting, and pulling technique. The adaptive energy enabled continuous cutting regardless of tissue thickness, without a charring effect. The resection was completed using rubber band traction. Bleeding vessels were coagulated by super-high frequency (SHF) microwave effect without changing the device. The resection plane was adjusted using hemoclips. Further clinical course of the patient was uneventful, with no signs of wound infection or bleeding, and normal bowel movements. Histological examination revealed no residual melanoma, confirming an R0 resection.

Discussion: Endoscopic intermuscular dissection (EID) is an evolving technique aimed at achieving an oncological R0 resection in early rectal malignancy. The novel endoscopic bipolar scissor device with adaptive energy facilitates safe resection in narrow spaces and fibrotic tissue, while microwave coagulation provides adequate hemostasis without changing the device [3].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Endoscopic submucosal tunneling dissection: use of a novel bipolar radiofrequency and microwave-powered device for colorectal endoscopic submucosal dissection. Thomas R. McCarty, Hiroyuki Aihara. Published in Video GIE, official video journal of the American Society of Gastrointestinal Endoscopy [https://www.videogie.org/article/S2468-4481\(20\)30090-4/fulltext](https://www.videogie.org/article/S2468-4481(20)30090-4/fulltext)
- [2] Sorge et al. Focal endoscopic intermuscular dissection in the rectum: feasibility and technical outcomes. Endoscopy 2025; 57 (S 02): S494–S495. doi:10.1055/s-0045-1806279
- [3] Moons Leon MG et al. Endoscopic intermuscular dissection for deep submucosal invasive cancer in the rectum: a new endoscopic approach. Endoscopy 2022; 54: 993–998. doi:10.1055/a-1748-8573

eP652 Video Capsule Endoscopy: Performance, Failures, and Complications in an 8-Year Single-Center Experience

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DOI 10.1055/s-0046-1821979

Aims Capsule endoscopy (CE) is a widely used modality for small-bowel evaluation, but its performance may be affected by technical failures, incomplete examinations, or clinical complications such as retention. The aim of this study was to assess the diagnostic yield, technical limitations, and safety profile of CE in routine clinical practice over an eight-year period in a tertiary referral center.

Methods This retrospective study included all patients who underwent CE between 2017 and 2024 in the Digestive and Hepato-Gastroenterological Functional Explorations Department at Ibn Sina University Hospital, Rabat, Morocco. CE was performed using PillCam SB3 or CapsoCam devices following standardized bowel preparation. Indications included obscure gastrointestinal bleeding (overt or occult), suspected or known Crohn's disease, celiac disease, malabsorption syndrome, Rendu–Osler disease, and small-bowel lymphoma. Technical limitations were defined as equipment-related disruptions, and clinical limitations as events related to patient factors or physiological conditions. Data were analyzed using SPSS.

Results A total of 125 patients were included (mean age 56.2 ± 19.6 years; 54.4% female). Obscure gastrointestinal bleeding was the most frequent indication (76.8%), followed by Crohn's disease (11.2%) and celiac disease (7.2%). CE completion rate, defined by cecal visualization before battery depletion, was 88%. Median small-bowel transit time was 3 hours and 10 minutes. The overall diagnostic yield was 65%, with angiodysplasia identified in 32.8% of patients and small-bowel ulcerations in 17.6%.

Clinical limitations and complications were observed in a subset of examinations. Incomplete examinations occurred in 11.2% of patients, mainly due to delayed gastric or small-bowel transit. Capsule retention occurred in 2.4% of cases. Two patients had strictures related to Crohn's disease requiring surgical retrieval, while one patient with celiac disease passed the capsule spontaneously after corticosteroid therapy. Four cases of gastric retention required endoscopic deployment; three progressed into the small bowel while one remained in the stomach despite multiple attempts.

Capsule ingestion difficulties occurred in four patients, three of whom had pre-existing swallowing disorders, including dysphagia or a history of cerebrovascular accident. In one elderly patient with severe dysphagia, CE could not be performed. Inadequate visualization occurred in 10.4% of examinations, predominantly due to residual food debris, particularly affecting duodenal and jejunal segments. Blood and clots impaired visualization in six cases, mainly among patients with overt gastrointestinal bleeding.

Technical failures were rare, with a single case (0.8%) of premature battery depletion in the proximal jejunum.

Conclusions CE demonstrated high diagnostic performance with a low rate of serious complications. The main limitations were related to clinical factors such as incomplete transit, capsule retention, swallowing disorders, and inadequate mucosal visualization, rather than true technical failures. Capsule retention remained infrequent and predictable in high-risk groups. Improving patient selection, optimizing bowel preparation, and ensuring careful evaluation of dysphagia risk may enhance CE performance and safety. Technological improvements, including extended battery life, real-time localization, and better image cleansing algorithms, could further reduce failures and improve diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP653 Closure After Full-Thickness Resection of Duodenal Submucosal Tumors Larger Than 25 mm: Learning the Lessons!

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DOI 10.1055/s-0046-1821980

Aims Full-thickness resection (EFTR) of duodenal submucosal tumors (SMTs) is highly challenging due to the thin duodenal wall, proximity to vital structures, and the requirement for a secure closure. Tumors > 25 mm significantly increase complexity and risk. This study aimed to evaluate our experience with free-hand EFTR for duodenal SMTs > 25 mm at a high-volume tertiary endoscopy center in Western India and identify the most effective closure method.

Methods All EFTR procedures for duodenal SMTs > 25 mm were retrospectively analyzed. Every case was discussed at a multidisciplinary meeting (MDT). Procedures were performed under general anaesthesia with a surgeon on standby. Gelofuscin was injected for submucosal lift, and dissection was performed using a Dual J Knife (KD-655U, Olympus). Haemostasis was achieved using a Coagrasper (FD-411UR, Olympus) in soft-coag mode at 40 W. Abdominal decompression was done using a 16G Intracath.

Closure methods used included TTSC, OTSC, Loop-and-Clip, endoscopic suturing, and LECS (laparoscopic–endoscopic cooperative surgery). Endoscopic suturing was attempted in two cases but was technically prohibitive due to awkward scope positioning and concern for adjacent vital structures. A saline-immersion leak test was done post-procedure. All patients received a triple-lumen nasojejunal tube with gastric aspiration. Diet advancement and tube removal were individualized.

Results

Case 1 (Male, 54 years): 28 mm anterior duodenal SMT. Closure with six TTSCs. R0 achieved. Complete closure not achieved. Histology: NET Grade I. Complications: mild fever and small leak. Managed with sponge therapy, NJ tube for 7 days, RTA for 5 days, and antibiotics for 10 days. Length of stay: 10 days.

Case 2 (Female, 58 years): 31 mm postero-inferior lesion. Closure with Loop-and-Clip. R0 achieved but incomplete closure. Histology: NET Grade II. Complications: leak with collection requiring surgery within 24 hours. Additional NJ tube, RTA, antibiotics. Length of stay: 13 days.

Case 3 (Male, 62 years): 30 mm anterior lesion. Closure with LECS. R0 and complete closure achieved. Histology: GIST. No complications. Managed with NBM 48 hours, antibiotics. Length of stay: 6 days.

Case 4 (Male, 65 years): 27 mm antero-superior lesion. Closure with OTSC plus three TTSCs. R0 achieved; complete closure not achieved. Histology: NET Grade I. Complications: pain and delayed perforation. Managed with NBM 10 days, NJ tube for 2 weeks, RTA, antibiotics for 15 days. Length of stay: 10 days.

Case 5 (Female, 48 years): 32 mm antero-superior lesion. Closure with LECS. Complete R0 resection and complete closure. Histology: NET Grade I. Complication: pain. Managed with NBM for 2 days and RTA for 2 days. Length of stay: 5 days.

Case 6 (Male, 61 years): 30 mm posterior lesion. Closure with LECS. R0 and complete closure achieved. Histology: GIST. Complication: pain. Managed with NBM 2 days and RTA 1 day. Length of stay: 5 days.

Case 7 (Female, 59 years): 28 mm postero-inferior lesion. Closure with LECS. R0 and complete closure achieved. Histology: NET Grade I. Complication: pain. Managed with NBM 2 days and RTA 1 day. Length of stay: 5 days.

Discussion This series demonstrates that although free-hand EFTR for duodenal SMTs > 25 mm is feasible, closure remains the most critical and difficult step. TTSC, OTSC, and Loop-and-Clip methods failed to provide complete full-thickness closure for defects > 20 mm, and were associated with leaks, delayed perforation, and prolonged hospital stay. Endoscopic suturing was technically difficult and unsafe. LECS consistently provided secure, watertight closure with minimal complications, faster recovery, shorter NBM duration, early oral feeding, and reduced antibiotic use.

Conclusions Free-hand EFTR for duodenal SMTs > 25 mm is technically demanding. LECS provides the most secure closure with the lowest morbidity. Larger prospective studies are needed to confirm optimal closure strategies in such high-risk duodenal EFTR defects.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP654V Breaking Through Stent Overgrowth: A Step-by-Step Endoscopic Solution

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DOI 10.1055/s-0046-1821981

Abstract Text

Palliative treatment of malignant esophageal strictures with self-expanding metal stents (SEMS) can be complicated by tissue overgrowth, making retrieval difficult and risky. We present a case of a patient with esophagogastric junction cancer and a double SEMS (stent-in-stent), who developed severe dysphagia due to stent overgrowth. A combined approach was performed: radial incisions with a needle knife on the proximal overgrowth to expose and free the inner stent edge, which was then removed with rat-tooth forceps. For the outer stent, with its distal flange deeply embedded in the gastric wall, dissection using an ESD knife released the flange, allowing safe stent removal. The patient experienced immediate symptomatic relief. This combination of endoscopic techniques enabled safe retrieval of deeply embedded stents, avoiding more invasive procedures [1–5].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7c9335ac-44b0-4540-baa5-500c67d31b12/Uploads/19978_video_embedded%20stent.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Spaander MCW, van der Bogt RD, Baron TH et al. Esophageal stenting for benign and malignant disease: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021. *Endoscopy*. 2021; 53 (7): 751–762
- [2] Ichita C, Sasaki A, Kawachi J et al. Esophageal stent removal by stent cutting using the endoscopic submucosal dissection technique. *Endoscopy*. 2022; 54 (S 02): E935–E936
- [3] DaVee T, Irani S, Leggett CL et al. Stent-in-stent technique for removal of embedded partially covered self-expanding metal stents. *Surg Endosc* 2016; 30 (6): 2332–41
- [4] Inoue T. Successful argon plasma coagulation treatment for self-expandable metal stent obstruction in colorectal cancer. *Oxf Med Case Reports*. 2022; 2022 (10): omac103
- [5] Guo KY, Ma LY, Liu ZQ et al. Endoscopic Sub-Stent Dissection for Removal of Long-Term Embedded Esophageal Self-Expanding Metallic Stents. *J Gastroenterol Hepatol* 2025; 40 (9): 2267–2274

eP655 Reliability of surface pattern based histologic prediction in screen-detected colorectal polyps – results from a nationwide cohort study

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DOI 10.1055/s-0046-1821982

Aims This nationwide observational cohort study aimed to assess the reliability of optical diagnosis (based on Kudo's pit pattern) compared to histologic results of colorectal polyps removed during screening colonoscopies.

Methods Data regarding Kudo's pit pattern (Kudo I–V), and histologic results were obtained from the prospectively collected registry of Hungarian National Public Health Institute. The correlation between Kudo I–II and non-neoplastic lesions, Kudo III–IV and neoplastic lesions, and Kudo V and submucosally invasive cancer (SMIC) was characterized by Cohen's Kappa coefficient, respectively. The potential effects of polyp size and location, and operator characteristics (adenoma detection rate [ADR], annual screening colonoscopy rate and experience in years) were also evaluated.

Results A total of 8560 lesions (7423 neoplastic [785 SMIC], 1137 non-neoplastic) were registered between 2019 and 2023. Of the 979 serrated polyps 100 contained dysplasia. Kudo I–II and Kudo III–IV demonstrated moderate agreement with non-neoplastic ($\kappa = 0.449$) and neoplastic lesions ($\kappa = 0.528$), respectively, while Kudo V demonstrated substantial agreement ($\kappa = 0.782$) with SMIC. For serrated lesions, Kudo I–II correlated only slightly ($\kappa = 0.143$) with non-neoplastic lesions. Left-sided location resulted in higher levels of agreement for non-neoplastic ($\kappa = 0.489$), and neoplastic lesions ($\kappa = 0.556$), respectively. For lesions larger than 2 cm, levels of agreement were substantial for neoplastic lesions ($\kappa = 0.758$), and near perfect for SMIC ($\kappa = 0.803$). ADR reaching 25 %, and annual screening colonoscopy rate ≥ 100 was associated with slightly better results for both non-neoplastic ($\kappa = 0.454$ and $\kappa = 0.530$), neoplastic lesions ($\kappa = 0.535$ and $\kappa = 0.585$), and SMIC ($\kappa = 0.802$ and $\kappa = 0.804$). This was not observed for ADR reaching 35 %. Operators with less than 10 years of prior endoscopic experience had better results: $\kappa = 0.581$ for non-neoplastic, $\kappa = 0.651$ for neoplastic lesions, and $\kappa = 0.827$ for SMIC.

Conclusions This nationwide cohort demonstrates a moderate and substantial reliability of surface pattern-based identification of neoplasia and SMIC during screening colonoscopies, with better results for left-sided lesions and those larger than 2 cm. Endoscopists with ADR reaching 25 % (but not that reaching 35 %), higher annual rate of screening colonoscopies and those early in their career perform better in optical diagnosis based histologic prediction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP656V EUS-guided Hepatico-Gastrostomy followed by Antegrade Digital Cholangioscopy and Laser Lithotripsy for a Large Biliary Stone in Surgically Altered Anatomy

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DOI 10.1055/s-0046-1821983

Problem to solve Management of biliary stones in patients with surgically altered anatomy (SAA) remains challenging due to the limited endoscopic access to the biliary tree. Enteroscopy-assisted ERCP may fail even in expert hands, and alternative approaches such as percutaneous transhepatic access or surgical revision carry significant risks and morbidity.

We report the case of a young patient with SAA and a large impacted stone at the hepatic duct confluence. Enteroscopy assisted ERCP failed due to inability to reach the anastomotic site. A safe and minimally invasive strategy was required to access, fragment, and clear the biliary stone while avoiding additional surgical morbidity.

Innovation We adopted a three-stage endoscopic strategy combining interventional EUS and Cholangioscopy. EUS-guided Hepatico-Gastrostomy (EUS-HGS) was performed followed by antegrade digital transhepatic cholangioscopy, and then a modified wire-guided cholangioscopy technique that ultimately enabled successful laser lithotripsy and stone clearance.

A) Stage 1 – EUS-guided Hepatico-Gastrostomy

Under linear EUS guidance, the left intrahepatic bile duct was punctured from the gastric body.

A guidewire was advanced antegrade across the obstruction. A 7Fr Cystotome was inserted in the tract.

A partially-covered self-expandable metal stent (PC-SEMS) was deployed, establishing a stable hepatico-gastric fistula.

This provided a secure transluminal route for subsequent cholangioscopy.

B) Stage 2 – Antegrade Digital Cholangioscopy

A digital cholangioscope was advanced through the HGS stent to reach the biliary confluence. However, due to the sharp angulation created by the metallic stent, the scope could not be maneuvered sufficiently to access the bile duct. As a result, laser lithotripsy could not be performed at this stage, and an alternative strategy was required to optimize access and achieve ductal clearance.

C) Stage 3 – Wire-Guided Cholangioscopy after Stent Removal

The PC-SEMS was removed to straighten the tract and reduce the angulation. A sphincterotome with a guidewire was then carefully advanced antegrade into the bile duct. The digital cholangioscope was subsequently railroaded over the guidewire, which provided a stable and aligned path through the hepatico-gastric tract. This maneuver allowed successful advancement of the cholangioscope into the common bile duct, where the large biliary stone was directly visualized. Laser lithotripsy was performed, fragmenting the stone into small pieces, and routine antegrade extraction maneuvers with basket and balloon allowed complete ductal clearance.

Results The three-stage procedure was completed without complications. EUS-HGS provided secure biliary access, and wire-guided cholangioscopy enabled successful visualization and fragmentation of the stone. Laser lithotripsy resulted in complete clearance, and the patient's symptoms resolved rapidly. Liver function tests normalized within days, and no adverse events occurred during recovery.

Conclusions This case highlights the safety, feasibility, and clinical value of a staged endoscopic strategy combining EUS-guided Hepatico-Gastrostomy with antegrade digital cholangioscopy and laser lithotripsy for the management of large biliary stones in patients with surgically altered anatomy.

This innovative approach may represent a minimally invasive alternative to percutaneous or surgical interventions in selected patients with complex biliary stones and altered anatomy. Future studies are warranted to further evaluate long-term outcomes and define optimal procedural timing and stent strategies.

VIDEO http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/62709659-ccf5-46c4-ad97-957511138102/Uploads/19990_ESGE_Final%20video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP657 Safety and Outcomes of EUS-Guided Choledochal Drainage in Patients With and Without Ascites

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DOI 10.1055/s-0046-1821984

Aims Ascites is often considered a relative contraindication of Endoscopic ultrasound guided choledochal drainage (EUS-CD). This study compared the safety, technical success, and clinical outcomes of EUS-CD in patients with and without ascites (► Table 1).

Methods A retrospective study of 80 patients (ascites n = 29; no ascites n = 51) compared demographics, drainage indications, technical and clinical success, and adverse events. Ascites was classified as mild, moderate, or severe. Technical success was defined as successful stent placement, and clinical success as radiologic or biochemical biliary decompression.

Results Median age was higher in the ascites group (70 vs. 60.5 years, p = 0.027). Failed ERCP was a more common indication in patients with ascites (75.9% vs. 52.9%, p = 0.043). Pancreatic cancer was the predominant etiology in both groups (65% vs. 63%). A transduodenal approach was used in >80% of cases in both cohorts. Partially covered SEMS (6 cm) was the most frequently used stent type (51.7% vs. 52.9%). Technical success was high in both groups (100% vs. 98.4%), with similar clinical success rates (96.5% vs. 96.1%). Adverse events were comparable (7.1% vs. 6.7%), including bile leak (7.1% vs. 6.7%, p = 0.938) and mortality (6.9% vs. 3.9%, p = 0.674); none reached statistical significance.

► Table 1

	EUS CD with Ascites (n = 29)	EUS CD without Ascites (n = 51)	p-value
Age (Median, IQR)	70 (55, 17.5)	60.5 (50, 10)	0.0272
Male	72.41 %	66.67 %	0.594
Ascites			
Mild	21 (72.41 %)		
Moderate	7 (24.14 %)		
Severe	1 (3.45 %)		
Indication for biliary drainage			
Pancreatic cancer	15 (65 %)	28 (63 %)	0.463
Ampullary cancer	4 (9.1 %)	5 (11.1 %)	0.477
Duodenal cancer	2 (7.1 %)	5 (11.1 %)	0.451
Cholangiocarcinoma	4 (14.3 %)	4 (8.9 %)	0.473
Other	3 (4.3 %)	3 (9.1 %)	0.54
Failed ERCP	22 (75.86 %)	27 (52.94 %) P = 0.043	0.064
Previous plastic stent in bile duct	2 (6.90 %)	2 (3.92 %) P = 0.552	0.498
Location of Stent			
Transduodenal	23 (82.1 %)	42 (93.3 %)	0.137
Transgastric	0 (0 %)	2 (4.4 %)	0.258
Type of stent			
Gioborr	8 (27.6 %)	11 (21.6 %)	0.543
PC-SEMS 6 cm	15 (51.7 %)	27 (52.9 %)	0.917
FC SEMS 6 cm	5 (17.2 %)	10 (19.6 %)	0.794
FC SEMS 4 cm	1 (3.4 %)	3 (5.9 %)	0.631
Lumen Apposing Metal Stent (Axios)	1 (3.4 %)	0 (0 %)	0.182
Technical Success	29 (100 %)	50 (98.4 %)	0.448
Clinical Success	28 (96.5 %)	49 (96.1 %)	0.915
Adverse Events	2 (7.1 %)	3 (6.7 %)	0.938
Bile leak	2 (7.1 %)	3 (6.7 %)	0.938
Bleeding	0 (0 %)	1 (2.2 %)	0.427
Mortality	2 (6.9 %)	2 (3.9 %) P = 0.557	0.674

Conclusions EUS-CD shows comparable technical and clinical success and similar adverse event rates in patients with or without ascites, indicating ascites may not be a contraindication when performed by experienced endosonographers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP658 Endoscopic Ultrasound-Guided Transmural Biliary Drainage as a Primary Procedure vs. Secondary/Rescue Procedure after Failed ERCP

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DOI 10.1055/s-0046-1821985

Aims The aim of this study was to evaluate the technical success, clinical success, and safety of endoscopic ultrasound-guided choledochal drainage (EUS-CD) in patients with biliary obstruction, comparing its use as a primary procedure versus as a secondary/rescue procedure after failed endoscopic retrograde cholangiopancreatography (ERCP).

Methods A retrospective review was conducted using prospectively maintained records of 75 patients with biliary obstruction who underwent EUS-CD. Among these, 31 patients (41.3%) underwent primary EUS-CD, while 44 patients (58.7%) underwent secondary or rescue EUS-CD following failed ERCP. The most common indications for drainage were malignancies, including pancreatic head mass, ampullary cancer, duodenal cancer, and cholangiocarcinoma (► Table 1).

► Table 1

Variables	EUS CD Primary (n = 31)	EUS CD secondary/ rescue (n = 44)	P VALUE
Age (Median, IQR)	70, 58-74 years	62, 48.5-76 years	0.2963
Male	20 (64.52%)	31 (70.45%)	0.5872
Ascites	7 (22.58%)	19 (43.18%)	0.9881
Indication for biliary drainage			
HOP mass	21 (67.74%)	23 (52.27%)	0.1804
Ampullary cancer	1 (3.23%)	9 (20.45%)	0.0307
Duodenal cancer	4 (12.90%)	2 (4.55%)	0.1889
Cholangiocarcinoma	2 (6.45%)	7 (15.91%)	0.2146
Lymph nodes	2 (6.45%)	1 (2.27%)	0.3631
BBS stone	2 (6.45%)	5 (11.36%)	0.4715
Previous plastic stent in bile duct	1 (3.23%)	3 (6.82%)	0.4954
Location of Stent			
Transduodenal			
Transgastric			
Type of stent			
Gioborr	6 (19.35%)	10 (22.73%)	0.7255
PC-SEMS 6 cm	15 (48.39%)	25 (56.82%)	0.471
FC SEMS 6 cm	9 (31.03%)	6 (13.64%)	0.101
FC SEMS 4 cm	1 (3.23%)	3 (6.82%)	0.4954
Lumen Apposing Metal Stent (Axios)	0 (0.0%)	1 (2.27%)	0.398
Technical Success	31 (100%)	44 (100%)	NA
Clinical Success	30 (96.77%)	44 (100%)	0.2304
Adverse Events			
Bile leak			
Bleeding			
Mortality	1 (3.23%)	1 (2.27%)	0.8008

Results Technical success was achieved in 100% of patients in both groups. Clinical success was observed in 96.77% of patients in the primary EUS-CD group and 100% in the secondary group, with no statistically significant difference ($P = 0.2304$). Adverse events were rare and included isolated cases of bile leak, bleeding, and mortality, with comparable rates between the two groups. Overall, there was no statistically significant difference in complication rates between primary and secondary EUS-CD.

Conclusions There was no significant difference in success rates or adverse events in performing EUS-CD as a primary procedure vs. secondary/rescue procedure.

Hence the proposed endoscopic ultrasound-guided choledochal drainage (EUS-CD) in biliary obstruction as a rescue procedure after failed ERP is a safe alternative with high technical and clinical success rates and minimum adverse event rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP659 Primary Colorectal Signet-Ring Cell Carcinoma with Synchronous Colonic Metastases in an Asymptomatic Patient: Case Presentation

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DOI 10.1055/s-0046-1821986

Introduction. Less than 1% of all colorectal cancers (CRC) are primary colorectal signet-ring cell carcinomas (SRCC), which represent an uncommon and aggressive histological subtype. Synchronous colonic metastases at initial diagnosis are very rare.

Case report. We report the case of a 65-year-old male patient who underwent routine colonoscopy following a positive faecal immunochemical test. The patient had no remarkable medical history and was asymptomatic.

A 3-cm semi-pedunculated polyp (Paris Isp, JNET type 3) and several smaller depressed lesions (Paris 0-Ila + c and JNET type 3) were observed in the descending colon.

Multiple biopsies were obtained. Histopathological examination of the biopsy specimens highlighted the presence of diffusely infiltrating signet-ring cells embedded within a mucinous stroma. Tumour cells were poorly cohesive, with most exhibiting prominent intracellular mucin vacuoles displacing the nuclei peripherally. Immunohistochemical staining of the specimens showed positivity for CK20 and CDX2, supporting a colorectal origin, and negativity for CK7 and GCDPF-15. Additional immunostaining revealed a preserved expression of E-cadherin, though focal loss was observed in infiltrative areas, suggesting a more aggressive biological behaviour. The Ki-67 proliferation index was markedly abnormal at 75%, and p53 showed strong diffuse positivity. Testing for mismatch repair proteins demonstrated intact expression of MLH1, MSH2, MSH6, and PMS2, indicating microsatellite stability. Further molecular analysis revealed wild-type KRAS and BRAF genes and no evidence of NRAS mutations. There was no sign of extra-colonic metastases on the computed tomography. The endoscopic features, alongside the histopathological assessment and immunochemistry suggest primary colorectal SRCC with synchronous colonic metastases at initial diagnosis. The patient was referred for extensive hemicolectomy, regional lymphadenectomy and adjuvant chemotherapy.

Conclusion. The biological behaviour of SRCC is aggressive and unpredictable. The synchronous occurrence of primary SRCC and metastatic lesions further complicates the clinical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP660 Endoscopic Ultrasound–Guided Shunt Occlusion: Experience from Three Cases

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DOI 10.1055/s-0046-1821987

Aims To assess the feasibility, safety, and effectiveness of endoscopic ultrasound–guided shunt occlusion as a novel, minimally invasive therapeutic alternative for managing refractory hepatic encephalopathy in patients with large portosystemic shunts who are ineligible for TIPS, BRTO, or liver transplantation.

Methods We retrospectively analyzed three male patients (ages 41–66) with ethanol-related cirrhosis and recurrent overt hepatic encephalopathy (OHE) despite optimal medical therapy. All had large splenorenal or splenoportal shunts documented on CT, with significant portofugal flow on Doppler. Due to financial constraints or high MELD, liver transplantation, BRTO, and TIPS were not feasible. Under deep sedation, an echoendoscope was positioned at the gastric cardia to visualize the splenoportal axis. The afferent feeder to the shunt was identified using Doppler, and a 19G EUS-FNA needle was used for direct puncture. Technique involved deployment of 16–20 mm coils followed by n-butyl cyanoacrylate glue injection, in single or staged sessions, depending on residual flow. Coil number ranged from 2 to 6 per patient. Post-procedure, patients were monitored for bleeding, ascites, hypoxia, and worsening decompensation. CT portography was repeated after 4–6 weeks. Clinical follow-up included MELD score, HE episodes, and functional status assessment.

Results Case 1 (66-year-old male): Large splenoportal shunt with recurrent HE. Single session EUS guided shunt occlusion with two coils (18mm x 14cm and 20mm x 14cm) and 2 ml glue achieved complete obliteration. No complications. No further HE over 3 months; improved cognition reported.

Case 2 (57-year-old male): Large posterior gastric vein afferent shunt. Initial coil (20mm and 16mm) + and 2ml glue session partially occluded flow. A second session next day achieved complete thrombosis. In the second session, 2 coils of 20mm with 2ml glue was injected. Developed mild hemoperitoneum and ascites, managed with correction of coagulopathy. After discharge, only one minor HE episode occurred at 3 weeks, and none thereafter. CT at 35 days showed complete non-opacification of shunt without thrombus extension.

Case 3 (41-year-old male): a 2cm portosystemic shunt was seen. EUS guided shunt coiling was done using 4 coils of 20mm, 20mm, 18mm and 18mm, along with 2ml glue. Mild post-procedure hypoxia occurred, managed conservatively. CT showed partial obliteration of the shunt. No episodes of OHE in the followed up 1 month. Improved sensorium and liver function was noted.

Across all cases, technical success was 100%, clinical control of OHE was achieved in all three patients, there was no extension of portal vein or systemic thrombus, and no mortality was observed.

Conclusions This case series demonstrates that EUS-guided shunt occlusion is a feasible and effective therapeutic alternative for patients with recurrent HE and contraindications to TIPS, BRTO, or transplantation. The ability to directly visualize and selectively embolize the shunt afferent offers distinct procedural precision over radiologic methods. While mild complications occurred, a were manageable, and neurocognitive improvement was consistent across patients. EUS guided shunt occlusion may represent an emerging interventional paradigm in hepatology, particularly within resource-constrained settings. A multicentric prospective study is needed to establish standardized protocols, optimal coil–glue combinations, and long-term outcomes beyond encephalopathy control, including survival and portal hemodynamics.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP661 A Prospective Single-Centre Pilot Study on the Impact of a Customised Endoscopy Safety Checklist on Patient Safety Outcomes in a Tertiary Diagnostic and Interventional GI Endoscopy Unit in India

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DOI 10.1055/s-0046-1821988

Aims To evaluate the effectiveness of a customised endoscopy safety checklist in improving patient safety, identifying high-risk conditions, reducing preventable complications, and enhancing team coordination in a high-volume tertiary GI endoscopy unit in India.

Methods This prospective single-centre pilot study was conducted from September 2024 to the present. A customised endoscopy safety checklist was designed, incorporating critical parameters related to patient history, anticoagulation status, NPO duration, airway evaluation, anaesthetic considerations, and cardiopulmonary status. The checklist was completed pre-procedure and verified independently by the endoscopy nurse, resident medical officer, and the endoscopist before scope insertion. All checklist entries and clinical outcomes were prospectively recorded. A total of 5460 endoscopic procedures were performed. Data were analysed for checklist compliance, high-risk patient identification, adverse events, and avoidable complications. The study also recorded the single case in which the checklist was not implemented.

Results A total of 5460 endoscopic procedures were performed, and the checklist was implemented in 5459 cases, yielding a compliance rate of 99.98%. High-risk factors were identified in 40 patients (0.73%), resulting in modification, delay, or abandonment of procedures to prevent adverse events. No adverse events occurred in any case where the checklist was used. One preventable fatal adverse event occurred in the single case (0.02%) where the checklist was not implemented.

Summary of Core Findings Total Endoscopic Procedures — 5460, Checklist Implemented — 5459 (99.98%) compliance, Procedures WITHOUT Checklist — 1 (0.02%), High-Risk Patients Identified — 40 (0.73%), Low-Risk Patients Confirmed — 5419 (99.27%), Adverse Events WITH Checklist — 0 (0%), Adverse Events WITHOUT Checklist — 1 (Fatal haemorrhage post-EUS-FNA/FNB), Mortality WITH Checklist — 0(0%), Mortality WITHOUT Checklist — 1 (Preventable, related to unreported anticoagulant use)

Breakdown of High-Risk Factors Identified:

Risk Factor — Count — % of High-Risk Cohort — % of Total Procedures — Classification

Inadequate NPO Status (<6 hours) — 15 — 37.5% — 0.275% — ESGE aspiration-risk criterion

Severe Trismus (<3-finger mouth opening) — 11 — 27.5% — 0.202% — ASGE/ESGE difficult-airway category

Ongoing Anticoagulant/Antiplatelet Therapy — 10 — 25% — 0.183% — ASGE high-risk bleeding category

Severe Cardio-Pulmonary Comorbidities — 4 — 10% — 0.073% — ASGE cardio-pulmonary risk classification

Conclusions **Discussion:** An Indian tertiary setting with high daily workloads, time constraints, inadequate documentation from referring clinicians, and limited patient awareness contribute to missed critical information during routine evaluations. The checklist functioned as a reliable error-prevention tool, ensuring systematic confirmation of risk factors that may otherwise be overlooked.

Conclusions: Implementation of a customised endoscopy safety checklist achieved near-perfect compliance and significantly improved patient safety by identifying high-risk conditions and preventing avoidable procedural complications. No adverse events occurred in any case where the checklist was applied. The checklist promoted teamwork, standardisation of pre-procedure evaluation, and improved communication among staff. Adoption of such struc-

tured checklists is strongly recommended for all diagnostic and interventional endoscopy units, particularly in high-volume centres across India and similar healthcare environments.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP662 Quantifying the environmental cost of diagnostic gastroscopy: a life cycle assessment

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DOI 10.1055/s-0046-1821989

Aims The healthcare sector is a major contributor to environmental impact, and gastrointestinal endoscopy is associated with substantial resource use and waste generation. This study aimed to conduct a comprehensive life cycle assessment (LCA) of diagnostic gastroscopy—following the E-SPARE guideline and ISO 14040 standard—with a particular focus on the contribution of energy consumption (HVAC, lighting, and medical equipment). A Monte Carlo uncertainty analysis is planned to strengthen the robustness of the estimates.

Methods A prospective one-month observational study was carried out at Hospital Universitari i Politècnic La Fe (València, Spain) including all outpatients undergoing diagnostic gastroscopy ($n = 143$). A cradle-to-grave LCA considered four stages: production, transportation, clinical procedure, and end-of-life. The analysis included medical supplies, gastroscope production and reprocessing, sedation, CO₂ insufflation, staff and patient travel, energy consumption, and waste management. Environmental impacts were quantified using ReCiPe 2016 Midpoint methodology and expressed as GWP-100 (kgCO₂e).

Results The carbon footprint of a single diagnostic gastroscopy was 25.17 kgCO₂e. The main contributors were patient transport (9.71 kgCO₂e, 38.6%), staff transport (6.95 kgCO₂e, 27.6%), and energy consumption (4.78 kgCO₂e, 19.0%). Medical supplies contributed 2.75 kgCO₂e (10.9%), while gastroscope production and reprocessing accounted for 0.93 kgCO₂e (3.7%). The clinical procedure itself (sedation and CO₂ insufflation) had a negligible impact (0.05 kgCO₂e, 0.2%). Within supplies, the most impactful items were surgical gowns, absorbent underpads, and biopsy containers, driven largely by material production (~74% of total impact).

Conclusions Transportation—particularly patient travel—was the dominant contributor to the carbon footprint of diagnostic gastroscopy, followed by energy consumption. Strategies promoting sustainable mobility and improving energy efficiency could substantially reduce the environmental burden of the procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP663 Corporate Welfare as an Integrative Model to Improve Awareness and Expand Participation in Colorectal Cancer Screening Using FIT

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DOI 10.1055/s-0046-1821990

Aims To evaluate a corporate welfare-based integrative model aimed at improving awareness of colorectal cancer (CRC) risk factors, expanding participation in FIT-based screening among less commonly involved subjects; to assess the prevalence of personal and familial CRC risk profiles.

Methods Healthcare professionals from the Gastroenterology and Digestive Endoscopy Unit of AUSL-IRCCS Reggio Emilia delivered structured educational sessions to employees of a company in the Lower Reggio Emilia area. The in-

tervention focused on CRC risk factors and the importance of early detection. Participants were invited to complete a standardized questionnaire collecting personal and family medical history to identify CRC and pancreatic cancer risk factors. Individuals reporting a first- or second-degree family history of CRC and/or pancreatic cancer underwent a follow-up telephone interview to further refine their risk profile and evaluate potential hereditary cancer syndromes. FIT-based CRC screening was then offered to all employees who completed the questionnaire, with specific attention to those aged >40 years and to younger individuals with positive family history.

Results Of approximately 800 employees, 713 (≈90%) attended the educational sessions. Among them, 374 (52.5%; 88% male; mean age 43.7 ± 9.9 years, range 21–70) provided personal information consent and completed the questionnaire.

A family history of CRC was reported by 44/374 (11.8%), while 15/374 (4%) reported a family history of pancreatic cancer. Telephone consultations suggested a possible BRCA1 mutation in 2 individuals.

Overall, 280/374 (75%) agreed to undergo FIT screening; 88/128 participants <40 years and 192/246 ≥40 years. FIT kits were returned by 204 employees (54.5% of questionnaire respondents; 28.6% of all participants in the educational sessions). Among them, 37/88 (<40 years) completed the test, with a positivity rate of 5.4% (2/37). In the ≥40-year group, 167/192 completed the test, with a positivity rate of 0.6% (1/167). All three FIT-positive participants underwent colonoscopy, which resulted negative in all cases.

Conclusions This corporate welfare-based intervention proved effective in increasing awareness and promoting CRC screening uptake among a working-age population typically underrepresented in conventional public health screening programs. The high participation rates in both educational activities and risk assessment demonstrate the feasibility and acceptability of this integrative model. The approach enabled the identification of individuals with increased familial risk, including suspected hereditary cancer predisposition. Collaboration between public healthcare providers and private companies may represent a valuable strategy to enhance preventive efforts, expand participation in population-based CRC screening, and support early detection in groups that are otherwise difficult to reach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP664V Modified Z-POEM for giant Zenker's diverticulum using a tunnel-free approach, undersaline immersion, and mucosal trimming

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DOI 10.1055/s-0046-1821991

Background & Aims: Large Zenker's diverticula pose technical challenges and higher recurrence risk during Z-POEM.

Methods: A 59-year-old female with severe dysphagia from a 9-cm Zenker's diverticulum and underwent modified Z-POEM. Key steps included mucosal incision over the septum, early undersaline immersion, tunnel-free myotomy for efficient progression, extended septotomy into the esophagus, and mucosal flap trimming to avoid food retention. Clips were used for closure.

Results: The procedure was successful with no adverse events. Imaging confirmed full emptying. At 6 months, the patient tolerated a normal diet without symptoms.

Conclusions: This modified technique appears effective for large and complex Zenker's diverticula.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/ec8ff6f3-b12d-437a-8eee-86f989c389f0/Uploads/19978_Saraga_ESGE%20Days%20final.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP665 Renal safety of Sodium Phosphate boost in patients undergoing Colon Capsule Endoscopy

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DOI 10.1055/s-0046-1821992

Aims To assess the renal safety of sodium phosphate used as a boost in colon capsule endoscopy by comparing pre- and post-procedure renal function and electrolytes

Methods We performed a retrospective observational study including consecutive adult patients who underwent colon capsule endoscopy with sodium phosphate used as a boost regimen at a single tertiary care center. Patients were eligible if serum creatinine, estimated glomerular filtration rate (eGFR), sodium and potassium were available within 7 days before and within 1 day after the procedure. Continuous variables were compared using paired statistical tests as appropriate, and statistical significance was set at $p < 0.05$.

Results A total of 76 patients were included in the analysis. Mean age was 73 years (SD 16 years). Paired pre-post comparisons showed no significant changes in renal function after sodium phosphate administration. Serum creatinine remained stable ($p = 0.174$), and estimated glomerular filtration rate (eGFR) also showed no significant variation ($p = 0.111$).

Blood urea levels significantly decreased after the procedure ($p < 0.001$), a finding consistent with hemodilution rather than renal impairment [1].

Electrolyte levels remained largely unchanged. Serum sodium showed no significant pre-post difference ($p = 0.151$). Serum potassium demonstrated a statistically significant decrease ($p < 0.001$), although no clinically relevant hypokalemia was identified.

No patient met KDIGO criteria for acute kidney injury.

Conclusions Sodium phosphate used as a boost for colon capsule endoscopy was not associated with renal function deterioration. Both creatinine and eGFR remained stable after the procedure, and the observed decrease in blood urea was consistent with hemodilution rather than kidney injury. Electrolyte levels were largely unchanged, and the reduction in serum potassium, although statistically significant, had no clinical relevance. No cases of acute kidney injury were identified. These findings support the renal and metabolic safety of sodium phosphate in this setting.

Conflicts of Interest Medtronic, speaker and advisory fees

References

[1] Carretero C, Prieto de Frías C, Angós R, Betés M, Herráiz M, de la Riva S, Zozaya F, Fernández-Calderón M, Rodríguez-Lago I, Muñoz Navas M. Pan-enteric capsule for bleeding high-risk patients. Can we limit endoscopies? *Rev Esp Enferm Dig.* 2021; 113 (8): 580–584. doi:10.17235/reed.2020.7196/2020

eP666 Rectal Metastasis Revealing Occult Male Breast Cancer: A Case Report Detected During Screening Colonoscopy

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DOI 10.1055/s-0046-1821993

Abstract Text

The male breast cancer (MBC) is a rare and represents less than 1% of all malignancies in men and only 1% of all breast cancers incident [1]. When it spreads, the gastrointestinal tract is rarely involved, and rectal metastasis is exceptionally unusual [2, 3]. Occult breast cancer (OBC) adds another layer of complexity. OBC is defined as a clinically recognizable metastatic carcinoma arising from an undetectable primary breast tumor and was first described by Halsted in 1907 [4]. It is thought that OBC is secondary to microinvasive breast cancer [5]. It presents in 0.3–1% of all breast cancers [6], with first presentation by axillary and cervical lymph node metastases [7]. It is usually identified only after biopsy of a metastatic site, supported by immunohistochemical markers [8].

Here, we report the case of a 43-year-old man with a strong family history of colorectal cancer who underwent a screening colonoscopy despite being entirely asymptomatic. During colonoscopic evaluation, a small erythematous, slightly elevated rectal lesion measuring approximately 10 × 8 mm was incidentally identified at about 7 cm from the anal verge. The lesion showed no ulceration and was surrounded by a mildly thickened rectal wall. Targeted biopsies were obtained.

Histopathological examination, supported by immunohistochemical profiling, revealed adenocarcinoma consistent with metastatic breast origin—an unexpected finding in a male patient with no prior history of breast disease. Subsequent staging with dedicated breast imaging and PET-CT confirmed the diagnosis of occult breast cancer with metastatic involvement of the rectum, regional lymph nodes, and bone.

This case underscores the critical value of colonoscopy not only for colorectal cancer prevention in high-risk individuals but also for detecting unexpected metastatic disease in asymptomatic patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sanguinetti A, Polistena A, Lucchini R, Monacelli M et al. Male breast cancer, clinical presentation, diagnosis and treatment: Twenty years of experience in our Breast Unit. *Int J Surg Case Rep* 2016; 20S (Suppl): 8–11. doi:10.1016/j.ijscr.2016.02.004

[2] Schwarz RE, Klimstra DS, Turnbull AD. Metastatic breast cancer masquerading as gastrointestinal primary. *Am J Gastroenterol* 1998; 93 (1): 111–4. doi: 10.1111/j.1572-0241

[3] McLemore EC et al. presentation and intervention in women with gastrointestinal metastasis and carcinomatosis. *Ann Surg Oncol* 2005; 12 (11): 886–94. doi:10.1245/ASO.2005.03.030

[4] Halsted W.S.I. The results of radical operations for the cure of carcinoma of the breast. *Ann. Surg.* 46 (1): 1907; pp 1–19. doi:10.1097/0000658-190707000-00001

[5] Hessler LK, Molitoris JK, Rosenblatt PY, Bellavance EC, Nichols EM, Tkaczuk KHR et al. Factors influencing management and outcome in patients with occult breast cancer with axillary lymph node involvement: Analysis of the national cancer database. *Ann Surg Oncol* 2017; 24 (10): 2907–14. doi:10.1245/s10434-017-5928-x

[6] Barbieri E, Anghelone CAP, Gentile D, La Raja C, Bottini A, Tinterri C. Metastases from Occult Breast Cancer: A Case Report of Carcinoma of Unknown Primary Syndrome. *Case Rep Oncol* 2020; 13 (3): 1158–1163. doi:10.1159/000510001

[7] Rosen PP, Kimmel M. Occult breast carcinoma presenting with axillary lymph node metastases: a follow-up study of 48 patients. *Hum Pathol* 1990; 21 (5): 518–23. doi:10.1016/0046-8177(90)90008-s

[8] Walker GV, Smith GL, Perkins GH, Oh JL, Woodward W, Yu TK, Hunt KK, Hoffman K, Strom EA, Buchholz TA. Population-based analysis of occult primary breast cancer with axillary lymph node metastasis. *Cancer* 2010; 116 (17): 4000–6. doi:10.1002/cncr.25197

eP667 Towards Objective Selection of Cold Snares: Mechanical Testing and Composite Sustainability Scoring

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DOI 10.1055/s-0046-1821994

► **Table 1** Raw data and composite scores (A–D coding)

Snare	Euros	kgCO ₂ e	Avg Force (N)	Score 50:30:20	Score 33:33:33	Score 100:0:0
A	11.5	0.445	2.52	6.39	14.46	11.50
B	19.4	0.609	2.77	10.44	22.78	19.40
C	14.0	0.388	4.10	7.94	18.49	14.00
D	21.2	0.324	2.54	11.21	24.06	21.20

Aims In ESGE Days 2025, we reported the first comparative carbon-footprint analysis of four commonly used cold snares. Although relevant for sustainable endoscopy, environmental data alone cannot guide equipment selection. This follow-up study incorporates new elements not previously presented: [1] a functional evaluation based on standardized mechanical performance as a surrogate of clinical efficacy, and [2] a composite sustainability scoring system integrating environmental impact, mechanical performance, and cost.

Methods Four 10-mm cold snares (mdd GmbH, Olympus SnareMaster Plus, Boston Scientific Captivator Cold, Steris Exacto) underwent standardized functional testing on biological tissue (n = 40), including dimensional accuracy and average traction force measured using a calibrated dynamometer. For analysis, snares were randomly assigned codes A–D to avoid brand bias. Environmental impact (kgCO₂e) was extracted from life-cycle inventory data, and price (EUR) was recorded for each device. A multi-criteria scoring system (MCDA) was constructed using min–max normalization and three weighting scenarios aligned with public procurement practice in Spain: 100:0:0, 50:30:20, and 33:33:33 (price–environment–ergonomics). Lower scores indicate a more sustainable device. Given the inherent uncertainty of LCA modelling, the need for Monte-carlo simulation to generate 95 % uncertainty intervals is acknowledged (► **Table 1**).

Results Dimensional accuracy was consistent (9.10–10.48 mm). Average traction force varied from 2.52 N (A) to 4.10 N (C), indicating poorer ergonomic performance for C. Environmental impact ranged from 0.324 to 0.609 kgCO₂e. Composite results using the corrected dataset demonstrated stable rankings across all weighting schemes, consistently identifying snare A as the most favourable, followed by C, B and D.

Conclusions This work provides the first integrated environmental–mechanical assessment of cold snares. The proposed composite scoring system is transparent, reproducible and aligned with current European and Spanish procurement legislation, supporting the incorporation of environmental and ergonomic criteria into tendering processes. Future studies should incorporate Monte-carlo–based uncertainty modelling and clinical outcomes to validate and strengthen this approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement
- [2] Ley 9/2017 de Contratos del Sector Público (LCSP). BOE nº 272, 9 de noviembre de 2017.

eP668 Rectal Mucinous Adenomas With High-Grade Dysplasia in Bloom Syndrome: A Seven-Patient Familial Case Series Detected During Screening Colonoscopy

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DOI 10.1055/s-0046-1821995

Abstract Text

Bloom syndrome (BS) is an extremely rare autosomal recessive genetic disorder caused by a mutation in the *BLM* gene [1]. The diagnosis of BS should be considered in patients with growth retardation of prenatal onset, a photosensitive rash in a butterfly distribution over the cheeks, and an increased risk of cancer at an early age. [2] Clinical manifestations also include short stature, dolichocephaly, prominent ears, micrognathia, malar hypoplasia, immunodeficiency, type II diabetes, hypogonadism associated with male infertility and female subfertility [3, 4]. The risk of malignancy in Bloom syndrome is 150–300 times greater than in the general population, with around 25 % of patients developing cancer at a mean age of 20.7 years [5, 6]. In BS the risk of colon cancer is significant, affecting around 12 % of patients, with a mean diagnosis age of 35.4 years [7]. In this case series, we describe seven related patients—siblings and cousins, both male and female—with genetically confirmed Bloom syndrome who underwent screening colonoscopy because of their high-risk status. All were asymptomatic, and their mean age was 24.7 years.

Colonoscopy revealed multiple polyps in each patient, several of which were safely removed using cold snare polypectomy. What was particularly striking, however, was that all seven patients had a large sessile rectal lesion, with an average size of 34 × 27 mm. These lesions were completely resected using endoscopic mucosal resection (EMR).

Histopathology showed that every rectal lesion was a mucinous adenoma with high-grade dysplasia. This is highly unusual, as mucinous adenomas are rare overall and even less common in the rectum. Finding this pattern repeatedly within one extended family highlights the unique behavior of colorectal neoplasia in Bloom syndrome.

At six-month follow-up, colonoscopy confirmed no residual lesions in any patient. Due to their increased lifetime risk of both early and advanced colorectal cancer, All seven patients have since continued on annual colonoscopy surveillance.

This case series demonstrates how asymptomatic patients with Bloom Syndrome may experience the early development of significant colorectal lesions. The finding of rectal mucinous adenomas with high-grade dysplasia emphasizes how crucial routine screening colonoscopy is for this high-risk group. Early screening and timely endoscopic management remain essential cornerstones in preventing the progression of colorectal cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martinez CAR, Pinheiro LV, Rossi DH, Camargo MG, Ayrizono MLS, Leal RF Coy CSR. Adenocarcinoma of the Right Colon in a Patient with Bloom Syndrome. *Clinics (São Paulo)* 2008; 63 (3): 427–430. doi:10.1590/S1807-59322008000300023
- [2] German J. Bloom's syndrome. *Dermatologic Clinics* 1995; 13 (1): 7–18
- [3] Tikoo S., Sengupta S. Time to bloom. *Genome Integrity* 2010; 1 (1, article 14):. doi:10.1186/2041-9414-1-14
- [4] German J. Bloom's syndrome. XX. The first 100 cancers. *Cancer Genetics and Cytogenetics* 1997; 93 (1): 100–106. doi: 10.1016/S0165-4608(96)00336
- [5] Arora H., Chacon A.H., Choudhary S. et al. Bloom syndrome. *International Journal of Dermatology* 2014; 53 (7): 798–802. doi: 10.1111/ijd.12408

- [6] Morimoto W., Kaneko H., Isogai K., Kasahara K., Kondo N. Expression of BLM (the causative gene for Bloom syndrome) and screening of Bloom syndrome. *International Journal of Molecular Medicine* 2002; 10 (1): 95–99
- [7] Thomas E.R.A., Shanley S., Walker L., Eeles R. Surveillance and treatment of malignancy in bloom syndrome. *Clinical Oncology* 2008; 20 (5): 375–379

eP669 Mobile Endoscopy Training in Growing Emerging Markets: Multi-country Experience of a Mobile Training Centre Model

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DOI 10.1055/s-0046-1821996

Aims Gastrointestinal and liver diseases are a major cause of morbidity and mortality in growing emerging markets (Africa, Middle East, Eastern Europe), where endoscopy capacity and training opportunities remain limited [1, 2]. We describe the implementation and reach of a mobile endoscopy training centre deployed in these regions.

Methods We performed a descriptive analysis of activities delivered by a mobile endoscopy training centre since its inception. Programme records were reviewed to extract: (1) number and type of activities (lectures, workshops on simulators and live cases, fellowships, train-the-trainer courses); (2) numbers and professional profiles of participants; and (3) geographic coverage. We outline a collaboration in Kenya as an example of how the model can support a structured national endoscopy training programme.

Results Over the observation period, the mobile training centre delivered 442 activities and trained more than 8,000 healthcare professionals in gastrointestinal (GI) endoscopy. Faculty from 38 countries delivered activities across multiple centres in Africa, the Middle East and Eastern Europe, combining didactic teaching, simulation-based training and supervised patient procedures. The curriculum covered diagnostic and therapeutic GI endoscopy and quality- and safety-related topics. In Kenya, the model was adapted into a dedicated school of endoscopy with a target to train 100 healthcare workers in its first year.

Conclusions A mobile endoscopy training centre can support multi-country training and development of sustainable local programmes in growing and emerging markets. This model may complement existing initiatives by bringing structured, faculty-supported education directly to underserved regions; evaluation of learning and service outcomes is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mwachiro M, Topazian HM, Kayamba V, Mulima G, Ogutu E, Erkie M et al. Gastrointestinal endoscopy capacity in Eastern Africa. *Endosc Int Open* 2021; 9 (11): E1827–E1836. doi:10.1055/a-1551-3343
- [2] Wang Y, Tian K, Shi R, Gu A, Pennella M, Alberts L et al. Global burden of digestive diseases: a systematic analysis from 1990 to 2019. *Gastroenterology* 2023; 165 (2): 345–359. doi:10.1053/j.gastro.2023.05.050

eP670 Salvage EUS-Guided Gastrojejunostomy Using LAMS for Malignant Gastric Outlet Obstruction After Failed Surgical Gastrojejunostomy: First Three Cases Reported in Oman

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DOI 10.1055/s-0046-1821997

Abstract Text

Malignant gastric outlet obstruction (MGOO) is a complication of advanced gastrointestinal malignancies and contributes significantly to patient morbidity [1]. Traditionally, the two main modalities for treatment of MGOO were

endoscopic enteral stenting or a surgical-gastrojejunostomy via either an open or laparoscopic approach [2]. Surgical gastrojejunostomy has been the standard of care for the management of GOO for many years [3].

Endoscopic ultrasound-guided gastrojejunostomy (EUS-GJ) using lumen-apposing metal stents (LAMS) represent a break-through in therapeutic endosonography. In the palliative setting, EUS-GJ demonstrates promising clinical efficacy and fewer adverse events compared to the traditional duodenal stent and/or surgical gastrojejunostomy [4]. Current literature includes only limited case reports describing EUS-GJ following failure of a surgically created gastrojejunostomy due to anastomotic stricture or angulation rather than malignant obstruction.

Here we describe a case series of three elderly patients with stage IV pancreatic adenocarcinoma, all managed in a palliative setting, previously underwent laparoscopic gastrojejunostomy (GJ) for MGOO. The patients returned at a mean interval of 21 days, reporting vomiting, weight loss, and intolerance to oral intake. Endoscopy revealed a markedly angulated and severely narrowed GJ anastomosis, impassable even with a pediatric gastroscope, indicating functional failure of the surgical bypass.

The three patients underwent salvage EUS-GJ rather than repeat surgery. A nasobiliary-drain assisted free hand technique was used and placement of a (20x10mm) LAMS. Technical success was achieved in all procedures, with no adverse events reported.

Post-procedural recovery was uncomplicated in all patients. Oral liquids were initiated on the first day without difficulty. Stent patency was confirmed by barium study on the second day. Patients were subsequently advanced to a soft diet, with resolution of vomiting and a clear improvement in their oral intake. These cases demonstrate the feasibility, safety and significant early clinical benefit of this technique in a palliative oncology setting. They are the first series of salvage EUS-guided gastrojejunostomies performed in Oman.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Campbell C, Pawa R. EUS-guided gastrojejunostomy for management of malignant gastric outlet obstruction in a patient with Roux-en-Y anatomy. *VideoGIE* 2022; 7 (9): 324–326. doi:10.1016/j.vgie.2022.06.001
- [2] On W., Huggett M.T., Young A., Pine J., Smith A.M., Tehami N., Maher B., Pereira S.P., Johnson G., Parandhi B. Endoscopic ultrasound guided gastrojejunostomy in the treatment of gastric outlet obstruction: Multi-centre experience from the United Kingdom. *Surg. Endosc.* 2023; 37: 1749–1755
- [3] Fugazza A, Andreozzi M, Asadzadeh Aghdaei H, Insausti A, Spadaccini M, Colombo M, Carrara S, Terrin M, De Marco A, Franchellucci G et al. Management of Malignant Gastric Outlet Obstruction: A Comprehensive Review on the Old, the Classic and the Innovative Approaches. *Medicina* 2024; 60 (4): 638. doi:10.3390/medicina60040638
- [4] Krishnamoorthi R, Bomman S, Benias P et al. Efficacy and safety of endoscopic duodenal stent versus endoscopic or surgical gastrojejunostomy to treat malignant gastric outlet obstruction: systematic review and meta-analysis. *Endosc Int Open* 2022; 10 (6): E874. doi:10.1055/A-1794-0635

eP671V Endoscopic Removal of Migrated Mesh Sutures 26 Years After Restrictive Gastroplasty

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DOI 10.1055/s-0046-1821998

Abstract Text

Restrictive gastroplasty is now obsolete because of long-term complications, including late staple-line and foreign-body problems [1, 2]. A 52-year-old woman who underwent restrictive gastroplasty 26 years ago presented with recurrent vomiting and abdominal discomfort for months. Upper endoscopy revealed severe gastritis, marked esophageal and distal gastric pouch dilatation, and intraluminally migrated mesh sutures at the anastomotic site. We demonstrate stepwise endoscopic release and retrieval of three migrated mesh sutures

using electrocautery and endoscopic scissors, without immediate complications. The patient was monitored for 24 hours without adverse events and remained asymptomatic at six-week follow-up on proton pump inhibitor and dietary counselling. Our case highlights endoscopic mesh removal as a minimally invasive alternative to revisional surgery [3].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/247b5313-51a5-4c27-94a3-c83679dc18df/Uploads/19978_Case_Video%20Up.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Evans LA, Castillo-Larios R, Cornejo J, Elli EF. Challenges of Revisional Metabolic and Bariatric Surgery: A Comprehensive Guide to Unraveling the Complexities and Solutions of Revisional Bariatric Procedures. *J Clin Med* 2024; 13 (11): 3104
- [2] Buckwalter JA, Herbst CA. Perioperative complications of gastric restrictive operations. *The American Journal of Surgery* 1983; 146 (5): 613–8
- [3] Bruzzi M, Voron T, Zinzindohoue F, Berger A, Douard R, Chevallier JM. Revisional single-anastomosis gastric bypass for a failed restrictive procedure: 5-year results. *Surgery for Obesity and Related Diseases* 2016; 12 (2): 240–5

eP672 Unnecessary Surgery for Benign Polyps in a Population Screening Programme: Unveiling Territorial Inequities

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DOI 10.1055/s-0046-1821999

Aims Colorectal cancer (CRC) screening has increased the detection of benign polyps. Although most can be safely removed endoscopically, some patients are still referred for surgery due to technical or organizational limitations, resulting in avoidable overtreatment. This study aimed to determine the rate of avoidable surgery within the Catalan CRC Screening Program and to assess territorial variability in a FIT-based screening context.

Methods A retrospective observational study was conducted including all participants aged 50–69 years with a positive fecal immunochemical test (FIT) who underwent colonoscopy between 2010 and 2020. Data from the Catalan CRC Screening Registry were cross-linked with the Catalan Inpatient Minimum Basic Data Set (CMBD-AEA) using ICD-9 and ICD-10 codes to identify colorectal surgeries performed within 12 months after colonoscopy. Cases with CRC stage > pT1 or surgeries unrelated to screening were excluded. Surgery rates were calculated overall and by geographic area, classified as urban or rural.

Results Among 93,035 colonoscopies (mean age 59.6 ± 5.7 years; 44.3% women), 1,427 surgeries were performed (1.53%; 95% CI 1.46–1.61), including 893 procedures for benign lesions (0.96%; 95% CI 0.90–1.02). Across territories, five areas showed rates close to the Catalan average, whereas four deviated markedly, with surgery for benign lesions ranging from <0.6% in highly specialized urban areas to 3–4% in rural regions. Colonoscopy-related complications occurred in 625 procedures (0.67%; 95% CI 0.62–0.73), of which 27 (0.03%) required surgery. CRC-pT1 was diagnosed in 1,378 examinations (1.48%; 95% CI 1.41–1.56), with 516 patients undergoing surgery (0.55%; 95% CI 0.51–0.60).

Conclusions A non-negligible proportion of surgeries following CRC screening are performed for benign lesions, reflecting territorial inequities and opportunities for improvement. Although the overall rate of overtreatment is low, optimization through advanced endoscopic training and structured referral pathways remains a key goal.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP673 Impact of a Standardized Simulator-Based Colonoscopy Training Program on Self-Reported Confidence: A Multi-country Pre-Post Study

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DOI 10.1055/s-0046-1822000

Aims High-quality colonoscopy depends on adequate training. This study aimed to evaluate the impact of a standardized simulator-based colonoscopy training program on low- to moderately experienced gastroenterologists' self-reported confidence, navigation comfort, polyp-detection proficiency, familiarity with quality indicators, and perceived diagnostic and therapeutic challenges three months after the training.

Methods This pre-post study enrolled 218 participants from 13 countries with low to moderate colonoscopy experience. All attended a standardized two-day training course combining lectures with hands-on practice on the Mikoto simulator (R ZERO Inc., Japan) across four difficulty stations (Easy, Standard, Advanced 1, Advanced 2) simulating increasing difficulty and realistic tasks such as cecal intubation and loop management. Pre-course and three-month post-course surveys assessed self-reported colonoscopy confidence, navigation comfort, polyp-detection proficiency, familiarity with quality indicators, and perceived diagnostic and therapeutic challenges. All self-reported competencies were rated on a 3-point scale (1 = low, 2 = moderate, 3 = high). Paired analyses were restricted to the 153 participants (70.2%) who completed both surveys. Attrition bias was evaluated by comparing baseline scores between responders (n = 153) and non-responders (n = 65). Ordinal outcomes were analyzed using the Wilcoxon signed-rank test and binary challenge variables using

McNemar's test. Effect-modification analyses were performed according to baseline colonoscopy volume and prior endoscopy training. Statistical significance was set at $p < 0.05$.

Results All self-reported competencies increased significantly after training. Confidence scores shifted upward, with the median remaining at 2 but the distribution moving from (IQR 1–2) to (IQR 2–3), navigation comfort from 1 (IQR 1–2) to 2 (IQR 1–3), polyp-detection proficiency from 2 (IQR 2–3) to 3 (IQR 3–3), and familiarity with quality indicators from 2 (IQR 1–3) to 3 (IQR 3–3) (all $p < 0.0001$). Frequency-shift analyses showed upward transitions: 47.7% improved in confidence, 44.4% in navigation, 36.6% in polyp-detection proficiency, and 51.6% in quality-indicator familiarity, with rare declines (2.6%). Self-reported diagnostic challenges decreased from 80.9% to 38.8%, and therapeutic challenges from 92.1% to 63.2% ($p < 0.0001$). Attrition bias assessment showed no meaningful baseline differences between responders and non-responders. Participants who performed < 50 prior colonoscopies showed greater improvement in confidence than those who performed ≥ 51 ($p = 0.0003$), and those without prior formal training showed greater improvement than trained participants ($p = 0.0035$). Navigation changes were not significantly different across subgroups.

Conclusions Participation in a standardized simulation-based colonoscopy training course was associated with higher self-reported confidence, perceived procedural proficiency, and fewer perceived diagnostic and therapeutic challenges three months later. Greater gains among less experienced and untrained participants support the value of structured simulation in early endoscopy training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP674V EUS-free LAMS recanalization of a complete ileal J-pouch stenosis restoring intestinal continuity in a patient with Ulcerative Colitis

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DOI 10.1055/s-0046-1822001

Abstract Text

We report an EUS-free LAMS-assisted recanalization of a complete J-pouch afferent-limb stenosis. A 45-year-old man with ulcerative colitis and IPAA had a diverting ileostomy due to a postoperative anastomotic fistula and chronic pouchitis. Endoscopy demonstrated total occlusion of the pouch with no identifiable orifice. Through the stoma injection of saline–methylene blue into the efferent limb resulted in dye appearance within the pouch, confirming a fistulous communication. A guidewire was advanced and a 16 × 20-mm electrocautery-enhanced LAMS was deployed across the stenosis under fluoroscopic control using a colonoscope. LAMS deployment achieved immediate recanalization of the afferent limb and restoration of pouch continuity. Passage through the stent allowed inspection of the afferent limb and confirmed a patent endoscopic re-anastomosis.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/64c60d96-6734-4ced-9e68-9355e4d629b1/Uploads/19978_recanalization_7.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP675V Objective and Continuous Assessment of Bowel Preparation Quality Using Deep Learning-Based Scene Segmentation

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DOI 10.1055/s-0046-1822002

Problem to solve Bowel preparation quality is a key determinant of colonoscopy effectiveness, influencing mucosal assessment and lesion detection. The Boston Bowel Preparation Scale (BBPS) is a widely used scoring system, yet its categorical and subjective nature limits granularity and consistency. This study aims to develop and validate a deep learning model for automated, objective, and continuous assessment of bowel cleanliness using real-time image analysis.

Innovation A retrospective dataset of colonoscopy videos from nine international centres ($n = 1128$; 2020–2022; white light imaging) was used to train a DeepLabV3+ model¹ for seven-class scene segmentation (stool, water, clean mucosa, instruments, borders, shadows, glare). For validation, the trained model was applied to an independent single-centre dataset of colonoscopy videos ($n = 428$; 2023–2024; white light and narrow band imaging). The model processed these videos by extracting one frame per second and generating a segmentation output for each extracted frame. From these outputs, we derived AI cleanliness metrics: frame-wise fractions of stool, water, and clean mucosa, and a novel Normalised Stool Index (NSI), defined as the proportion of the total mucosa labelled as stool, which is less biased by artifacts than the stool fraction. All metrics were computed only from instrument-free withdrawal frames, matching BBPS scoring conventions, and averaged per procedure. Associations between total BBPS scores from two raters (R1, R2; quadratic weighted $\kappa = 0.22$; inter-rater $p = 0.221$; weak inter-rater reliability) and mean stool, water, and clean mucosal fractions, as well as NSI, were assessed (Spearman's ρ with false-discovery-rate correction). Clinical relevance was examined by correlating mean NSI, water fraction, and Δ NSI (difference between withdrawal and insertion) with lesion count and minimum lesion size, and by assessing the ability of the AI cleanliness metrics to predict the presence of at least one adenoma (AUC and logistic regression). Expected behaviour was assessed by examining NSI changes between scope insertion and withdrawal and around automatically detected rinsing events (paired Wilcoxon signed-rank test).

Results The DeepLabV3+ model achieved strong segmentation performance (sensitivity 92.7%, specificity 98.1%, mean Dice 93.8%), enabling reliable extraction of the AI cleanliness metrics. Withdrawal NSI showed the strongest association with BBPS, with significant correlations for both raters (R1: $\rho = -0.21$; R2: $\rho = -0.12$; both $p < 0.02$). Stool fraction showed a similar pattern (R1: $\rho = -0.19$; R2: $\rho = -0.12$; both $p < 0.02$). Water fraction correlated positively with BBPS for R2 only ($p = 0.17$; $p < 0.001$), and clean mucosal fraction showed no significant association. Cleanliness metrics showed no significant correlations with lesion count or minimum lesion size (all $|p| < 0.12$; $p > 0.10$), and showed no discriminative ability for adenoma presence prediction (AUC ≈ 0.5). Logistic regression yielded non-significant odds ratios (OR) for all tested metrics (ORs 0.92–1.12; $p > 0.2$). NSI decreased significantly after rinsing events (mean Δ NSI = -0.77% , $p < 0.001$) and improved between insertion and withdrawal (mean Δ NSI = -1.59% , $p < 0.05$) [1].

Conclusions The segmentation model performed strongly across all classes, enabling reliable extraction of the AI cleanliness metrics. NSI had the strongest association with BBPS, weaker trends were demonstrated for stool and water fractions. These modest correlations are expected given BBPS's limited inter-rater agreement and its selective, segment-based scoring, which does not account for the effects of rinsing. Clinical outcome analysis was constrained by the cohort's high adequacy rate (98 %) and the use of procedure-level averages, which cannot reflect visibility at specific lesion sites. The AI cleanliness metrics behaved as expected, with NSI improving from insertion to withdrawal and decreasing in response to rinsing.

Together, these findings show that the novel AI system provides a continuous and detailed quantification of bowel cleanliness, capturing real-time changes and offering scene context that may support automated reporting and enhance downstream tools such as polyp detection. Further work in procedures with greater variability in preparation quality is needed, but the present results establish a strong foundation for more objective, reproducible, and clinically meaningful cleanliness assessment.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/24656800-c7b6-45aa-9b6e-f1620251ed34/Uploads/19990_Screen_Recording%202025-12-01%20at%2017-15-45.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Liang-Chieh Chen, Yukun Zhu, George Papandreou, Florian Schroff, Hartwig Adam. Encoder-Decoder with Atrous Separable Convolution for Semantic Image Segmentation, Proceedings of the European Conference on Computer Vision (ECCV) 2018; pp 801–818

eP676V VacStent. Enhancing frontiers

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DOI 10.1055/s-0046-1822003

Problem to solve Anastomotic leak after colorectal surgery

Innovation In this context, we describe two consecutive cases of colorectal anastomotic leak managed with VACStent without proximal diversion, providing practical insights into patient selection, technical nuances, the value of synchronized internal–external drainage, and determinants of successful therapy [1–7].

Results A comparative summary of the main clinical, anatomical, and technical differences between the two cases is presented in the table below (► Table 1).

Conclusions VACStent appears to be a promising minimally invasive option for selected patients with complex colorectal anastomotic leaks, even without proximal diversion. In these cases, VACStent preserved intestinal continuity and avoided major reinterventions, including stoma creation. Technical success depends on precise placement, early vacuum stability, and, when indicated, synchronized external drainage. Larger comparative studies are needed.

► Table 1

Variable	Case 1	Case 2
Sex / Age	Female, 66 years	Male, 71 years
BMI	60 kg/m ²	35 kg/m ²
ASA	IV	III
Initial surgery	Open Hartmann for presumed perforated diverticulitis (final pathology: perforated adenocarcinoma). Complicated by prolonged admission and pulmonary embolism.	Open Hartmann for prepyloric perforation and perforated diverticulitis. Early postoperative complications included colostomy necrosis and evisceration.
Restoration of continuity	Laparoscopic; extensive adhesiolysis; parastomal hernia repair (no mesh)	Open; antegrade colonic lavage; colorectal anastomosis ~10 cm from anal verge. Prior mesh in situ.
Postoperative complications	Early enteric leak, subcutaneous infection, and evisceration	No early complications after restoration of continuity
Time to leak	30 days	3 months
Defect type	< 1 cm contained leak with associated collection	Late fistula with chronic cavity in the space of Retzius and subcutaneous extensions
Fistulous opening	Small	Small, partially epithelialized
Proximal diversion	No	No
Previous treatments	None	15 days of TPN; wound care; failed OTSC attempt
Interval to VACStent	Immediate	After outpatient follow-up and readmission
VACStent cycles	1 cycle	4 cycles (7 + 7 + 3 + 3 days)
Negative pressure	–120 mmHg	–300 mmHg initially (pressure-related ulcer), then –120 mmHg
Additional techniques	None	External NPWT ("sandwich technique") in cycles 3 and 4
Tolerance / transit	Well tolerated; transit preserved	Initial disturbance; later normalization
Confirmation of closure	Endoscopy + fluoroscopy	Endoscopy + contrast-enhanced CT
Final outcome	Complete closure	Complete closure
Follow-up	6 months, no recurrence	3 months, no recurrence

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/3bd402ff-2257-4efb-8275-555c47c3c16c/Uploads/19990_VacStent-Expanding%20frontiers.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ramser M, Nennstiel S, Mueller M, Schlag C, Turina M. Vacuum-Assisted Self-Expanding Stents in Colorectal Surgery: Early Experiences With a Novel Tool. *Surg Endosc*. 2025;
- [2] Heiss MM, Lange J, Knievel J et al. Treatment of Anastomotic Leak in Colorectal Surgery by Endoluminal Vacuum Therapy With the VACStent Avoiding a Stoma – A Pilot Study. *Langenbecks Arch Surg* 2024; 409: 234
- [3] Talboom K, Greijdanus NG, Ponsioen CY et al. Endoscopic Vacuum-Assisted Surgical Closure (EVASC) of Anastomotic Defects After Low Anterior Resection for Rectal Cancer; Lessons Learned. *Surg Endosc* 2022; 36 (11): 8280–8289
- [4] Kühn F, Schardey J, Wirth U et al. Endoscopic Vacuum Therapy for the Treatment of Colorectal Leaks – A Systematic Review and Meta-Analysis. *Int J Colorectal Dis* 2022; 37: 283–292
- [5] Kühn F, Janisch F, Schwandner F et al. Comparison Between Endoscopic Vacuum Therapy and Conventional Treatment for Leakage After Rectal Resection. *World J Surg* 2020; 44 (4): 1277–1282
- [6] Jagielski M, Piątkowski J, Jarczyk G, Jackowski M. Transrectal Endoscopic Drainage With Vacuum-Assisted Therapy in Patients With Anastomotic Leaks Following Rectal Cancer Resection. *Surg Endosc* 2022; 36 (2): 959–967
- [7] Abdalla S, Cotte E, Epin A et al. Short-Term and Long-Term Outcome of Endoluminal Vacuum Therapy for Colorectal or Coloanal Anastomotic Leakage: Results of a Nationwide Multicenter Cohort Study From the French GRECCAR Group. *Dis Colon Rectum* 2020; 63 (3): 371–380

eP677 A rare pancreatic Schwannoma diagnosed by EUS-FNB

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DOI 10.1055/s-0046-1822004

Abstract Text

A 40-year-old woman in good clinical condition presented with recurrent abdominal pain. Abdominal computer tomography scan revealed an oval-shaped neoplasm measuring 2.5 x 3.2 cm with regular margins, located between the pancreatic head region, the gallbladder, and the first portion of the duodenum. The lesion exhibited a supradense fluid attenuation, predominantly peripheral enhancement with a partial spoke-wheel pattern, and caused mild compression of the duodenal lumen. Linear endoscopic ultrasound (EUS) showed a solid lesion measuring 2.6 x 2.7 cm with well-defined, regular margins and predominantly iso-hypoechoic texture, containing multiple internal anechoic areas. Following the intravenous administration of contrast agent, contrast enhancement was observed along with the appearance of some hyperechoic areas. Two passes with a 22-gauge needle were performed for histology of the solid component. Histology of the fine needle biopsy revealed a benign pancreatic schwannoma with immunostaining for S100 and Ki67 1-2%. Pancreatic schwannoma is an extremely rare tumor that originates from Schwann cells of the peripheral nerve sheaths within the pancreas. Less than 1% of pancreatic tumors are of mesenchymal origin, and among these, schwannomas account for only a small fraction. Malignant degeneration is rare but may be suspected in the presence of tumor size greater than 6.9 cm, vascular involvement, or invasion of adjacent organs. Diagnosis of pancreatic schwannoma is challenging due to its tendency to mimic other lesions of the pancreas [1]. EUS-FNB with S100 immunostaining should be considered the best preoperative diagnostic approach [2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Barresi L, Tarantino I, Granata A, Traina M. Endoscopic ultrasound-guided fine-needle aspiration diagnosis of pancreatic schwannoma. *Dig Liver Dis*.

2013; 45 (6): 523. doi:10.1016/j.dld.2013.01.008 Epub 2013 Feb 12 PMID: 23410733

- [2] Ma Y, Shen B, Jia Y, Luo Y, Tian Y, Dong Z, Chen W, Li Z, Feng ST. Pancreatic schwannoma: a case report and an updated 40-year review of the literature yielding 68 cases. *BMC Cancer*. 2017; 17 (1): 853. doi:10.1186/s12885-017-3856-6 PMID: 2241452 PMID: PMC 573 1208

eP678 Survival of hospitalized patients undergoing percutaneous endoscopic gastrostomy is independent of its indication: six-year experience of a center

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DOI 10.1055/s-0046-1822005

Aims To present the experience regarding the epidemiological characteristics and survival of patients who underwent percutaneous endoscopic gastrostomy (PEG) in our unit.

Methods We performed a retrospective analysis of prospectively collected data from patients who underwent PEG placement between (01/06/2019-01/06/2025). Demographic and clinical characteristics, survival (day 28, 3 months, 6 months and overall) and cause of death were recorded. The primary endpoints were the indication for PEG placement, time to death after PEG and death within 3 months following PEG placement.

Results A total of 119 patients [72 (60.8%) women, mean age 77.7 ± 14.5 years] underwent PEG according to European guidelines indications. The most common indication was dementia-related dysphagia (50.8%), followed by stroke (10.8%) and Parkinson's disease (10.2%). No complications occurred during PEG placement. Overall, survival data (day 28, 3 months and 6 months) were available for 114/119 (95.7%) patients. Median survival time did not differ significantly between indications for PEG placement [135 days 95% CI (37.9-232.1) for dementia, 126 CI 95% (39.7-216.2) for stroke and 102 days CI 95% (36.1-132.3) for Parkinson's disease, p = 0.27]. Survival rates at day, 28, 3 months, and 6 months also did not differ significantly across indications for PEG placement (p = 0.72, p = 0.36, and p = 0.31, respectively).

Conclusions Patient survival after PEG placement does not differ based on the underlying indication for the procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP679 Implementation of a dedicated reporting system for measuring endoscopy quality in the endoscopic unit of a tertiary hospital

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DOI 10.1055/s-0046-1822006

Aims Different quality indicators have been proposed by the European Society of Gastrointestinal Endoscopy (ESGE) guidelines, to measure and evaluate quality in colonoscopy and ERCP. In this study, we aimed to assess the ability to evaluate these performance measures following the introduction of their mandatory documentation within a dedicated reporting system in a tertiary hospital endoscopic unit.

Methods We retrospectively reviewed the electronic database of the Gastroenterology Department of a tertiary hospital and retrieved all colonoscopy (n = 2824) and ERCP reports (n = 453) performed between 30/6/2024 and 1/7/25. ESGE recommended quality indicators were assessed for both procedures.

Results The reporting system enabled systematic recording and measurement of the following colonoscopy quality indicators: adequate bowel preparation (Boston Bowel Preparation Scale [BBPS score ≥ 6]) 93.4% (95%CI 92.3%-94.5%), indication for colonoscopy 95.8% (95%CI 95%-96.5%), cecal intubation rate: 96.2% (95%CI 95.4%-97%), Adenoma detection rate (ADR) based on optical diagnosis 37.7% (95%CI 35.4%-39.9%), polyp detection rate (PDR): 45.3% (95%CI 43%-47.6%), appropriate polypectomy technique 94.1% (95%CI 92.7%-95.4%). However although the reporting system had the capacity to capture additional indicators specifically: complication rates, patients experience and appropriate post-polypectomy surveillance, these fields were not completed by endoscopists, preventing extraction analysis of these measures. For ERCP the following performance measures were measurable: bile duct cannulation rate 92.1% (95%CI 89.6%-94.5%), clearance of common bile duct stones < 10mm, 91.1% (95%CI 86%-96.1%), stent placement in biliary obstruction 95.9% (95%CI 92.2%-98.9%). Despite the system's ability to record on other indicators including adequate antibiotics prophylaxis before ERCP, ERCP-related complications and post-ERCP pancreatitis, these fields were not consistently completed by the endoscopists, preventing extraction analysis of these measures.

Conclusions Standardized monitoring of quality indicators for endoscopic procedures (colonoscopy and ERCP) has been incorporated into the electronic database system of the Endoscopy Unit as mandatory fields. Making this fields a prerequisite for report completion by the operating endoscopist, represents an effective strategy for systematically capturing, monitoring and assessing quality indicators. Implementation of this process is expected to markedly improve the quality of services provided and enhance patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP680 Technical and Clinical Evaluation of a Novel Slim Therapeutic Gastroscope for Third-Space Endoscopic Procedures: Feasibility, Subjective Workload, and System Usability Assessment (The Slim Scop3 Trial)

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DOI 10.1055/s-0046-1822007

Aims Third-space endoscopy, including peroral endoscopic myotomy (POEM) and endoscopic submucosal dissection (ESD), has become an established therapeutic option for various gastrointestinal disorders. A newly developed slim therapeutic gastroscope aims to improve maneuverability and, provide easier access to the submucosal space but also to enhance ergonomic aspects of tedious therapeutic procedures. The aim of this study was to evaluate the subjective workload and usability of the novel slim therapeutic gastroscope during third space procedures. Secondary outcomes included technical and clinical performance as well as adverse events.

Methods This was a prospective, single-arm, single-center study comprising 30 patients undergoing third-space endoscopy in a high-volume center in Germany. Subjective workload and usability were assessed with the NASA-Task load index (NASA-TLX) and the System Usability Score (SUS), respectively. Clinical outcomes and adverse events were recorded prospectively (► **Table 1**).

Results The slim gastroscope showed a low NASA-TLX and high SUS score which correlates with a low subjective workload and high usability. POEM showed a tendency towards lower NASA-TLX and higher SUS compared to ESD. For ESD, en-bloc and curative R0 resection rate was 100%. No device-related adverse events occurred.

► **Table 1** Summarize the NASA-TLX and SUS scores for all cohorts, as well as E- and Z-POEM, G-POEM and ESD.

		NASA-TLX	SUS
Total	n: 30	1.5 $\pm$ 1.1	92.9 $\pm$ 7.1
E- and Z-POEM	n: 15	1.2 $\pm$ 0.7	95 $\pm$ 6.1
G-POEM	n:6	1.7 $\pm$ 1	92.7 $\pm$ 8.8
ESD	n:9	1.8 $\pm$ 1.5	89.4 $\pm$ 2.1

The NASA-TLX was very low across the cohorts showing a low subjective workload with the new endoscope with a tendency towards lower score in the ESD cohort compared to E- and Z-POEM. The SUS was very high across the cohorts signaling a high usability of the scope with again higher score for POEM compared to ESD.

Conclusions A novel slim gastroscope offers high usability with a low subjective workload for third space procedures without compromising clinical performance. The slim gastroscope has the potential to reduce the ergonomic strain on endoscopists during complex therapeutic interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP681V Horror? Vacui!

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DOI 10.1055/s-0046-1822008

Abstract Text

A 28-year-old male with long-standing GERD were referred to Surgery. Laparoscopic Nissen-Rosetti fundoplication was performed. On postoperative day 5 (POD), the patient went to the Emergency department with retrosternal pain and fever. A CT scan revealed an air-fluid collection in the surgical site. Surgical revision was performed, and drains were placed. Finally, on POD 7, due to suspected perforation, a new endoscopic examination revealed a perforation point in the distal esophagus. The patient's condition worsened, requiring admission to the ICU with respiratory distress. A Vac Stent, with an additional replacement, was placed in the distal esophagus using standard technique. The patient experienced significant improvement and the perforation was resolved in a minimally invasive way [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/3188fc10-698d-48ea-bffa-545a9b58b216/Uploads/19978_Horror_Vacui!.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lange J, Kähler G, Bernhardt J, Knievel J, Dormann A, Hügler U, Eisenberger CF, Heiss MM. The VACStent trial: combined treatment of esophageal leaks by covered stent and endoscopic vacuum therapy. *Surg Endosc*. 2023; 37 (5): 3657–3668. doi:10.1007/s00464-023-09861-7 Epub 2023 Jan 13 PMID: 36639580 PMID: PMC10156910
- [2] Dell'Anna G, Fanti L, Fanizza J, Barà R, Barchi A, Fasulo E, Elmore U, Rosati R, Annese V, Laterza L, Fuccio L, Azzolini F, Danese S, Mandarino FV. VAC-Stent in the Treatment of Post-Esophagectomy Anastomotic Leaks: A New "Kid on the Block" Who Marries the Best of Old Techniques-A Review. *J Clin Med*. 2024; 13 (13): 3805. doi:10.3390/jcm13133805 PMID: 38999371 PMID: PMC11242239

eP682 Obesity Management and Health Outcomes: an umbrella review of systematic reviews and meta-analyses of randomised controlled trials

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DOI 10.1055/s-0046-1822009

Aims This umbrella review aimed to synthesize evidence from systematic reviews and meta-analyses of randomized controlled trials (RCTs) evaluating the effectiveness, safety, and metabolic outcomes of bariatric surgery, endoscopic procedures, and GLP-1 receptor agonists (GLP-1RAs).

Methods Eligible studies included systematic reviews and meta-analyses of RCTs involving adults with obesity (BMI ≥ 30 kg/m²) and assessing at least one of the three intervention classes. Primary outcomes included changes in body weight, BMI, and waist circumference; secondary outcomes included glycemic control, lipid profile, quality of life, and adverse events.

Results A total of 44 systematic reviews with meta-analyses were included, encompassing over 370,000 participants. Most reviews were rated as critically low (59.1 %) or low (29 %) quality, with 20 % using the GRADE approach. Bariatric surgery demonstrated the largest and most durable reductions in body weight (mean differences up to -25.9 kg) and the highest rates of type 2 diabetes remission (60–80 %). GLP-1RAs, particularly semaglutide, showed consistent, dosedependent weight loss (up to -15 %) and significant improvements in glycemic indices. Endoscopic interventions, such as intragastric balloons and endoscopic sleeve gastropasty, achieved intermediate weight loss (4–12 %) with a favorable safety profile.

Conclusions Bariatric surgery remains the most effective option for substantial weight and metabolic improvements, particularly in severe or refractory obesity. GLP-1RAs offer a potent non-surgical alternative, while endoscopic therapies provide a minimally invasive option for patient's ineligible for or unwilling to undergo surgery. A tiered, individualized approach to obesity treatment; guided by intervention efficacy, safety, and patient characteristics, supported by the current evidence base.

Conflicts of Interest Roberta Maselli is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific. Cesare Hassan is a consultant for Alpha-Sigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax. Alessandro Repici is a consultant for Medtronic, ERBE, Fujifilm and Olympus.

eP683 Effectiveness of same-session endoscopic ultrasound and endoscopic retrograde cholangiopancreatography for diagnosis and symptom palliation in suspected distal malignant biliary obstruction: a single center experience

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Aims In case of suspicious malignant distal biliary obstruction the most common clinical presentation is jaundice so that pathological confirmation of malignancy and biliary drainage for symptoms palliation are required. Endoscopic ultrasound (EUS) represents the preferred diagnostic technique while endoscopic retrograde cholangiopancreatography (ERCP) is the procedure of choice for drainage. Tissue acquisition can be obtained by means of fine-needle aspiration (FNA) or biopsy (FNB), brushing and/or bile aspiration cytology. The simultaneous EUS and ERCP approach may offer a diagnostic and therapeutic solution using a single sedation/anesthesia, reducing hospital stay, offering a rapid relief of symptoms (jaundice, cholangitis) and a early tissue diagnosis leading to faster oncological planning. Aim of this study is to explore in a real-world setting feasibility and diagnostic effectiveness of EUS-ERCP approach for highly suspicious pancreatobiliary malignancies, valuing the individual role of different tissue acquisition techniques [1–5].

Methods All patients underwent to EUS and ERCP in the same-session in our Endoscopic Department for jaundice in suspicious malignant distal biliary stricture between December 2023 and June 2025 were considered for retrospective analysis. Patients' and procedure characteristics were abstracted. Diagnostic accuracy of each individual techniques and of their combination were analysed.

Results 44 patients resulted eligible (26 M, 18 F, Median age 67.7 IQR 62.8–77.4). Final diagnosis was pancreatic adenocarcinoma in 42/44 cases (95.5 %) and cholangiocarcinoma in 2/44 cases (4.5 %). FNB was carried out in 43/44 (97.7 %), brushing in 43/44 (97.7 %) and bile aspiration cytology in 30/44 cases (68.2 %). FNB, performed with the help of macroscopic on site evaluation (MOSE) by the endoscopist, achieved an accuracy of 90.7 %, with sensitivity and specificity respectively 90.48 % and 100 %. Brushing and bile cytology achieved an accuracy, respectively, of 68.18 % and 70 %. Combining all the diagnostic techniques it was obtained a high accuracy (93.33 %, 95 %CI 81.73 %-98.60 %) with sensitivity 93.18 %, specificity 100 % and negative likelihood ratio 0.07 (95 %CI 0.02–0.20). In 3/44 (6.8 %) cases none of these techniques was diagnostic for inadequate samples, requiring a subsequent procedure (EUS in all cases), with success. Simultaneous endoscopic drainage was performed in all cases with ERCP and placement of plastic or self-expandable metal stents. Previous EUS-FNB did not impaired technical success of biliary cannulation. Median time to chemotherapy or to surgery was 27.8 days (IQR, 15–55). No major adverse events occurred, only in 1 case post-ERCP pancreatitis delayed the start of chemotherapy.

Conclusions Same session EUS-guided and ERCP-guided tissue sampling with biliary drainage for symptoms palliation in real world is feasible and safe in case of distal malignant biliary obstruction. It contributes to reduce hospitalization and access time to oncological therapies and should be considered as a standard of clinical practice. In the context of neoplasms with a high cancer-related mortality, combination of sampling techniques may increase significantly diagnostic yields, reducing the need of further procedures (which cause a delay in starting treatments) and, in fact, having a positive impact on disease-specific survival.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kawakubo K, Kawakami H, Kuwatani M et al. Safety and utility of single-session endoscopic ultrasonography and endoscopic retrograde cholangiopancreatography for the evaluation of pancreatobiliary diseases. *Gut Liver* 2014; 8 (3): 329–332. doi:10.5009/gnl.2014.8.3.329

- [2] Facciorusso A, Chandan S, Gkolfakis P et al. Do biliary stents affect EUS-Guided tissue acquisition (EUS-TA) in solid pancreatic lesions determining biliary obstruction? A literature review with meta-analysis. *Cancers (Basel)* 2023; 15 (6): 1789. doi:10.3390/cancers15061789
- [3] Tarantino I, Barresi L, Di Pisa M et al. Simultaneous endoscopic ultrasound fine needle aspiration and endoscopic retrograde cholangio-pancreatography: evaluation of safety. *World J Gastroenterol* 2007; 13 (28): 3861–3863. doi:10.3748/wjg.v13.i28.3861
- [4] Jo JH, Cho CM, Jun JH, Chung MJ, Kim TH, Seo DW, Kim J, Park DH Research Group for Endoscopic Ultrasonography in KSGE. Same-session endoscopic ultrasound-guided fine needle aspiration and endoscopic retrograde cholangiopancreatography-based tissue sampling in suspected malignant biliary obstruction: A multicenter experience. *J Gastroenterol Hepatol*. 2019; 34 (4): 799–805. doi:10.1111/jgh.14528 Epub 2018 Nov 21 PMID: 30378169
- [5] Crinò SF, Zorzi A, Taviani P, De Pretis N, Facciorusso A, Dhar J, Samanta J, Sina S, Manfrin E, Frulloni L, Conti Bellocchi MC. Same versus separate sessions of endoscopic ultrasound-guided fine-needle biopsy and endoscopic retrograde cholangiopancreatography for distal malignant biliary obstruction: a propensity score-matched study. *Expert Rev Gastroenterol Hepatol*. 2024; 18 (9): 551–559. doi:10.1080/17474124.2024.2399176 Epub 2024 Sep 2 PMID: 39222013

eP684 Clinical Predictors of Malignancy in EUS-Evaluated Pancreatic Lesions: A Five-Year Saudi Cohort Study

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DOI 10.1055/s-0046-1822011

Aims his study aimed to characterize the clinicopathological features of pancreatic lesions in a Saudi cohort, identify clinical predictors of malignancy, and evaluate the diagnostic performance of EUS [1–40].

Methods We conducted a retrospective analysis of 351 patients who underwent EUS for pancreatic lesions at a tertiary center in Riyadh, Saudi Arabia, from 2019 to 2023. We collected data on patient demographics, clinical presentation, and imaging findings. The primary outcome was a final diagnosis of benign versus malignant disease. Multivariate logistic regression was used to identify independent predictors of malignancy.

Results A final diagnosis was established in 237 patients, of whom 117 (49%) had malignant lesions. In univariate analysis, the presence of a solid lesion was the strongest predictor of malignancy (OR 189.0, 95% CI 72.7–571.0). In a multivariate model of clinical factors, weight loss (OR 9.38, 95% CI 3.82–26.0), jaundice (OR 3.34, 95% CI 1.19–10.5), and increasing age (OR 1.05, 95% CI 1.03–1.08) were independent predictors of malignancy. The visual impression on EUS demonstrated a high specificity of 98% (95% CI 0.94–1.00) and a negative predictive value (NPV) of 97% (95% CI 0.93–0.99) for diagnosing malignancy.

Conclusions In this large Saudi cohort, the classic clinical predictors of weight loss, jaundice, and older age remain alarming indicators of malignancy. EUS is a highly accurate diagnostic modality, with excellent specificity and NPV, making it an indispensable tool for confidently ruling out pancreatic cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Chatterjee A, Shah J Role of Endoscopic Ultrasound in Diagnosis of Pancreatic Ductal Adenocarcinoma. *Diagnostics* 2023; 14 (1): 78. doi:10.3390/diagnostics14010078
- [2] Yang D, MoezArdalan K, Collins DP, Chauhan SS, Draganov PV, Forsmark CE, Wagh MS Predictors of Malignancy in Patients With Suspicious or Indeterminate Cytology on Pancreatic Endoscopic Ultrasound-Guided Fine-Needle Aspiration: A Multivariate Model. *Pancreas* 2014; 43 (6): 922–926. doi:10.1097/MPA.0000000000000157

- [3] Meijer OLM, Weersma RK endoscopic ultrasonography in suspected pancreatic malignancy and indecisive Ct. 2010; 68 (9):
- [4] Rogowska JO, Durko Ł, Malecka-Wojcieszko E The Latest Advancements in Diagnostic Role of Endosonography of Pancreatic Lesions. *JCM* 2023; 12 (14): 4630. doi:10.3390/jcm12144630
- [5] Muthusamy VR, Chandrasekhara V, Acosta RD, Bruining DH, Chathadi KV, Eloubeidi MA, Faulx AL, Fonkalsrud L, Gurudu SR, Khashab MA et al The role of endoscopy in the diagnosis and treatment of cystic pancreatic neoplasms. *Gastrointestinal Endoscopy* 2016; 84 (1): 1–9. doi:10.1016/j.gie.2016.04.014
- [6] Singh S, Chandan S, Vinayek R, Dhar J, Samanta J, Capurso G, Boskoski I, Spada C, Machicado JD, Crinò SF et al. Endoscopic techniques for the diagnosis of pancreatic cystic lesions. *World J Gastroenterol* 2025; 31 (1):. doi:10.3748/wjg.v31.i1.101082
- [7] Elta GH, Enestvedt BK, Sauer BG, Lennon AM ACG Clinical Guideline: Diagnosis and Management of Pancreatic Cysts. *American Journal of Gastroenterology* 2018; 113 (4): 464–479. doi:10.1038/ajg.2018.14
- [8] Hendifar AE, Petzel MQB, Zimmers TA, Denlinger CS, Matrisian LM, Piccozi VJ, Rahib L on behalf of the Precision Promise C: Pancreas Cancer-Associated Weight Loss. *The Oncologist* 2019; 24 (5): 691–701. doi:10.1634/theoncologist.2018-0266
- [9] Wei N, Shi RH, Yu T Development and validation of a clinical prediction model to estimate the probability of malignancy in solid pancreatic lesions and explore its value in the atypical diagnostic category after endoscopic ultrasound-guided fine-needle aspiration biopsy (EUS-FNA). *Transl Cancer Res* 2020; 9 (11): 6801–68. doi:10. 10.21037/tcr-20-2208
- [10] Lesmana CRA, Gani RA, Lesmana LA Non-alcoholic fatty pancreas disease as a risk factor for pancreatic cancer based on endoscopic ultrasound examination among pancreatic cancer patients: A single-center experience. *JGH Open* 2018; 2 (1): 4–7. doi:10.1002/jgh3.12032
- [11] Ahmed A, Alzahrani F, Gharawi A, Alammery S, Almijmaf F, Alhusayni F, McClish D, Al-Jahdali H, Al Olayan A, Jazieh AR Improving risk prediction for pancreatic cancer in symptomatic patients: a Saudi Arabian study. *CMAR* 2018; Volume 10: 4981–4986. doi:10.2147/CMAR.S173666
- [12] Yousri M, Abusinna ES, Tahoun NS, Okasha H, El-Habashi A A Comparative Study of the Diagnostic Utility of Endoscopic Ultrasound-Guided Fine Needle Aspiration Cytology (EUS-FNA) Versus Endoscopic Ultrasound-Guided Fine Needle Biopsy (EUS-FNB) in Pancreatic and Non-Pancreatic Lesions. *Asian Pacific Journal of Cancer Prevention* 2022; 23 (6): 2151–2158. doi:10.31557/apjcp.2022.23.6.2151
- [13] Yoshida T, Yamashita Y, Kitano M Endoscopic Ultrasound for Early Diagnosis of Pancreatic Cancer. *Diagnostics* 2019; 9 (3): 81. doi:10.3390/diagnostics9030081
- [14] Wadhwa V, Gonzalez A, Singh H, Ahmed I, Erim T, Sanaka MR 87 Comparison of EUS-Guided Fine-Needle Aspiration Alone Versus Combined Fine-Needle Aspiration and Fine-Needle Biopsy in the Diagnostic Evaluation of Solid Pancreatic Lesions. *Am J Gastroenterology* 2019; 114 (1): S52–S52. doi:10.14309/01.ajg.0000589880.83224.cf
- [15] Shehata AK, Fathallah YF, Hegazi MM, Elfeshawy MS Role of EUS in the Diagnosis of Patients with Solid Pancreatic Mass in relation to other imaging modalities. *Al-Azhar International Medical Journal* 2023; 4 (3):. doi:10.58675/2682-339X.1703
- [16] Klapman JB, Chang KJ, Lee JG, Nguyen P Negative Predictive Value of Endoscopic Ultrasound in a Large Series of Patients with a Clinical Suspicion of Pancreatic Cancer. *Am J Gastroenterology* 2005; 100 (12): 2658–2661. doi:10.1111/j.1572-0241.2005.00315.x
- [17] Jeong H, Park CS, Kim KB, Han J-H, Yoon SM, Chae HB, Youn SJ, Park SM Predictors of Malignancies in Patients with Inconclusive or Negative Results of Endoscopic Ultrasound-guided Fine-needle Aspiration for Solid Pancreatic Masses. *Korean J Gastroenterol* 2018; 71 (3): 153. doi:10.4166/kjg.2018.71.3.153
- [18] Hewitt MJ, McPhail MJW, Possamai L, Dhar A, Vlavianos P, Monahan KJ EUS-guided FNA for diagnosis of solid pancreatic neoplasms: a meta-analysis. *Gastrointestinal Endoscopy* 2012; 75 (2): 319–331. doi:10.1016/j.gie.2011.08.049
- [19] Zhang L, Pleskow DK, Turzhitsky V, Yee EU, Berzin TM, Sawhney MS, Shinagare S, Vitkin E, Zakharov YN, Khan U et al Light Scattering Spectroscopy Identifies the Malignant Potential of Pancreatic Cysts During Endoscopy. *Nature Biomedical Engineering* 2017; 1 (4):. doi:10.1038/s41551-017-0040

[20] Storm AC, Lee L Endoscopic Ultrasound-Guided Techniques for Diagnosing Pancreatic Mass Lesions: Can We Do Better. *World J Gastroenterol* 2016; 22 (39): 8658. doi:10.3748/wjg.v22.i39.8658

[21] Iglesias-García J, Lariño-Noia J, Domínguez-Muñoz J When to Puncture, When Not to Puncture: Pancreatic Masses. *Endoscopic Ultrasound* 2014; 3 (2): 91. doi:10.4103/2303-9027.123007

[22] Teshima C Endoscopic Ultrasound in the Diagnosis and Treatment of Pancreatic Disease. *World J Gastroenterol* 2014; 20 (29): 9976. doi:10.3748/wjg.v20.i29.9976

[23] Huang J, Fan X, Liu W Applications and Prospects of Artificial Intelligence-Assisted Endoscopic Ultrasound in Digestive System Diseases. *Diagnostics* 2023; 13 (17): 2815. doi:10.3390/diagnostics13172815

[24] Schedel J, Kaess M, Schorr W, Brookman-Amissah D, Alqahtan SA, Pech O Cystic Pancreatic Neoplasms in a Tertiary Gastroenterologic Referral Center: Evaluation of the Diagnostic Accuracy of Endoscopic Ultrasound, Progression Rate and Malignancy Rate in a Large Unicentric Cohort. *Zeitschrift Für Gastroenterologie* 2022; 61 (6): 655–664. doi:10.1055/a-1852-5644

[25] Rangwani S, Juakiem W, Krishna SG, El-Dika S Role of Endoscopic Ultrasound in the Evaluation of Pancreatic Cystic Neoplasms: A Concise Review. *Diagnostics* 2023; 13 (4): 705. doi:10.3390/diagnostics13040705

[26] Rogers H, Shah SL Role of Endoscopic Ultrasound in Pancreatic Cancer Diagnosis and Management. *Diagnostics* 2024; 14 (11): 1156. doi:10.3390/diagnostics14111156

[27] Kitano M, Minaga K, Hatamaru K, Ashida R Clinical Dilemma of Endoscopic Ultrasound-guided Fine Needle Aspiration for Resectable Pancreatic Body and Tail Cancer. *Digestive Endoscopy* 2021; 34 (2): 307–316. doi:10.1111/den.14120

[28] M A Systematic Comparative Study on the Diagnostic Value of Transabdominal Ultrasound in Patients With Pancreatic Cystic Lesions. *JCM* 2022; 11 (20): 6176. doi:10.3390/jcm11206176

[29] Lee L Incidental Cystic Lesions in the Pancreas: Resect? EUS? Follow? Current Treatment Options in Gastroenterology 2014; 12 (3): 333–349. doi:10.1007/s11938-014-0019-6

[30] Jalal M, Gbadegesin SA, Ibrahim S, Tehami N Recent Advances in Detecting Premalignant Pancreatic Cysts. *Journal of Cancer Metastasis and Treatment* 2023. doi:10.20517/2394-4722.2022.122

[31] Pinho DF, Rofsky NM, Pedrosa I Incidental Pancreatic Cysts. *Topics in Magnetic Resonance Imaging* 2014; 23 (2): 117–128. doi:10.1097/rmr.0000000000000018

[32] Pedrosa I, Boparai D Imaging Considerations in Intraductal Papillary Mucinous Neoplasms of the Pancreas. *World Journal of Gastrointestinal Surgery* 2010; 2 (10): 324. doi:10.4240/wjgs.v2.i10.324

[33] Sheik DA, Byers K, Thomas M, Rajesh UC, Ifuku KA, Kirkwood KS, Al-Haddad M, Craik CS, Davisson VJ Addressing the Unmet Clinical Need for Low-Volume Assays in Early Diagnosis of Pancreatic Cancer. *Frontiers in Gastroenterology* 2023; 2. doi:10.3389/fgstr.2023.1258998

[34] Kim M, Karadsheh Z, Levy AN, Al-Haddad M Management of Incidental Pancreatic Cystic Lesions. *Journal of Clinical Gastroenterology* 2020; 54 (5): 415–427. doi:10.1097/mcg.0000000000001310

[35] Takuma K, Kamisawa T, Tabata T, Kurata M, Honda G, Horiguchi S Main-Duct Intraductal Papillary Mucinous Adenoma of the Pancreas. *World Journal of Surgical Oncology* 2011; 9 (1): 1186/1477-7819-9-153

[36] Ning KG, Salamone A, Manos L, Lafaro KJ, Afghani E Serosus Cystadenoma: A Review on Diagnosis and Management. *JCM* 2023; 12 (23): 7306. doi:10.3390/jcm12237306

[37] Maier HJ, Wagner M, Schips TG, Salem HH, Baumann B, Wirth T Requirement of NEMO/IKK γ for Effective Expansion of KRAS-induced Precancerous Lesions in the Pancreas. *Oncogene* 2012; 32 (21): 2690–2695. doi:10.1038/ncr.2012.272

[38] Kotian S, Bhat SP, Mohan R, Sajitha K Microcystic Serosus Cystadenoma of Pancreas Presenting With Chronic Diarrhea. *Journal of Health and Allied Sciences Nu* 2018; 08 (3): 045–049. doi:10.1055/s-0040-1708764

[39] Esposito I, Schlitter AM, Sipos B, Klöppel G Klassifikation Und Malignes Potenzial Der Zystischen Pankreastumoren. *Der Pathologe* 2014; 36 (1): 99–114. doi:10.1007/s00292-014-1971-6

[40] Jiang J, Chao WL, Culp S, Krishna SG Artificial Intelligence in the Diagnosis and Treatment of Pancreatic Cystic Lesions and Adenocarcinoma. *Cancers* 2023; 15 (9): 2410. doi:10.3390/cancers15092410

eP685V Management of Difficult Intrahepatic Duct Stones Using Cholangioscopy, Lithotripsy, and Basket

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DOI 10.1055/s-0046-1822012

Abstract Text

The treatment of difficult intrahepatic duct stones has emerged as a critical area of inquiry due to the high prevalence and complex management challenges of hepatolithiasis worldwide. Epidemiological data indicate that hepatolithiasis affects up to 50% of patients in East Asia and presents increasing incidence in Western countries, emphasizing the global relevance of effective treatment strategies [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/4c884f4f-52dc-40c6-bf0f-e258c2a24f83/Uploads/19978_VIDEO-2025-11-29-12-36-18.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] McCarty TR, Gulati R, Rustagi T. Efficacy and safety of peroral cholangioscopy with intraductal lithotripsy for difficult biliary stones: a systematic review and meta-analysis. *Endoscopy*. 2021; 53 (2): 110–122. doi:10.1055/a-1200-8064 Epub 2020 Oct 5 PMID: 32544959
- [2] Chen Z, Du J. Efficacy of Laparoscopic Left Hemihepatectomy Combined With Choledochoscopic Lithotomy for Complex Intrahepatic Bile Duct Stones and Its Impact on Postoperative Liver Function. *Surg Laparosc Endosc Percutan Tech* 2024; Dec 1 34 (6): 630–637. doi:10.1097/SLE.0000000000001334IF 1.2 Q3 PMID: 39445437
- [3] McCarty TR, Gulati R, Rustagi T. Efficacy and safety of peroral cholangioscopy with intraductal lithotripsy for difficult biliary stones: a systematic review and meta-analysis. *Endoscopy*. 2021; 53 (2): 110–122. doi:10.1055/a-1200-8064IF 12.8 Q1 Epub 2020 Oct 5 PMID: 32544959

eP686 Clinical Profile, Management, and Outcomes of Primary Sclerosing Cholangitis in a Saudi Cohort: A Retrospective Study at a Tertiary Care Center in Riyadh

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DOI 10.1055/s-0046-1822013

Aims This study aims to characterize PSC in a Saudi cohort, detailing its presentation, diagnosis, and management at a major tertiary center in Riyadh.

Methods This retrospective observational study analyzed PSC patients aged ≥ 14 years at King Fahad Medical City, Riyadh (2013–2024), excluding pregnant, breastfeeding, or incomplete-record cases. Data on demographics, clinical presentation, lab results, imaging, and comorbidities were extracted from EPIC software. Descriptive statistics were performed using SPSS v27. Ethical approval was obtained, ensuring confidentiality and data accuracy through double-checking and standardized protocols [1–4].

Results This study included 93 PSC patients (mean age 41.3 ± 14.7 years, 57% male, 98.9% Saudi). Median disease duration was 5 years, with common symptoms including right upper quadrant pain (19.4%) and pruritus (14%). Lab findings showed median ALP 188 U/L and bilirubin 11.8 $\mu\text{mol/L}$. MRCP was the primary diagnostic tool (45.2%). URSO was the most used treatment (39.7%). IBD prevalence was 55.6%, with UC more common than CD. Cholangiocarcinoma and colorectal cancer each occurred in 4.3%.

Conclusions Early ALP elevation was essential for diagnosis. URSO remains the primary therapy, while novel treatments like oral vancomycin and fibrates show promise. Further research is needed to optimize care and integrate novel bio-

markers with advanced imaging for personalized management in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lapitz A, Azkargorta M, Milkiewicz P, Olaizola P, Zhuravleva E, Grimsrud MM, Schramm C, Arbelaz A, O'Rourke CJ, La Casta A et al Liquid biopsy-based protein biomarkers for risk prediction, early diagnosis, and prognostication of cholangiocarcinoma. *Journal of Hepatology* 2023; 79 (1): 93–108
- [2] Satiya J, Mousa O, Gupta K, Trivedi S, Oman S, Wijarnpreecha K, Harnois D, Corral J Diagnostic yield of magnetic resonance imaging for cholangiocarcinoma in primary sclerosing cholangitis: a meta-analysis. *ceh* 2020; 6 (1): 35–41
- [3] Muñoz-Martínez S, Rimola J, Londoño MC, Cárdenas A, Forner A Cholangiocarcinoma: early detection and screening in high-risk population. *Hepato-ma Res* 2022; 8 (7): 30
- [4] Khaderi SA, Sussman NL Screening for Malignancy in Primary Sclerosing Cholangitis (PSC). *Current Gastroenterology Reports* 2015; 17 (4): 17
- [5] Hatami B, Mosala M, Hassani AH, Ardakani MJE, Gholami S, Zali MR Fenofibrate in primary sclerosing cholangitis; a randomized, double-blind, placebo-controlled trial. *Pharmacology Res & Perspec* 2022; 10 (4): e00984
- [6] De Vries E, Bolier R, Goet J, Parés A, Verbeek J, De Vree M, Drenth J, Van Erpecum K, Van Nieuwkerk K, Van Der Heide F et al Fibrates for Itch (FITCH) in Fibrosing Cholangiopathies: A Double-Blind, Randomized, Placebo-Controlled Trial. *Gastroenterology* 2021; 160 (3): 734–743.e736
- [7] Sannaa W, Almasry M, Peedikayil M, Grimshaw AA, Attamimi M, Almutairdi A, Al-Bawardy B Effectiveness and safety of oral vancomycin for the treatment of inflammatory bowel disease associated with primary sclerosing cholangitis: a systematic review and pooled analysis. *Therap Adv Gastroenterol* 2025; 18:17562848241312766
- [8] Quraishi MN, Cheesbrough J, Rimmer P, Mullish BH, Sharma N, Efsthathiou E, Acharjee A, Gkoutos G, Patel A, Marchesi JR et al Open Label Vancomycin in Primary Sclerosing Cholangitis-Inflammatory Bowel Disease: Improved Colonic Disease Activity and Associations With Changes in Host-Microbiome-Metabolomic Signatures. *Journal of Crohn's and Colitis* 2025; 19 (2):jjae189
- [9] Shah A, Jones MP, Callaghan G, Fairlie T, Ma X, Culver EL, Stuart K, De Cruz P, O'Beirne J, Tabibian JH et al Efficacy and safety of biologics in primary sclerosing cholangitis with inflammatory bowel disease: A systematic review and meta-analysis. *Hepatology Communications* 2024; 8 (1):
- [10] Kunovsky L, Dite P, Hornakova L, Dolina J, Uvirova M, Kojecy V, Martinek A, Jabandziev P Differentiating Primary Sclerosing Cholangitis from Similar Diseases of Autoimmune Origin. *JGLD* 2021; 30 (3): 398–403
- [11] Li Y, Zhou L, Zhao X, Song W, Karunaratna N, Wang B The importance of IgG4 screening in patients diagnosed with primary sclerosing cholangitis in the past: A case rediagnosed as IgG4-SC after 10 years. *Medicine* 2016; 95 (50): e5628
- [12] Navaneethan U, Gk Venkatesh P, Choudhary M, Shen B, Kiran RP Elevated immunoglobulin G4 level is associated with reduced colectomy-free survival in patients with primary sclerosing cholangitis and ulcerative colitis. *Journal of Crohn's and Colitis* 2013; 7 (2): e35–e41
- [13] Deneau MR, Mack C, Abdou R, Amin M, Amir A, Auth M, Bazerbach F, Marie Broderick A, Chan A, DiGuglielmo M et al Gamma Glutamyltransferase Reduction Is Associated With Favorable Outcomes in Pediatric Primary Sclerosing Cholangitis. *Hepatology Communications* 2018; 2 (11): 1369–1378
- [14] Peerani F, Du L, Lytyak E, Bain VG, Mason AL, Bailey RJ, Montano-Loza AJ Serum IgG4 cut-off of 70 mg/dL is associated with a shorter time to cirrhosis decompensation and liver transplantation in primary sclerosing cholangitis patients. *Canadian Liver Journal* 2022; 5 (1): 31–42
- [15] Rupp C, Rössler A, Halibasic E, Sauer P, Weiss KH, Friedrich K, Wannhoff A, Stiehl A, Stremmel W, Trauner M et al Reduction in alkaline phosphatase is associated with longer survival in primary sclerosing cholangitis, independent of dominant stenosis. *Alimentary Pharmacology & Therapeutics* 2014; 40 (11/12): 1292–1301
- [16] Yamao K, Takenaka M, Imai H, Nakai A, Omoto S, Kamata K, Minaga K, Miyata T, Sakurai T, Watanabe T et al Primary Hepatic Adenosquamous Carcinoma Associated With Primary Sclerosing Cholangitis. *Oncology* 2017; 93 (Suppl 1): 76–80
- [17] Wilhelm AB, Stevenson HL, Kline K Cytokeratin 7 and Copper Stains Facilitate Diagnosis of Small Duct Primary Sclerosing Cholangitis. *American Journal of Clinical Pathology* 2021; 156 (Supplement_1): S125–S125
- [18] Nakamura K, Ito T, Kotoh K, Ihara E, Ogino H, Iwasa T, Tanaka Y, Iboshi Y, Takayanagi R Hepatopancreatobiliary Manifestations of Inflammatory Bowel Disease. *Clinical Journal of Gastroenterology* 2012; 5 (1): 1–8
- [19] Navaneethan U Primary Sclerosing Cholangitis. *Gastroenterology, Hepatology and Endoscopy*. 2015;
- [20] Özdil B, Coşar A, Keçe C, Sandıkçı M, Akkız H The Diagnostic Value of Endoscopic Balloon Catheter Usage for Detecting Early-Stage Primary Sclerosing Cholangitis in Endoscopic Retrograde Cholangiopancreatography: A Case Report. *Case Reports in Gastroenterology* 2010; 4 (1): 1–5
- [21] Saner FH, Frey A, Stüben B-O, Hoyer DP, Willuweit K, Daniel M, Rashidi-Alavieh J, Treckmann J, Schmidt H Transplantation for Primary Sclerosing Cholangitis: Outcomes and Recurrence. *Journal of Clinical Medicine* 2023; 12 (10): 3405
- [22] Hippchen T, Sauer P, Göppert B, Schirmacher P, Gotthardt D, Weiss K-H, Stremmel W, Rupp C Association Between Serum IgG Level and Clinical Course in Primary Sclerosing Cholangitis. *BMC Gastroenterology*. 2019; 19 (1):
- [23] Muratori P, Muratori L, Guidi M, Maccariello S, Παπαός Γ, Ferrari R, Gionchetti P, Campieri M, Bianchi FB Anti-*Saccharomyces Cerevisiae* Antibodies (ASCA) and Autoimmune Liver Diseases. *Clinical & Experimental Immunology* 2003; 132 (3): 473–476
- [24] Domschke W, Klein R, Terracciano L, Jung P, Kirchner T, Berg PA, Bianchi L Sequential Occurrence of Primary Sclerosing Cholangitis and Autoimmune Hepatitis Type III in a Patient With Ulcerative Colitis: A Follow Up Study Over 14 Years. *Liver International* 2000; 20 (4): 340–345
- [25] Fiske HW, Saeed F, Ward C, Sinayuk B, Ulici V, Curry MP, Shah S Primary Sclerosing Cholangitis and Autoimmune Hepatitis: Overlapping Challenges in Diagnosis and Treatment. *Inflammatory Bowel Diseases* 2023; 29 (Supplement_1): S29–S30
- [26] Alizadeh AHM, Shahnazi A, Rasoulzadeh A, Shams E, Mohammadi M, Darabi F, Behdad M Characteristic Findings of Primary Sclerosing Cholangitis on Endoscopic Retrograde Cholangiography: Which Is the Most Common Finding? *Clinical Medicine Insights Gastroenterology* 2011; 5:CCast.S7850
- [27] Mukewar S Recent Advances in Diagnosis and Management of Chronic Cholestatic Liver Diseases: Expert Consensus. *International Journal of Research in Medical Sciences* 2025; 13 (2): 967–976
- [28] Xavier-Júnior JCC, Coelho KIR, Sassaki LY, Yamashiro FS, Oliveira KCL, Rodrigues MAM Primary Sclerosing Cholangitis Associated With Severe Ulcerative Colitis in a Young Man. *Autopsy and Case Reports* 2013; 3 (4): 37–41
- [29] Seo N, Kim SY, Lee SS, Byun JH, Kim JH, Kim HJ, Lee M-G Sclerosing Cholangitis: Clinicopathologic Features, Imaging Spectrum, and Systemic Approach to Differential Diagnosis. *Korean Journal of Radiology* 2016; 17 (1): 25
- [30] Law ST, Lee W-K, Li MK, Lok KH A Gentleman With Anemia and Cholestasis. *Case Reports in Medicine* 2010; 2010: 1–4
- [31] Wasmuth HH, Tranø G, Endreseth BH, Wibe A, Rydning A, Myrvold HE Primary Sclerosing Cholangitis and Extraintestinal Manifestations in Patients With Ulcerative Colitis and Ileal Pouch–Anal Anastomosis. *Journal of Gastrointestinal Surgery* 2010; 14 (7): 1099–1104
- [32] Vinnitskaya EV, Abdulkhakov S, Abdurakhmanov D, Alikhanov R, Bakulin IG, Belousova EA, Byeevov AO, Burnevitch EZ, Efanov M, Eremina EY et al Important Problems in the Diagnosis and Treatment of Primary Sclerosing Cholangitis (Based on the Russian Consensus on Diagnosis and Treatment Autoimmune Hepatitis. Moscow, 2018). *Terapevticheskii Arkhiv* 2019; 91 (2): 9–15
- [33] Shen B, Yao Q, Scherl E Management of Primary Sclerosing Cholangitis and Extraintestinal Disorders in Patients With Ileal Pouches: A Systemic Review. *Diseases of the Colon & Rectum*. 2024;
- [34] Tanaka A IgG4-Related Sclerosing Cholangitis and Primary Sclerosing Cholangitis. *Gut and Liver* 2019; 13 (3): 300–307
- [35] Ливзан МА, Гайс ОВ, Гавриленко ДА Manifest Hyperthyroidism in Patient With Autoimmune Hepatitis (Clinical Observation). *Medical Alphabet* 2021; 35: 52–56
- [36] Alkhaledi A, Jadaani I, Sharfo MZ, Faysal T, Abdallah Y, Ali A Association of Ulcerative Colitis, Celiac Disease, Primary Sclerosing Cholangitis and Liver Cirrhosis in a Young Male. *JGH Open* 2023; 7 (10): 731–733

- [37] Fousekis FS, Theopistos V, Mitselos IV, Skamnelos A, Kavvadias A, Katsanos KH, Christodoulou D Specific Features of Patients With Inflammatory Bowel Disease and Primary Sclerosing Cholangitis. *Journal of Clinical Medicine Research* 2019; 11 (2): 81–88
- [38] Cooper J, Markovinić A, Coward S, Herauf M, Shaheen AA, Swain MG, Panaccione R, Ma C, Lu C, Novak KL et al Incidence and Prevalence of Primary Sclerosing Cholangitis: A Meta-Analysis of Population-Based Studies. *Inflammatory Bowel Diseases* 2023; 30 (11): 2019–2026
- [39] Olszewska A, Matyja K, Berner A, Stencel K, Stelmaszak K, Marczyk K, Polak P, Pekała M, Polaszek M, Bogowska M Etiology, Epidemiology, and Therapeutic Approaches for Primary Sclerosing Cholangitis in the Context of Concurrent Non-Specific Inflammatory Bowel Diseases. *Journal of Education Health and Sport* 2024; 60: 44–57
- [40] Vlăduț C, Ciocirlan M, Bilous D, Șandru V, Stan-Ilie M, Panić N, Becheanu G, Jinga M, Costache R, Costache DO et al An Overview on Primary Sclerosing Cholangitis. *Journal of Clinical Medicine* 2020; 9 (3): 754
- [41] Pardak P, Walczak E, Filip R Rapid Progression of Primary Sclerosing Cholangitis Complicated With Ulcerative Colitis. *Case Reports in Gastrointestinal Medicine* 2015; 2015: 1–4

eP687 A systematic review of simple balloon enteroscopy compared to video capsule endoscopy for thickening of the small intestinal wall

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DOI 10.1055/s-0046-1822014

Aims Small bowel disorders, including obscure gastrointestinal bleeding (OGIB), Crohn's disease, and tumors, require accurate diagnostic approaches for effective treatment. Video capsule endoscopy (VCE) and simple balloon enteroscopy (SBE) are widely used, but each modality has limitations, particularly regarding therapeutic intervention and diagnostic yield [1].

Methods A comprehensive search of four databases (PubMed, Embase, Cochrane Library, and Scopus) revealed over 600 citations for applying capsule endoscopy and balloon enteroscopy for small intestine diagnosis following wall thickening. Following a rigorous assessment of these citations based on a pre-determined eligibility criterion, seven moderate-to-high-quality retrospective studies were conducted evaluating the diagnostic performance of VCE and SBE in patients with small bowel disorders. The studies were assessed using QUADAS-2 to evaluate the risk of bias and overall methodological quality.

Results The analysis of seven moderate-to-high-quality retrospective studies revealed comparable overall detection rates for small bowel lesions between Video Capsule Endoscopy (VCE) and Simple Balloon Enteroscopy (SBE). VCE demonstrated superior performance in detecting vascular lesions, with one study reporting 39 cases identified by VCE compared to 30 cases by SBE ($p < 0.05$). Conversely, SBE exhibited higher efficacy in detecting ulcerative lesions, with a statistically significant difference of 28 cases versus 10 cases identified by VCE ($p < 0.01$). The overall diagnostic yield varied across studies, with VCE showing a range of 32–83% for small bowel bleeding, while SBE demonstrated a higher overall detection rate of 69.7% compared to 57.6% for VCE in one study ($p < 0.05$). Notably, SBE showed superior performance in diagnosing Crohn's disease, with a detection rate of 35% compared to 11.3% for VCE ($p < 0.001$). The diagnostic concordance between VCE and SBE was influenced by lesion type. Strong agreement was observed for inflammatory lesions ($\kappa = 0.82$, 95% CI: 0.75–0.89), while moderate agreement was noted for tumors ($\kappa = 0.61$, 95% CI: 0.52–0.70) and angiectasias ($\kappa = 0.58$, 95% CI: 0.49–0.67). In terms of clinical utility, SBE demonstrated significant advantages in therapeutic

intervention, particularly in cases of overt bleeding. One study reported immediate hemostasis achieved in 92% of cases where active bleeding was identified during SBE (95% CI: 86–98%). Patient tolerability was generally higher for VCE, with a completion rate of 95% (95% CI: 92–98%) compared to 85% for SBE (95% CI: 80–90%). However, the capsule retention rate for VCE was reported at 1.4% (95% CI: 0.8–2.0%), necessitating subsequent intervention.

Conclusions VCE and SBE are complementary techniques in evaluating small bowel disorders. While VCE remains the initial test of choice for stable patients with OGIB, SBE should be considered for cases requiring therapeutic intervention. The findings suggest that combining both modalities enhances diagnostic accuracy and patient management. Further research should focus on improving CE interpretation and the ability of SBE to provide comprehensive small bowel exploration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gadour E, Miutescu B, Hassan Z, Aljahdli ES, Raees K. Advancements in the diagnosis of biliopancreatic diseases: A comparative review and study on future insights. *World J Gastrointest Endosc.* 2025; 17 (4): 103391. doi:10.4253/wjge.v17.i4.103391 PMID: 40291132 PMID: PMC12019128

ePosters 09

eP688 Jejunal Fish Bone Perforation Presenting as Recurrent Cholangitis in a Post-Whipple Patient

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DOI 10.1055/s-0046-1822015

Aims: This study aims to report a rare cause of recurrent fever and abdominal pain in a patient with altered gastrointestinal anatomy after pancreaticoduodenectomy (Whipple procedure). The objective is to highlight the diagnostic challenges and emphasize the importance of considering gastrointestinal foreign body perforation in the differential diagnosis of post-Whipple patients presenting with recurrent febrile episodes and abdominal pain [1].

Methods: A case study was conducted involving a 55-year-old female patient with a history of pylorus-preserving Whipple procedure performed 10 years prior for intraductal papillary mucinous neoplasm (IPMN). The patient presented with recurrent fever and severe abdominal pain over one year. Comprehensive diagnostic workup included serial laboratory tests, liver function tests, imaging studies (ultrasound, MRCP, CT KUB), and deep push enteroscopy. Imaging was critically re-evaluated to identify subtle abnormalities. Endoscopic intervention was performed to extract the foreign body.

Results: Initial investigations, including blood tests and liver function tests, remained largely normal, and infectious workup was negative. MRCP revealed a 37-mm linear filling defect in the right intrahepatic duct, initially suspected as intrahepatic lithiasis. CT KUB, upon detailed review, identified a subtle linear hyperdense structure traversing the efferent jejunal limb near the right renal vein, consistent with a fish bone. Deep push enteroscopy confirmed the presence of an embedded fish bone in the jejunal wall, which was successfully extracted endoscopically. Post-procedural intravenous antibiotics led to marked clinical improvement with resolution of fever and abdominal pain. Follow-up demonstrated stable recovery with no recurrence.

Conclusions: This case underscores the significance of maintaining a broad differential diagnosis in post-Whipple patients with recurrent fever and abdominal pain, especially when conventional biliary causes are excluded. Critical re-assessment of imaging and utilization of advanced endoscopic techniques such as deep push enteroscopy are crucial for detecting rare causes like gastrointestinal foreign body perforation. Early multidisciplinary collaboration and vigilant diagnostic approaches can prevent delays in diagnosis and improve

patient outcomes. Future implications include increased awareness of atypical etiologies and the integration of specialized imaging and endoscopic evaluations in complex postoperative cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Elsayed G., Mohamed L., Almasaabi M., Barakat K., Gadour E. 2025; Hepaticojunostomy and long-term interventional treatment for recurrent biliary stricture after proximal bile duct injury: A case report. *World Journal of Clinical Cases* 13 (20): 104609. doi:10.12998/wjcc.v13.i20.104609

eP689 The “Biliopancreatic Conundrum” of

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DOI 10.1055/s-0046-1822016

Aims EUS trans-mural approach can be technically challenging or unfeasible in patients with distal malignant biliary obstruction (DMBO) and < 12 mm common bile ducts (CBD) after ERCP failure [1, 2]. Similarly, intrahepatic route requires ≥ 5mm intrahepatic duct (IHBD) dilatation and ≥ 2.5cm hepatic parenchymal distance to safely create a novel direct access from stomach [3]. EUS-guided rendezvous (EUS-RV) has emerged as an alternative approach in this scenario. However, it requires technically challenging steps like biliary puncture using a 19G needle, guidewire manipulation, EUS scope withdrawal and duodenoscope re-insertion, guidewire grasping/traction inside the accessory channel and finally biliary cannulation (BC) using the EUS-placed guidewire by the “along-the-wire” and the “over-the-wire” methods.

Methods This single-center retrospective study aimed to evaluate the feasibility, safety, and efficacy of EUS-RV in patients with < 12mm CBD and DMBO. Patients were enrolled between January 2020 and May 2025, and followed for at least 6 months follow-up. Over a total number of 2838 ERCP performed in our center, approximately one third (1082) were executed for malignant obstruction. Of this subgroup, a DMBO was reported in 785 cases and 91 patients presented a CBD < 12mm. We finally registered all the 12 EUS-RV cases after failed conventional ERCP with standard or advanced cannulation techniques. Technical success, clinical success and adverse events (AEs) were analyzed. All procedures were performed under general anesthesia, using standard linear echoendoscope and ERCP equipment (► **Table 1**).

► **Table 1**

Patients	12 (6 female – 6 male)
Access route	CDB: 8 – IHBD: 3 – Wirsung: 1
Mean CBD diameter	9.8 mm (range: 7.5–11.5 mm)
Wire shearing	0/12 cases
Wire losing	41.6 % (5/12)
Biliary Cannulation	“along-the-wire”: 41.6 % (5/12), “over-the-wire”: 58.4 % (7/12)
Procedural time	89,81 ± 29,04 minute
Metallic stent release	100 %
Technical success	100 %
Clinical Success	100 %
AEs	0/12 cases

Results 12 patients were included in this analysis. Access was performed from the bulb to the CBD or from stomach to IHBD (S2 or S3) in 8 and 3 cases, respectively. One case required approach by the main pancreatic duct due to the impossibility of a valid biliary EUS window. Mean CBD diameter was 9.8 mm (range: 7.5–11.5 mm). Wire shearing was never reported. A 10-mm snare was adopted to catch the wire

through the duodenoscope. A second operator was systematically located at patient head to collect and facilitate the correct sliding of the 450-mm 0.035inch hydrophilic guidewire. The wire was inadvertently detached, broke or lost during traction in 41,6 % of the cases. In this scenario, BC was performed “along-the-wire” using a standard sphincterotome following the way of the rendezvous wire. In the remaining 58,4 % of the cases, the “over-the-wire” BC technique was used. A tubular metal stent was deployed in all the cases. Procedural time was 89,81 ± 29,04 minutes, confirming the high technical complexity of the procedure that requires multiple steps. EUS-RV technical success was achieved in all the cases. Clinical success, defined as successful biliary drainage and jaundice resolution, was obtained in 100 % of cases. No AEs were reported.

Conclusions EUS-RV demonstrated favorable efficacy in patients with < 12mm CBD diameter and DMBO when conventional ERCP failed as showed in this single-center retrospective analysis. In this context, EUS-RV constitutes a valid first-line treatment with comparable effectiveness and no AEs, although it necessitates multiple procedural steps that increase technical complexity and procedural time. The lack of dedicated devices necessitated standard ERCP accessories, which may have impacted procedural efficiency and outcomes, particularly wire loss. It can inadvertently occur during scope exchange, guidewire manipulation, or other EUS-RV steps, representing a critical passage that may compromise procedural success. “Along-the-wire” BC represents a useful trick in high-skilled endoscopists facilitating deep papillary access.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kadhodayan K, Irani S. EUS-guided hepaticogastrostomy: practical tips and tricks. *VideoGIE*. 2024; 9 (9): 417–424. doi:10.1016/j.vgie.2024.05.015 PMID: 39429912 PMID: PMC11489514
 [2] Perez-Miranda M, de la Serna C, Diez-Redondo P, Vila JJ. Endosonography-guided cholangiopancreatography as a salvage drainage procedure for obstructed biliary and pancreatic ducts. *World J Gastrointest Endosc*. 2010; 2 (6): 212–22. doi:10.4253/wjge.v2.i6.212 PMID: 21160936 PMID: PMC2998937
 [3] Bang JY, Faraj Agha M, Hawes R, Varadarajulu S. Rate of suitable cases for primary EUS-guided biliary drainage in distal malignant biliary obstruction. *Gut*. 2025; gutjnl-2025–334979. doi:10.1136/gutjnl-2025–334979 Epub ahead of print PMID: 40011036

eP690 Evolution of Gastric Outlet Obstruction Management: Insights from a UK Tertiary Centre

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DOI 10.1055/s-0046-1822017

Aims To review the changing trends of endoscopic management of Gastric Outlet Obstruction (GOO) in a large tertiary referral centre in the UK, comparing the outcomes of patients undergoing Duodenal Stenting vs Endoscopic Ultrasound-Guided Gastro-Jejunostomy

Methods We conducted a single centre retrospective analysis reviewing all patients referred for management of GOO between June 2019 and October 2025. Over 300 Electronic Medical Records (EMR) of cases discussed at our MDT were reviewed to select patients subsequently managed with Duodenal Stenting (DS) and/or Endoscopic Ultrasound-Guided Gastro-Jejunostomy (EUS-GJ). EMRs were reviewed to obtain anonymised data related to patient demographics, procedure duration, time to resolution of oral intake post procedure (defined as resumption of oral fluid/food consumption and absence of vomiting), survival, re-intervention rates, complications. We also reviewed our trends of case numbers comparing DS vs EUS GJ procedures per year

Results 71 patients underwent duodenal stenting (31 female/40 male), while 33 underwent EUS GJ (20 female/13 male). Median age of DS group 67 years

old (range 32-91) vs EUS-GJ group 66 years old (range 37-86). Median survival of DS cohort 100 days (range 6-604 days) vs median survival of EUS-GJ cohort 86 days (range 9-516 days). Median survival of DS cohort 100 days (range 6-604 days) vs median survival of EUS-GJ cohort 86 days (range 9-516 days). Re-intervention rate in DS group: 26.7 % (19/71) vs re-intervention rate of EUS-GJ group: 6 % (2/33). Median duration of DS procedure 31 min (range 13-74 min) vs median duration of EUS-GJ procedure 49 min (range 23-76 min). Median time to resolution of GOO: 1 day in EUS-GJ group (range 1-2 days) vs 1 day in DS group (range 1-7 days). Over the study period, the number of DS procedures per year has levelled off, while the number of EUS-GJ procedures completed annually has steadily risen year on year since 2022 1-4.

Conclusions Over time, the volume of EUS-GJ in our centre has increased steadily, from 1 case in 2022 to 15 cases to date in 2025. The role for DS has changed from the primary endoscopic method of GOO management to one used only in select cases. Re-intervention rates were higher in the DS group, in keeping with prior published experience. In our cohort, 47 % of DS patients who required re-intervention for recurrence of GOO were successfully managed with EUS-GJ. EUS-GJ was seen to be safe, with no major complications noted during the study period, and was highly effective for definitive management of GOO with low rates of re-intervention. This study adds to the growing body of evidence in support of EUS-GJ for patients with malignant GOO.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sánchez-Aldehuelo R, Subtil Iñigo JC, Martínez Moreno B et al. EUS-guided Gastroenterostomy Versus Duodenal Self-Expandable Metal Stent for Malignant Gastric Outlet Obstruction: Results From a Nationwide Multicenter Retrospective Study (With Video). *Gastrointestinal Endoscopy* 2022; 96 (6): 1012-1020.e3. doi:10.1016/j.gie.2022.07.018
- [2] van Wanrooij RLJ, Vanella G, Bronswijk M et al. Endoscopic Ultrasound-Guided Gastroenterostomy Versus Duodenal Stenting for Malignant Gastric Outlet Obstruction: An International, Multicenter, Propensity Score-Matched Comparison. *Endoscopy* 2022; 54 (11): 1023-1031. doi:10.1055/a-1782-7568
- [3] Jain H, Dey D, Odat RM et al. Endoscopic Ultrasound-Guided Gastroenterostomy Versus Duodenal Stenting for Gastric Outlet Obstruction: A Systematic Review, Meta-Analysis, and Meta-Regression. *Medicine* 2024; 103 (40): e39948. doi:10.1097/MD.00000000000039948
- [4] Teoh AYB, Lakhtakia S, Tarantino I et al. Endoscopic Ultrasonography-Guided Gastroenterostomy Versus Uncovered Duodenal Metal Stenting for Unresectable Malignant Gastric Outlet Obstruction (DRA-GOO): A Multicentre Randomised Controlled Trial. *The Lancet. Gastroenterology & Hepatology*. 2025; 10 (6): e8-e16. doi:10.1016/S2468-1253(25)00136-0

eP691 Single frame intraprocedural phase recognition for endoscopic submucosal dissection using artificial intelligence

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DOI 10.1055/s-0046-1822018

Aims Precise intraprocedural phase recognition during complex endoscopic procedures like endoscopic submucosal dissection (ESD) could facilitate automatic objective reporting, specific target-oriented training interventions and measurable quality control. Artificial intelligence algorithms have already been applied to phase recognition in laparoscopic operations and peroral endoscopic myotomy successfully. The aim of this study was to develop and validate an algorithm for automated intraprocedural phase recognition during ESD on a single frame basis.

Methods The ESD procedure was divided into 5 macro phases: diagnostics, marking, needle injection, dissection and bleeding. Macro-phases were subdivided into micro-phases, which included scope manipulation, electric current application and injection, leading to a total of 11 phases. A training dataset was compiled from 92 full-length ESD videos (7.930.412 frames) and each frame allocated to one phase. All procedures were performed with the same endoscope system (GIF EZ1500, Olympus, Tokyo, Japan) A video swin transformer was trained in the recognition of the procedural phases. Temporal information was incorporated by uniform frame sampling from past and future of the analyzed frame. The algorithm was validated internally on a validation set (16 ESD procedures, 1.580.394 frames). External validation was performed on 8 ESD procedures (759.346 frames) from a live pig study using a different endoscopy system (GIF H190, Olympus, Tokyo, Japan). In a further evaluation, 2 videos from the external validation set were incorporated into the training data.

Results The overall internal validation yielded an accuracy of 86 % and an F1 score of 86 %. The external validation showed values of 69 % and 70 % for the same parameters. The evaluation for macro phases showed overall accuracies of 89 % and 80 % and F1 scores of 90 % and 80 % for internal and external test sets, respectively. Incorporation of 2 videos from the test set into the training set led to the following results: The accuracy and F1-score for all phase validation were 78 % and 78 %. For macro-phase evaluation, these values were 87 % and 87 %.

Conclusions Automated procedural phase recognition yielded precise overall performance in internal validation. External validation with different image quality, endoscopy series and subject showed lower, but still adequate performance. Incorporation of a very limited number of videos from the test set into the training improved the performance. Adaptation of a core algorithm to local settings by limited retraining may mitigate problems of generalizability in the future. Further research should determine the value of this technology for automatic reporting and quality control.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP692 What is the optimum duration of hospital admission following colorectal endoscopic submucosal dissection (ESD)?

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DOI 10.1055/s-0046-1822019

Aims There is no consensus on whether routine hospital admission is required following colorectal ESD, and practice varies internationally. At our institution, patients are typically admitted overnight for observation. We aimed to evaluate post ESD outcomes to identify factors that may guide decision-making on the need for hospital admission.

Methods We conducted a retrospective study of patients undergoing colorectal ESD between October 2019 to October 2025 at a tertiary centre in the United Kingdom. Data were obtained from electronic records. Categorical variables were compared using the Chi-square test, and continuous variables using the T-test or Mann-Whitney U test based on distribution. All procedures were performed using a bipolar radiofrequency/high-frequency microwave device (Speedboat). Procedural complications—defined as perforation, bleeding or post-polypectomy syndrome related to ESD—were classified as immediate (≤ 24 hours) or delayed (> 24 hours). Patients were grouped into uncomplicated and complicated ESD.

Results A total of 225 patients were included; 204 (91 %) were discharged within 24 hours. Extended hospitalisation occurred in 21 patients. Of these, 10 cases (48 %) were due to immediate procedural complications, 7 (33 %) were due to procedure-dependent symptoms such as abdominal pain or raised inflammatory markers, and 4 (19 %) resulted from unrelated issues including

social problems, alcohol withdrawal, or allergic reactions. Fourteen patients required readmission within 30 days; 7 cases (50 %) were attributed to delayed procedural complications, and the remaining 7 cases were due to unrelated conditions such as pneumonia, urinary retention, skin rash, or suspected venous thromboembolism.

We next examined factors associated with complicated ESD (► **Table 1**). Anti-coagulant use was more common in this group (37.5 % vs 5.7 %, $p = 0.001$), which also had longer admissions (4 vs 1 day, $p < 0.001$) and higher 30-day readmissions (43.8 % vs 3.3 %, $p = 0.001$). As these differences were largely complication-driven, we evaluated event characteristics. Perforation occurred in 2 % (5/225), with only 1 % (3/225) requiring surgery. Post ESD bleeding occurred in 5 % (11/225), and only 2 % (5/225) required intervention. Notably, no perforations occurred in anticoagulated patients, indicating that anticoagulation primarily increases bleeding risk. Indeed, 55 % (6/11) of post ESD bleeds occurred in patients on anticoagulants despite appropriate peri-procedural management in accordance with national guidelines.

► **Table 1** Comparison between patients with and without procedural complications

Procedural factors		Uncomplicated ESD N = 209	Complicated ESD N = 16*	p value
Male		118	12	0.27
Mean age (range)		64.4 (25-88)	61.3 (37-81)	0.21
Anticoagulant use, N (%)		12 (5.7)	6 (37.5)	0.001
Previous biopsy/resection, N (%)		23 (11.0)	4 (25.0)	0.34
Mean size in cm (range)		5.1 (1-18)	5.1 (3-10)	0.98
Location	Rectum, N (%)	96 (45.9)	8 (50.0)	0.98
	Colon, N (%)	113 (54.1)	8 (50.0)	
Mean duration in minutes		167.3	188.4	0.26
Hybrid technique, N (%)		40 (19.1)	4 (25.0)	0.13
Mean admission duration in days		1	4	<0.001
Out-of-hours medical review, N (%)		9 (4.3)	5 (31.3)	0.008
30-day readmission, N (%)		7 (3.3)	7 (43.8)	0.001

*1 patient had both immediate and delayed complications (bleeding)

Conclusions Colorectal ESD performed with the Speedboat device demonstrates low complication rates, supporting safe discharge within 24 hours for most patients. Anticoagulant use was the only factor significantly associated with complications, leading to extended hospitalisation or readmission. Incorporating anticoagulation status into pre-procedural planning may therefore help identify the minority of patients who would benefit from planned post ESD admission. These findings support a selective, risk-stratified approach rather than routine overnight admission following colorectal ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP693 Intraoperative instrument recognition during endoscopic submucosal dissection using artificial intelligence

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DOI 10.1055/s-0046-1822020

Aims The automation of procedure analysis for endoscopic interventions is a prerequisite for the advancement towards automatic reporting, quality assessment and advanced operator assistance systems. A critical aspect of procedure characteristics is the choice and utilization of endoscopic instruments. The endoscopic submucosal dissection (ESD) is a complex resection technique with a slow learning curve and relevant operator dependent risks for procedure related complications such as bleeding and perforation. During ESD, specific instruments such as electrosurgical knives of different shapes or hemostatic forceps are used. The analysis of the utilized endoscopic instruments may facilitate a more profound understanding of procedure characteristics. Therefore, we aimed to develop an algorithm for the automatic detection and delineation of endoscopic instruments during ESD (► **Table 1**).

► **Table 1**

Class	Sensitivity	Specificity	Dice
Background	0.98	0.91	0.97
Hook knife Shaft	0.92	1.00	0.93
Hook knife Tip	0.78	1.00	0.76
Dual knife Shaft	0.93	1.00	0.95
Dual knife Tip	0.46	1.00	0.54
Flush knife Shaft	0.93	1.00	0.92
Flush knife Tip	0.08	1.00	0.14
Needle Shaft	0.96	1.00	0.91
Needle Tip	0.82	1.00	0.79
Hemostatic forceps Shaft	0.30	1.00	0.41
Hemostatic forceps Tip	0.57	1.00	0.52
Clip Shaft	0.84	1.00	0.84
Clip Tip	0.31	1.00	0.44
Distal Attachment	0.90	0.98	0.93

Methods 65 full length ESD videos (15x rectal, 29x esophageal, 16x gastric, 5x duodenal ESD) were extracted from Augsburg University Hospital database. 8.165 single images from these procedures were used for training. On these images, shaft and tip of endoscopic instruments were delineated by two study investigators using Computer Vision and Annotation Tool. Classes included Hook knife, Dual knife (both Olympus, Tokyo, Japan), Flush knife (Fujifilm, Tokyo, Japan), injection needle, hemostatic forceps, hemostatic clip and transparent distal attachment. Annotated images were used for training of a DeepLabV3 + deep learning algorithm. 5-fold internal cross validation was performed on pixel basis, as well as for instrument detection per image (sensitivity, specificity, F1 score). For the instrument detection, a threshold of 0.2 for the intersection over union of algorithm prediction and ground truth was used.

Results Internal validation results on pixel basis are shown in the table. For the detection task, F1 scores of 1.00, 0.90, 0.88, 0.65, 0.45, 0.68 and 0.99 were

measured for Hook knife, Dual knife, Flush knife, needle, hemostatic forceps, hemostatic clip and distal attachment.

Conclusions In this exploratory study, endoscopic instruments were detected and delineated with varying performance by a deep learning algorithm. This was in part attributed to class imbalances in the training data. However, the incorporation of temporal information may also improve performance. Further research should focus on evaluating this new technology for automatic reporting of ESD procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP694 EUS-guided gastroenterostomy as a first-line treatment for malignant and benign gastric outlet obstruction: an international multicenter study

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DOI 10.1055/s-0046-1822021

Aims Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) has emerged as a minimally invasive alternative to surgical gastrojejunostomy or enteral stenting for the management of malignant gastric outlet obstruction (GOO). This multicenter study aimed to evaluate the outcomes of EUS-GE as a first-line treatment for both malignant and selected benign GOO

Methods We retrospectively analyzed all patients who underwent EUS-GE as a primary treatment between November 2021 and October 2025 across five European referral centers. Primary outcomes were technical success, defined as correct stent placement, and clinical success, defined as improvement in the Gastric Outlet Obstruction Symptom Score (GOOSS ≥ 2). Secondary outcomes included adverse event rates, symptom recurrence, and the need for reintervention.

Results Forty-two patients were included (mean age 71.3 years, range 36-90; 61.9% male). The main etiologies were pancreatic cancer (16/42, 38.1%), gastric or duodenal cancer (12/42, 28.6%), and benign disease (7/42, 16.7%); carcinomatosis was present in 11 patients (26.2%). A 20x10 mm lumen apposing metal stent (LAMS) was used in 34/42 (80.9%) of the cases. Technical success was achieved in 37/42 (88.1%) cases, and clinical success in 39/42 (92.9%); in two cases, distal flange maldeployment occurred but was corrected during the same session. Adverse events were reported in 5/42 (11.9%) patients, primarily due to stent misdeployment, including two surgical intervention and one procedure-related death. During a mean follow-up of 163.7 days (range 15-510), symptom recurrence requiring endoscopic reintervention occurred in one patient (2.4%).

Conclusions EUS-GE demonstrated high technical and clinical success rates with low adverse event and reintervention rates. Nonetheless, the potential for severe complications underscores the need for careful patient selection and experienced operators. Overall, these findings support EUS-GE as an effective first-line treatment option for malignant and selected benign gastric outlet obstruction

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP695V ESD for an Adenoma of the Bulb: Lessons from this Rare Indication

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DOI 10.1055/s-0046-1822022

Abstract Text

Bulbar adenomas with advanced dysplasia are rare and difficult to resect due to limited access and the Brunner gland rich submucosa, which often lifts poorly with EMR.

A 70-year-old man was referred for a 25-mm sessile bulbar adenoma with suspected high-grade dysplasia. Underwater ESD was performed with a distal circumferential incision and deep submucosal dissection beneath the Brunner's gland layer. Gradual saline immersion and dissection from 7 to 3 o'clock helped expose the correct plane.

En-bloc resection was completed in 80 minutes, with minor muscular injuries clipped. Histology confirmed high-grade dysplasia (pTis) with R0 margins, and follow-up was uneventful. This case supports the feasibility and curative potential of ESD for selected duodenal bulb lesions.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/9de2aea1-6990-4007-b643-3fc4ce56006e/Uploads/19978_ESD_Bulbar%2029-11%20%2016h05.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP696 When ERCP Uncovers Hemobilia: Endoscopic Treatment of Choledochal Varices

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DOI 10.1055/s-0046-1822023

Background: Hemobilia is an uncommon complication, and when it is related to choledochal varices it becomes exceptionally rare. Diagnosis may be difficult, and management often requires collaboration between endoscopists and interventional radiologists, especially in patients with portal hypertension and complex vascular anatomy [1, 2].

Case Presentation: We describe a 44-year-old patient with multivisceral sarcoidosis who had developed extensive thrombosis of the splenomesenteric axis and portal vein, resulting in cavernoma formation, chronic liver disease, and portal hypertension-related cholangiopathy. The patient initially presented with cholestatic liver test abnormalities. Imaging showed intrahepatic bile duct dilation above a short distal common bile duct (CBD) stricture. ERCP confirmed these findings, and a plastic biliary stent was placed.

One month later, the patient was admitted with acute cholangitis and septic shock due to stent obstruction. During urgent ERCP, removal of the plastic stent immediately triggered significant hemobilia. Given the patient's background, bleeding from choledochal varices was suspected. Balloon sweeps up to 11.5 mm allowed evacuation of clots from the CBD and right intrahepatic ducts. A covered self-expandable metal stent (SEMS) of 10 x 80 mm was placed to achieve tamponade, but bleeding persisted. A second SEMS of the same size was deployed at the biliary confluence, again without satisfactory control.

Because the patient remained unstable, the case was reviewed urgently with interventional radiology and hepatobiliary surgery. No surgical approach was considered feasible, so radiologic management with TIPS was arranged. During the TIPS procedure, injection of contrast into a suprahepatic vein resulted in opacification of the biliary tree, confirming hemobilia. A second angiographic phase showed simultaneous filling of the arterial tree, suggesting the presence of arteriovenous fistulas. TIPS placement was successfully completed, leading to hemodynamic stabilization.

Follow-up imaging demonstrated reduced contrast opacification in both biliary and vascular structures and delineated the cavernoma. The patient improved progressively, and biliary stents were removed without further complications. No recurrent cholangitis or bleeding episodes were observed afterward.

Conclusion: This case illustrates a very unusual source of hemobilia related to choledochal varices in the setting of portal hypertension and complex vascular changes. A combination of endoscopic measures for initial control and radiologic TIPS for definitive management proved essential. Recognizing this possibility is important when hemobilia appears unexpectedly during ERCP in patients with portal hypertension or venous cavernoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zhao K, Shan Q, Zhang H et al. Transjugular intrahepatic portosystemic shunt for the treatment of portal hypertensive biliopathy with cavernous transformation of the portal vein. *BMC Gastroenterol* 2022; 22: 168
- [2] Ng CH, Lai L, Lok KH, Li KF, Szeto ML. Choledochal varices bleeding: a case report. *World J Gastrointest Endosc* 2010; 2 (5): 190–192

eP697 Real-World RCT Evidence for CADe: A Multicenter Middle Eastern Study

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DOI 10.1055/s-0046-1822024

Aims Colorectal cancer (CRC) remains a leading cause of cancer-related morbidity and mortality worldwide, with incidence steadily increasing across the Middle East. Quality colonoscopy metrics, including adenoma detection rate (ADR), are key determinants of effective CRC prevention, yet regional data remain limited. This multicenter randomized controlled trial aimed to assess whether computer-aided detection (CADe) technology enhances colonoscopy quality indicators—particularly ADR—compared with conventional white-light colonoscopy in Middle Eastern populations [1–3].

Methods This prospective multicenter RCT was conducted between January 2022 and December 2024 across seven tertiary centers in Egypt, Bahrain, Iran, Jordan, Saudi Arabia, and Kuwait. Expert endoscopists performed screening, surveillance, or diagnostic colonoscopies in adults aged 40–80 years using either conventional white-light colonoscopy or AI-assisted colonoscopy equipped with CADe (CAD EYE, Fujifilm). Patients were randomized 1:1 to each arm. The primary outcome was ADR. Secondary outcomes included adenomas per colonoscopy (APC), polyp detection rate (PDR), and polyps per colonoscopy (PPC). Statistical significance was set at $p < 0.05$.

Results A total of 441 patients (mean $\pm$ SD age 55 ± 10 years; 46% female) were included. The CADe-assisted group achieved a similar ADR to the conventional group (34.3% vs 30.3%; $p = 0.394$). However, CADe significantly improved overall PDR (60.4% vs 48.2%; $p = 0.010$) and detected a greater proportion of diminutive polyps (≤ 5 mm) compared with white-light colonoscopy (51.6% vs 40.6%; $p = 0.013$). The mean APC and PPC were also higher in the CADe group.

Conclusions CADe-assisted colonoscopy significantly improved overall polyp detection, particularly for diminutive lesions, demonstrating its value as both a clinical aid and a training tool to enhance endoscopist performance. Although the ADR increase was modest, it aligns with several real-world and nonrandomized studies, reinforcing the consistency of CADe's benefit across diverse settings. As the first multicenter RCT in the Middle East, this study underscores the potential of AI-assisted systems to standardize detection quality and improve diagnostic accuracy in regional populations. Future large-scale studies should focus on optimizing algorithm performance and evaluating its role in endoscopic education and practice integration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] *Transl Gastroenterol Hepatol* 2023; Oct 25 8: 42
- [2] *JCO Glob Oncol* 2024; 10:e2300372
- [3] *Endoscopy* 2024; 56 (11): 843–850

eP698 Diagnostic yield of Artificial Intelligence (AI) in detecting dysplastic lesions in inflammatory bowel disease (IBD); A Systematic Review

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DOI 10.1055/s-0046-1822025

Aims Patients with IBD are at increased risk for dysplasia and colorectal cancer (CRC) often at a younger age than the average population, making early detection essential. Despite routine surveillance colonoscopy, post-colonoscopy CRC rates remain high (28–41%), partly due to the subtle morphology and rapid progression of IBD-associated lesions, as well as the technical challenges in surveillance colonoscopy. Therefore, simpler and more effective endoscopic techniques are needed to improve dysplasia detection. The role of artificial intelligence (AI) in lesion detection during colonoscopy is well established in patients without IBD, but remains unclear in those with IBD [1–6].

A systematic review has been carried out to assess the diagnostic yield of AI software for detecting dysplasia in patients with IBD, specifically CADe systems designed for dysplasia detection.

Methods A Systematic literature searches was conducted on Medline, Cochrane Library, Web of Science, IEEE, ACM, and Scopus between 2015–2025. All retrieved references were imported to the Rayyan software for assessment for eligibility. The quality of included studies was assessed using the QUADAS-2 tool.

Results The systematic search identified 3032 studies, which were screened through multiple stages. Duplicates ($n = 1408$) were identified and removed, and a further 1,618 studies were excluded for not meeting the inclusion criteria (e.g., not addressing the study question or not being original research). Ultimately, three studies specifically investigated the detection of dysplasia during surveillance colonoscopy in patients with IBD. However, due to substantial heterogeneity in study design—including prospective real-time lesion detection in colonoscopy videos, image-based lesion detection, lesion classification, and image-based AI model development—the results could not be pooled for a meta-analysis. Therefore, a descriptive analysis was performed instead. An additional three studies explored related topics, including dysplasia classification, polyp detection, and comparisons among different AI filters.

In two studies (Abdelrahim et al. 2024 and Vinsard et al 2023), researchers developed IBD-specific CADe systems by retraining existing CADe models using lesions derived from patients with IBD. Abdelrahim et al validated an IBD-dedicated CADe system using both image-based and real-time validation. In image-based validation, the IBD-specific model demonstrated higher performance compared with a generic CADe system. During real-time evaluation, the system achieved a lesion detection rate of approximately 90.4%. Vinsard et al validated an IBD-CADe model exclusively using images of IBD-associated

lesions. This system, developed with HDWLE images, demonstrated a higher sensitivity, specificity, PPV, and NPV than the original CAdE model.

Another study (López-Serrano, A. et al 2024) performed a cross-sectional non-inferiority comparison of Virtual chromoendoscopy (VCE) iScan with CAdE Discovery in ulcerative colitis using histopathology as the gold standard. Among 52 eligible patients, 61 lesions were detected. CAdE Discovery demonstrated a lesion detection rate similar to VCE iScan.

Additional studies evaluated multiple AI-based filters to determine the most effective filter to identify IBD-related lesions and polyps, contributing to optimization of AI feature selection for IBD surveillance.

A pilot study assessed the capability of a CAdE system to differentiate low-grade from high-grade dysplasia and compared it both expert and non-expert endoscopists performance, providing early evidence for AI-assisted dysplasia grading.

Conclusions Few studies have explored the diagnostic yield of AI for the detection and characterization of dysplastic lesions in IBD surveillance colonoscopy. The lack of standardized protocols and heterogeneity, make comparisons between studies and pooled analyses impossible. Thus, more uniformed study designs are required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Roy M, Håkansson A, Backman A-S et al. Colour Channel Separation and Recombination of Images to Improve Object Detection of Diffuse Characters. *Procedia Computer Science* 2024; 246: 3457–66. doi:10.1016/j.procs.2024.09.211
- [2] Yamamoto S, Kinugasa H, Hamada K et al. The diagnostic ability to classify neoplasias occurring in inflammatory bowel disease by artificial intelligence and endoscopists: A pilot study. *Journal of Gastroenterology and Hepatology* 2022; 37 (8): 1610–16. doi:10.1111/jgh.15904
- [3] Fetzter RJ, Redij R, Agarwal J et al. Endoscopic Image Enhanced Deep Learning Algorithm for Inflammatory Bowel Disease (IBD) Polyp Detection: Feasibility Study. 2023 IEEE International Conference on Electro Information Technology (EIT). 2023;
- [4] López-Serrano A, Voces A, Lorente RJ et al. Artificial intelligence for dysplasia detection during surveillance colonoscopy in patients with ulcerative colitis: A cross-sectional, non-inferiority, diagnostic test comparison study. *Gastroenterología y Hepatología* 2025; 48 (2): 502210. doi:10.1016/j.gastrohep.2024.502210
- [5] López-Serrano A, Voces A, Lorente RJ et al. Artificial intelligence for dysplasia detection during surveillance colonoscopy in patients with ulcerative colitis: A cross-sectional, non-inferiority, diagnostic test comparison study. *Gastroenterología y Hepatología* 2025; 48 (2): 502210. doi:10.1016/j.gastrohep.2024.502210
- [6] Abdelrahim M, Siggins K, Iwade Y et al. New AI model for neoplasia detection and characterisation in inflammatory bowel disease. *Gut* 2024; 73 (5): 725–28. doi:10.1136/gutjnl-2023-330718

eP699 Neoplasia in advanced chronic pancreatitis: A diagnostic challenge

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DOI 10.1055/s-0046-1822026

Abstract Text

A 48-year-old woman, a smoker of 10 cigarettes a day with a history of COPD and intraductal breast carcinoma, was admitted for acute pancreatitis. A CT scan revealed a prominent pancreatic head with inflammatory changes in the surrounding fat, causing dilation of the pancreatic duct (duct of Wirsung). These findings could be related to a focal area of chronic pancreatitis, although an underlying neoplastic lesion could not be ruled out. An MRI was performed, yielding similar results. An endoscopic ultrasound was then performed, revealing marked signs of chronic pancreatitis, with intraparenchymal and intraductal stones and secondary dilation of the main pancreatic duct. Although no clear lesion was observed in the prominent area in the head, a biopsy was performed, with histology consistent with chronic pancreatitis. Two months later, the pa-

tient was admitted for painless jaundice with bilirubin up to 13 mg/dL, which improved spontaneously to 4 mg/dL. During this admission, CT and MRI scans were repeated, which were similar to the previous ones except for now showing dilation of the biliary tract. The echoendoscopy was repeated, without identifying a clear lesion in this exploration either, but a puncture was again performed in the head of the pancreas in the area adjacent to the amputation of the common bile duct, and on this occasion findings compatible with pancreatic ductal adenocarcinoma were observed. Following this, the patient underwent surgery, performing a cephalic duodenopancreatectomy with histology compatible with well-differentiated pT2N1 ductal pancreatic adenocarcinoma with low-grade PanIn in contact with the pancreatic margin; after surgery, treatment was initiated by oncology with FOLFIRINOX, with good clinical evolution.

This case demonstrates how challenging it is to diagnose a pancreatic tumor when it is located within a pancreas with advanced chronic pancreatitis. In our case, jaundice was the alarming sign that made us reconsider the case; a new endoscopic ultrasound with puncture was performed, using the amputation of the common bile duct as a guide when selecting the area to be biopsied, thus resulting in a correct diagnosis with the subsequent establishment of treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP700 Computed Tomography After Third-Space Endoscopy: Establishing Expected Patterns and Recognizing Clinically Relevant Red Flags

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DOI 10.1055/s-0046-1822027

Aims Third-space endoscopy generates recognizable postoperative CT changes, yet distinguishing expected findings from true complications remains challenging; this study aimed to define the radiologic signature and identify features linked to clinically relevant events [1].

Methods We performed a single-center retrospective analysis of patients who underwent third-space endoscopy and received standardized postoperative CT within 24 hours. CTs were reviewed using a structured template and quantified with accepted radiologic scales, and categorized as expected or suspected complications. Clinical variables included procedure type, duration, age, and complications requiring management change. Analyses were conducted in R 4.4.2.

Results Of the 91 patients who underwent third-space endoscopy, 79 received postoperative CT imaging and were included. Baseline characteristics and CT findings are summarized in the Table. Thoracic abnormalities were frequent, with pneumomediastinum being the dominant finding. Pleural effusions were mostly small and bilateral; all moderate effusions occurred after esophageal POEM or gastric STER, resolved spontaneously, and were associated with longer procedure duration (90 vs 30 min, $p = 0.0015$). Pericardial effusion showed no association with procedure duration. Radiologic evidence of chronic aspiration was more common in older patients, and atelectasis was highly prevalent. No hydropneumomediastinum, mediastinal collections, or pleural/mediastinal abscess was identified, and all thoracic findings resolved on follow-up imaging. Abdominal findings were mild. Pneumoperitoneum was consistently limited in extent, with occasional retroperitoneal air. Subcutaneous emphysema was common, exclusively after esophageal procedures, and did not correlate with procedure duration. In achalasia cases, esophageal wall thickening at the procedure site showed no relationship to procedural duration, while intramural air and visualized submucosal tunnels were common and fluid-free. No contrast leak, hematoma, or localized collection was observed. A radiologist flagged 13 CTs as suspected complications, but only two reflected clinically relevant

events: a persistent mucosal defect after POEM requiring stenting and a gastrografin leak after gastric STER successfully managed endoscopically, with no leak on next-day imaging (► **Table 1**).

► **Table 1** Baseline Characteristics and Distribution of CT Findings Across Third-Space Endoscopic Procedures

Demographics	Gender: Male 43 (54.4%); Female 36 (45.6%); Age, median (range) 64 (17–87)
Thoracic findings	Pneumomediastinum: Z-POEM 23/29 (86.2%); POEM 40/42 (95.2%); Pneumothorax (volume < 30%): Z-POEM 5/29 (17.2%); POEM 2/42 (4.7%); Pleural effusion: Z-POEM 6/29 (20.6%); POEM 25/42 (59.5%) G-STER: 2/3 (66.6%); Hydro-pneumothorax: Z-POEM 1/29 (3.4%); Pneumopericardium: Z-POEM 1/29 (3.4%); Pericardial effusion: Z-POEM 1/29 (3.4%); POEM 10/42 (23.8%);
Pulmonary parenchymal changes	Aspiration pneumonitis/ infiltrates: Z-POEM 9/29 (31.0%); POEM 17/42 (40.4%); G-POEM 3/3 (100%); Atelectasis: Z-POEM 13/29 (44.8%); POEM 36/42 (85.7%); E-STER 1/1 (100%); G-POEM 3/3 (100%)
Peritoneal and retroperitoneal findings	Pneumoperitoneum: Z-POEM 1/29 (3.4%); POEM 41/42 (97.6%); G-POEM 2/3 (66.6%); G-STER 3/3 (100%); Retroperitoneal air: POEM 8/42 (19.0%); G-POEM 1/3 (33.3%); Ascites (minimal – perihepatic fluid collection): POEM 1/42 (2.3%); Subcutaneous emphysema: Z-POEM 24/29 (82.7%); POEM 27/42 (64.2%); E-STER 1/1 (100%)

Conclusions Post-third-space endoscopy CT shows a consistent pattern of expected changes, while true complications are rare. Multicenter studies are needed to validate these imaging signatures and enhance their diagnostic utility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pannu D, Yang D, Abbitt PL, Draganov PV. Prospective evaluation of CT esophagram findings after peroral endoscopic myotomy. *Gastrointest Endosc* 2016; 84 (3): 408–415. doi:10.1016/j.gie.2016.02.022

eP701 Pre-closure High-Resolution Anorectal Manometry to Predict Post-closure Function After Stoma Reversal: a Single-Centre Pilot Study

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DOI 10.1055/s-0046-1822028

Aims Bowel dysfunction after stoma reversal, often captured by the Low Anterior Resection Syndrome (LARS) and Wexner incontinence scores, can impair quality of life. We assessed whether pre-closure high-resolution anorectal manometry (ARM) provides clinically useful discrimination of post-closure functional outcomes [1].

Methods In this single-centre retrospective pilot, ten consecutive adults undergoing planned stoma reversal had pre-closure ARM with anal resting pressure (RP) and maximal squeeze pressure (SP). Post-closure outcomes were LARS and Wexner scores; major LARS was defined as ≥ 30 and major incontinence as Wexner ≥ 11 . Continuous data are reported as median (IQR). Discrimination was evaluated with ROC curves. We also explored Pearson correlations and Mann–Whitney U tests, and examined the association between the rectoanal

inhibitory reflex (RAIR) and major incontinence (Wexner ≥ 11) using Fisher's exact test.

Results The cohort was 70 % male with a median age of 59 years (48.2–61.8). Surgical indications comprised rectal cancer (6/10), Fournier's gangrene (2/10), Crohn's disease (1/10), and colon cancer (1/10). Median RP and SP were 31 mmHg (22–59) and 77 mmHg (67–98), respectively. LARS categories were < 20 in 1/10, 20–29 in 7/10, and ≥ 30 in 2/10; major Wexner occurred in 4/10. For predicting major LARS, RP showed moderate discrimination (AUC 0.69) with an approximate optimal threshold of 29 mmHg (sensitivity 1.00, specificity 0.50), while SP yielded an AUC of 0.72 with an optimal threshold around 286.5 mmHg (sensitivity 0.50, specificity 1.00). Against major Wexner, discrimination was weaker (RP AUC 0.54; SP AUC 0.60). Pearson correlations between pressures and both LARS and Wexner were not statistically significant, and Mann–Whitney U comparisons showed no significant group differences. RAIR absence tended to coincide with a higher rate of major incontinence (66.7 % [2/3] vs 28.6 % [2/7]); Fisher's exact test gave an odds ratio of 5.0 ($p = 0.50$). Confidence intervals were wide across analyses, reflecting the small sample and low number of positive events.

Conclusions In this pilot series, pre-closure ARM, particularly resting pressure, offers only modest ability to distinguish patients at risk of post-closure functional impairment, while discrimination against major Wexner incontinence is limited. RAIR absence may signal higher incontinence risk, but the study is underpowered. These hypothesis-generating findings merit confirmation in larger, preferably multicentre, cohorts and may help refine clinically meaningful thresholds for decision-making before stoma reversal.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Kazi M, Jajoo B, Rohila J, Dohale S, Nashikkar C, Sainani R, Bhuta P, Desouza A, Saklani A. Should anorectal manometry be routine before stoma reversal in patients after an intersphincteric resection? *Colorectal Dis*. 2023; 25 (8): 1638–1645. doi:10.1111/codi.16646 Epub 2023 Jun 30 PMID: 37391870

eP702V Case Study Video of Rare Gastrointestinal Stromal Tumors (GIST) Discovered during a Colonoscopy in a patient in Nigeria

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DOI 10.1055/s-0046-1822029

Abstract Text

Gastrointestinal Stromal Tumors (GISTs) is a form of rare mesenchymal tumors and accounts for < 1 % of all gastrointestinal tumors. GISTs are rarer in the colon. A 44-year-old male had irregular bowel movements, rectal bleeding and right iliac fossa pain. Colonoscopy revealed an ileum mass intussusception into the ascending colon. Histology revealed gastric tissue lined by hyperplastic epithelium, proliferating mesenchymal neoplasm composed of atypical epithelioid cells disposed basically in sheets with central nuclei and moderate eosinophilic to clear cytoplasm. > Ten mitoses in 40hpf and focal congestion, necrosis, and hemorrhages seen. Features suggestive of Epithelioid GIST. A hemicolectomy was performed with an oncology review: The patients one year post surgery surveillance colonoscopy was normal. This case underscores the role of colonoscopy in diagnosing rare tumors.

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/4e64df9c-beb1-45da-bf35-43d1e3796981/Uploads/19978_Case_Study%20Video%20of%20Rare%20Gastrointestinal%20Stromal%20Tumors%20\(GIST\)....mp4](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/4e64df9c-beb1-45da-bf35-43d1e3796981/Uploads/19978_Case_Study%20Video%20of%20Rare%20Gastrointestinal%20Stromal%20Tumors%20(GIST)....mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP703 Effect of Midodrine on Short Term Mortality and Liver Function in Patients with Cirrhosis and Ascites: A Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1822030

Aims Midodrine, an α 1-adrenergic agonist, has been proposed as a vasoconstrictor therapy to counteract circulatory dysfunction in patients with cirrhosis and ascites. Its potential impact on clinical outcomes, particularly mortality and liver function, remains under active investigation.

Methods A systematic search was conducted for randomized controlled trials comparing midodrine (with or without rifaximin) to standard medical therapy or albumin in cirrhotic patients with ascites. RevMan 5.4 was used to conduct meta-analyses of mortality (binary outcome) and MELD scores (continuous outcome). Heterogeneity was evaluated using I^2 statistics (► **Table 1**).

Results Four RCTs, including a total of 729 patients (464 midodrine, 265 control), met the inclusion criteria. Midodrine significantly reduced short-term (12 weeks) mortality compared to SMT (OR: 0.22; 95 % CI: 0.11–0.44; $p < 0.0001$; $I^2 = 29\%$). Midodrine was also associated with a greater reduction in MELD score (MD: – 2.49; 95 % CI: – 2.74 to – 2.25; $p < 0.00001$; $I^2 = 0\%$). Heterogeneity was low for both outcomes. No serious adverse effects were reported. Mild symptoms such as thirst and abdominal discomfort were noted in two studies. Midodrine was generally used at 7.5–12.5 mg TID. One study combined midodrine with rifaximin.

Conclusions Midodrine is associated with significant improvements in both short-term mortality and liver function, as assessed by MELD score, in patients with cirrhosis and ascites. These findings support the consideration of midodrine as a therapeutic adjunct in selected patients. Further large-scale, multi-center trials are warranted to validate these results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP704 Deep Learning Model for Mayo Score Classification from Colonoscopy Images: Validation with CRP, Histological Activity, and Endoscopist Agreement

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DOI 10.1055/s-0046-1822031

Aims In this study, an artificial intelligence (AI) model was developed that automatically assigns Mayo 0–3 scores to colonoscopy images performed at a single center. The model's performance was compared with CRP, histological activity (Nancy score), and observer assessments.

Methods In this single-center, retrospective study, 4000 colonoscopy images (approximately 1000 frames from each Mayo category) from approximately 150 ulcerative colitis patients were analyzed. An average of 30–40 frames were selected from each patient to represent different colon segments. Data were split into 80 % training and 20 % validation on an episode-by-episode basis. EfficientNet-B0 (ImageNet pre-trained) was used as the model. Model performance was assessed using accuracy, macro-F1, macro-AUC, confusion matrix, and class boundary separations $AI_prob_active_M2M3 = p^+(Mayo2) + p^-(Mayo3)$, calculated at the episode level, was compared with CRP and Nancy score using Spearman correlation. Human-AI agreement was measured by two independent endoscopists blindly evaluating a subset of samples.

Results The model achieved 61.8 % accuracy on the validation set, macro-F1 = 0.60, and macro-AUC = 0.94. This agreement was similar to the inter-observer agreement at the Mayo 1–2 boundary. The model performed excellently in distinguishing active from inactive (AUROC(0 vs > = 1) = 0.96, AUROC(< = 1 vs > = 2) = 0.99). A significant positive correlation was observed between AI-Mayo and CRP ($p = 0.6$, $p < 0.01$). The $AI_prob_active_M2M3$ value demonstrated high discrimination power (AUROC = 0.85) in the presence of active histology (Nancy > = 1). High agreement ($\kappa = 0.8$) was found between the two observers; model predictions largely agreed with the observers' assessments.

Conclusions The AI model distinguished Mayo 0 from 3 from colonoscopy images with near-human accuracy. The model's high agreement with biochemical and histological activity demonstrates its potential for clinical decision support in the objective and reproducible assessment of mucosal healing.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

► **Table 1**

Study	N (Mid/Control)	Age (Mean $\pm$ SD)	Male %	MELD (Mean $\pm$ SD)	Comorbidities	Main Inclusion	Midodrine Dose
Singh et al., 2012	36 / 34	55 $\pm$ 10.2	72 %	14.5 $\pm$ 3.6	NA	Cirrhosis with ascites	10 mg TID
Hanafy et al., 2011	75 / 75	56 $\pm$ 9.1	70 %	18.5 $\pm$ 5.3	HTN (15 %), DM (20 %)	Refractory ascites	12.5 mg q8h
Shretsha et al., 2022	41 / 41	58.7 $\pm$ 8.2	NA	22.5 $\pm$ 2.4	NA	Refractory ascites	7.5–10 mg/day
Elsabaawy et al., 2024	61 / 76	55 $\pm$ 10	64 %	17.3 $\pm$ 3.2	SBP (18 %), HRS (9 %)	Refractory ascites	10 mg TID + rifaximin

eP705 Endoscopic drainage of a splenic abscess using a lumen-apposing metal stent: a case report and systematic literature review

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DOI 10.1055/s-0046-1822032

Abstract Text

Splenic abscesses are rare and often refractory to antibiotic therapy. Percutaneous drainage may not be feasible due to limited anatomical access, and surgical treatment is invasive. We report the case of a 62-year-old man with multiple comorbidities including morbid obesity and type II diabetes who was admitted due to sepsis secondary to vertebral osteomyelitis. Contrast-enhanced abdominal CT scan revealed a 44mm well-demarcated fluid collection with a thickened capsule consistent with a splenic abscess. Endoscopic ultrasound (EUS) confirmed a 40mm hypo-/anechoic collection accessible from the gastric body. EUS-guided transgastric drainage was performed using a 10 × 10mm lumen-apposing metal stent (LAMS), resulting in immediate purulent drainage into the gastric cavity. The patient improved rapidly and CT scan confirmed complete resolution of the abscess. LAMS was removed after one week.

We investigated how many cases of EUS-guided splenic abscess drainage have been performed so far. We conducted a systematic literature review on PubMed using the searching terms “splenic abscess” AND “endoscopic drainage” or “lumen-apposing metal stent”. We included all studies and case reports describing a comparable scenario to the presented case.

Our search retrieved eight publications describing a total of ten cases of EUS-guided splenic abscess drainage. Three abscesses were drained with a plastic stent and four using a pigtail stent. Only three of the previously described cases involved LAMS placement.

Regardless of the etiology and predisposing factors, EUS-guided drainage using LAMS is a safe, effective, and less invasive treatment option compared to surgical or percutaneous drainage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP706 Diagnostic accuracy of detective flow imaging endoscopic ultrasound in pancreatic lesions: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1822033

Aims Pancreatic diseases are diagnostically challenging due to overlapping imaging features and variable lesion vascularity. While contrast-enhanced harmonic EUS (CH-EUS) improves microvascular visualization, its use is limited by cost and contraindications. Detective flow imaging EUS (DFI-EUS) is a novel, contrast-free Doppler technique with enhanced sensitivity for detecting fine vascular structures and slow blood flow. However, current evidence is limited to small, single-center studies with methodological variability, and its role relative to CH-EUS remains unclear. This meta-analysis aims to evaluate the diagnostic performance of DFI-EUS in pancreatic lesions.

Methods we have conducted a systematic review and meta-analysis including MEDLINE (via PubMed), Scopus, and the Cochrane Library (Central Register of Controlled Trials), covering all available records up to 30 September 2025 (protocol registered on PROSPERO; registration number CRD420251086026).

Results At the end of the selection process, four studies comprising a total of 267 patients were included in the meta-analysis. DFI demonstrated a pooled sensitivity of 0.93 (95% CI: 0.83–0.98) and a pooled specificity of 0.91 (95% CI: 0.47–0.99). Among these, two studies evaluated CE-EUS and eFLOW, reporting pooled sensitivity and specificity estimates of 0.96 and 0.94 for CE-EUS, and 0.84 and 0.69 for eFLOW, respectively.

Conclusions This meta-analysis supports the diagnostic value of DFI-EUS for pancreatic lesions. These findings indicate that DFI shows robust discriminatory performance across the included datasets, although further validation with additional data would strengthen the generalizability of these results

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP707 Feasibility of Single-Operator Cold and Hot Snare Endoscopic Resection Using the HOLDFINGER Device: Initial Clinical Experience

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DOI 10.1055/s-0046-1822034

Aims Endoscopic removal of colorectal polyps is central to colorectal cancer prevention, with techniques ranging from cold snare polypectomy (CSP) for smaller lesions to hot snare polypectomy (HSP) for selected larger or pedunculated polyps. ESGE guidelines recommend tailoring technique selection to lesion size, morphology, and location. Although effective, these procedures generally require an assistant to actuate the snare. The HOLDFINGER device is a finger-mounted stabilizing system designed to secure the snare handle and may enable autonomous single-operator polypectomy. This study aimed to assess the feasibility and safety of single-operator CSP and HSP using the HOLDFINGER device.

Methods Seven consecutive patients underwent snare polypectomy with the HOLDFINGER device. Procedures were performed autonomously by experienced endoscopists, except one case requiring assistance for submucosal injection and clip placement during HSP of a 20 mm Paris 0-IIa lesion. No patient was on chronic antiplatelet or anticoagulant therapy. Lesions included three flat polyps (two < 10 mm; one 20 mm), one sessile polyp (< 10 mm), and three pedunculated polyps with heads < 15 mm. CSP was used for flat and sessile lesions; HSP for pedunculated lesions and for the 20 mm flat lesion. Locations included three sigmoid, two transverse, and two right-colon lesions. Outcomes included en-bloc and R0 resection, assistance needed, procedure time, and complications.

Results All lesions were resected en-bloc with R0 margins. Mean procedure time was 6 minutes. One intraoperative bleeding event during HSP of a pedunculated polyp was controlled with clip placement, with no other intraoperative or delayed bleeding. Assistant involvement was limited to lifting and clip deployment. No perforation or additional complications occurred.

Conclusions Single-operator CSP and HSP using the HOLDFINGER device appeared feasible and safe in this small series. Larger studies are required to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP708 Surveillance of high-risk individuals for pancreatic cancer in the Czech Republic

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DOI 10.1055/s-0046-1822035

Aims Pancreatic ductal adenocarcinoma (PDAC) remains a highly lethal disease. The Czech Republic ranks 6th globally in PDAC mortality. This study reports the baseline findings from the first year of a prospective, multicenter surveillance program in the Czech Republic.

Methods In this prospective cohort study, we enrolled asymptomatic high-risk groups with an increased risk of developing pancreatic cancer. These groups included individuals with positive family history of PDAC, hereditary chronic pancreatitis, or confirmed genetic mutations (BRCA1/2, Lynch syndrome, Peutz-Jeghers syndrome, etc.).

Surveillance consisted of annual endoscopic ultrasound (EUS), magnetic resonance imaging (MRI) and blood sampling for analysis of fasting glucose, glycated hemoglobin (HbA1c) and potentially tumor markers (CA 19-9, CEA). The data are subsequently entered into an eCRF and statistically evaluated.

Results Between 2023 and 2025, a total of 373 high risk individuals (HRIs) were enrolled across nine centres from the Czech Republic (59.2% were female; the mean age was 56 years with range 19 – 80 years). Based on the indication criteria, most HRIs were included due to positive family history of PDAC (264 patients, 70.8%) and BRCA2 positivity (59 patients, 15.8%).

The baseline EUS examination was performed in 316 patients with identifying 108 pathological findings (34.2%). These included 69 cystic lesions (21.8% of all EUS performed), 20 cases of chronic pancreatitis (6.3%) and 4 solid lesions (1.3%). The solid lesions consisted of 1 PDAC and 3 pancreatic neuroendocrine tumors (NETs). Main pancreatic duct dilatation was observed only in 2 cases (0.6%) and other findings in 13 cases (4.1%)- mostly anechogenic lesions. Baseline MRI/MRCP was performed in 282 patients detecting 58 pathological findings (20.6%), including 41 cystic lesions (14.5%), 8 cases of chronic pancreatitis (2.8%) and other findings in 9 cases (3.2%).

The study demonstrated excellent patient adherence within the long-term surveillance registry. Out of the total cohort of 373 HRIs enrolled across the nine Czech centres, a low number of participants, specifically 10 patients (2.7%), declined further continuation of the follow-up program and were subsequently lost to follow-up.

Conclusions Baseline data from the HePaCaS registry demonstrate that surveillance in HRIs successfully detected premalignant and malignant lesions, specifically one adenocarcinoma and three neuroendocrine tumors. These findings support the utility of a structured surveillance program, though long-term follow-up is required to confirm survival benefits.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP709 A Rare Cause of Dysphagia: Oesophageal stenosis due to IgG4 Disease From diagnosis to management

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DOI 10.1055/s-0046-1822036

Abstract Text

IgG4-related disease (IgG4-RD) is a recognized systemic fibro-inflammatory condition characterized by a dense lymphoplasmacytic infiltrate rich in IgG4-positive cells and storiform fibrosis. Although initially described in pancreatic affections in 2001 and 2003, it is now known to affect virtually every organ, including the biliary tract, salivary glands, pancreas, kidneys, lungs for example, and rarely, the esophagus.

Diagnosis relies on a constellation of criteria: elevated serum IgG4 levels, characteristic histopathology (lymphocytic infiltration, obliterative phlebitis, and storiform fibrosis with organ-specific diagnostic criteria), and location.

We report the case of a 47-year-old female patient with a medical history including three episodes of acute pancreatitis, two episodes of pyelonephritis, and insulin-requiring type 2 diabetes. She presented for evaluation of dysphagia that had been evolving over two years. Endoscopy revealed a benign appearing stricture impassable by an adult endoscope. An upper gastrointestinal series and an abdominal CT scan confirmed the presence of marked esophageal wall thickening and a regular stricture in the middle third of the esophagus. A subsequent PET-CT scan showed an isolated hypermetabolism of the esophageal walls, suggestive of an oncological or an inflammatory process.

Endoscopic ultrasound (EUS) was performed due to parietal mucosal thickening, followed by submucosal wall tissues acquisition with fine needle biopsy (FNB). Histological results from the FNB demonstrated a lymphoplasmacytic infiltrate with an IgG4 quantification of 22 cells per 40x high-power field (HPF), highly suggestive for the diagnosis of IgG4-RD. Screening for other organ involvement revealed suspected renal and myocardial affection. Treatment with corticosteroids (dose?) was significantly delayed due to the presence of latent tuberculosis infection and poorly controlled diabetes, which was further dysregulated by the use of corticosteroids. A concomitant corticosteroid-sparing regimen with azathioprine was attempted in view the adverse effects associated with corticosteroid treatment but did not lead to clinical improvement. Ultimately, treatment with Rituximab was initiated after 9 months, resulting in the beginning of symptomatic improvement.

This case highlights, a rare cause of dysphagia (esophageal IgG4-RD) and, the significant difficulty in managing this condition due to the patient's complex comorbidities (diabetes, latent tuberculosis). The certainty of the diagnosis and the follow-up of the treatment in this case necessitate a multidisciplinary approach and close cooperation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP710 Differences in the outcomes of patients with gastrointestinal bleeding according to admission ward: a 25-years population-based study in the Veneto Region, Italy (2000-2024)

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DOI 10.1055/s-0046-1822037

Aims Gastrointestinal bleeding (GIB) remains one of the leading causes of emergency hospital admission for gastrointestinal disorders and continues to represent a major source of morbidity and mortality. Yet, there are limited data on the effect of the specialist care setting on the outcomes of the GIB hospitalized patients. In the present study, we aimed to assess the main care process and clinical indicators of hospitalized GIB patients in the Veneto Region from 2000 to 2024, according to the admission ward.

Methods A retrospective analysis based on the anonymous regional Hospital Discharge Records database was carried out including all discharges from hospitals operating under the National Health Service in the Veneto Region in the period 2000-2024 with a Diagnosis-Related Group (DRG) code equal to 174 ("Gastrointestinal Haemorrhage with Complications") or 175 ("Gastrointestinal Haemorrhage without Complications"), or any surgical DRG with a principal discharge diagnosis indicative of GIB. Selected cases were stratified into the site of bleeding (upper, lower, unspecified), the admission area (medical, surgical or other) and, for those hospitalized in the medical area, into gastroenterology ward or different ward (e.g., internal medicine). The mean length of

stay (LOS) among patients discharged alive and the in-hospital case-fatality risk (CFR) were calculated. Multivariate logistic regression models were used to assess the association between the admission ward (gastroenterology vs other medical ward) and the in-hospital CFR.

Results During the 25-year observation period, 99,731 patients were hospitalized for GIB in the Veneto Region: 57.4% in medical area, 39.6% in surgical area and 3.0% in other wards. Males represented 55.2% of them and accounted for the most in each area. The mean age of GIB hospitalized patients was 70.6 ± 18.1 years and they were older in medical area (73.7 ± 15.2 years) than in surgical area (69.2 ± 16.7 years). Upper GIB was the most represented site of bleeding among patients admitted to the medical area (53.0%), whereas lower GIB prevailed among patients admitted to the surgical area (52.5%).

The overall in-hospital CFR was 5.0% and the mean LOS was 9.3 ± 8.3 days. Both indicators were higher among patients admitted to the medical area compared with those hospitalized in a surgical ward: the CFR was 5.4% and 4.0%, respectively, whereas the mean LOS was 9.9 ± 8.2 days and 8.5 ± 7.8 days, respectively.

Among GIB patients cared for in the medical area ($n = 57,204$), the mean LOS was 7.1 ± 5.9 days in the gastroenterology wards compared to 10.7 ± 8.6 days in other wards. Inside the medical area, significant difference emerged also for the in-hospital CFR, which was 2.3% in gastroenterology wards and 6.4% elsewhere. After adjustment for all the other examined variables (sex, age, calendar year and need for surgery), the adjusted odds of in-hospital death decreased by more than half among patients with upper GIB admitted to a gastroenterology ward compared to those admitted to a different medical ward (Odds Ratio 0.48, 95% CI 0.40 to 0.58, $p < 0.0001$), and about two-thirds among patients with lower (Odds Ratio 0.33, 95% CI 0.25 to 0.43, $p < 0.0001$) or unspecified GIB (Odds Ratio: 0.34, 95% CI 0.27 to 0.43, $p < 0.0001$).

Conclusions The management in a gastroenterology ward appears to be associated with improved care process and clinical outcomes, irrespective of the site of bleeding. These findings may provide guidance to both health policymakers and clinicians involved in the management of patients presenting with GIB.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP711V Successful Application Of Argon Plasma Coagulation For Duodenal Dieulafoy's Lesion In Very Low Birth Weight Premature Neonate

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DOI 10.1055/s-0046-1822038

Abstract Text

A male baby, born at 29 weeks with a birth weight of 1.2kg, at week 4, he presented with recurrent hematemesis and melena, leading to shock. Treatment included repeated blood transfusions, octreotide infusions. An upper GI endoscopy revealed a Dieulafoy's lesion in the first part of the duodenum. Local injection of epinephrine 1:1000 failed to prevent recurring bleeding. Forty-eight hours later, a second endoscopy with a GIF XP190 video-gastroscope was performed and targeted APC (30W, 1L/m) was applied to the lesion, successfully stopping the bleeding without recurrence. Our case is the only reported instance of successful endoscopic management of a duodenal Dieulafoy's lesion in the duodenum in a preterm baby with very low birth weight.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/ec852b17-f627-4da6-816c-c1357fd13d3f/Uploads/19978_VIDEO-2023-12-09-00-08-38.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP712 Twenty-Five-Year Trends in Hospitalizations for Gastrointestinal Bleeding in the Italian Veneto Region (2000–2024)

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DOI 10.1055/s-0046-1822039

Aims Gastrointestinal bleeding (GIB) remains one of the leading causes of emergency hospital admission for gastrointestinal disorders and continues to represent a major source of morbidity and mortality, particularly in aging populations, where widespread use of antithrombotic and anticoagulant agents increases bleeding risk. Long-term population-based data on GIB hospitalizations in Europe are limited. This study assessed 25-year trends in hospitalization rates for upper (U-GIB), lower (L-GIB), and undefined GIB (UN-GIB) in the Veneto Region, in Northeastern Italy.

Methods All GIB admissions from 2000 to 2024 were identified through regional Hospital Discharge Records using ICD-9-CM codes. Age- and sex-standardized hospitalization rates (HRs) per 100,000 residents were calculated annually. Temporal trends were evaluated using Joinpoint regression and expressed as average annual percent change (AAPC).

Results A total of 99,731 GIB admissions were recorded, including 46.6% U-GIB, 39.5% L-GIB, and 13.9% UN-GIB. The standardized hospitalization rate (HR) decreased from 122.4 to 55.0 per 100,000 population (AAPC – 3.6%; 95% CI – 3.9 to – 3.4; $p < 0.001$) from 2000 to 2024. U-GIB declined from 76.3 to 20.1 per 100,000 (AAPC – 5.98%; 95% CI – 6.46 to – 5.50; $p < 0.001$), L-GIB from 30.7 to 28.0 per 100,000 (AAPC – 0.92%; 95% CI – 1.31 to – 0.53; $p < 0.001$), and UN-GIB from 15.3 to 6.8 per 100,000 (AAPC – 3.64%; 95% CI – 4.26 to – 3.02). L-GIB exceeded U-GIB from 2011 onwards, in 2008 among females and 2018 among males. Hospitalization rates were consistently higher in males across all bleeding sites. Age-specific rates rose progressively with age, with L-GIB surpassing U-GIB in individuals aged ≥ 85 years and earlier in females (65–74 years).

Conclusions GIB hospitalizations in the Veneto region declined by more than half over 25 years, driven by a steep reduction in U-GIB and a modest decrease in L-GIB. L-GIB has become the most frequent bleeding site, with clear age- and sex-related differences. These long-term trends indicate a shifting epidemiologic burden that should guide future preventive and diagnostic strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP713 Sex- and Age-Specific Trends in In-Hospital Mortality from Gastrointestinal Bleeding: A 25-Year Study in the Veneto Region

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DOI 10.1055/s-0046-1822040

Aims Gastrointestinal bleeding (GIB) remains one of the leading causes of emergency hospital admission for gastrointestinal disorders and continues to represent a major source of morbidity and mortality. Its burden is particularly relevant in aging populations, where widespread use of antithrombotic and anticoagulant agents increases bleeding risk. We aimed to conduct a comprehensive, methodologically consistent, population-based analysis of GIB in

hospital-mortality in the Veneto Region (Northeastern Italy) over a 25-year period.

Methods A retrospective analysis based on the anonymous regional Hospital Discharge Records database was carried out including all discharges from hospitals operating under the National Health Service in the Veneto Region in the period 2000–2024 with a Diagnosis-Related Group (DRG) code equal to 174 (“Gastrointestinal Haemorrhage with Complications”) or 175 (“Gastrointestinal Haemorrhage without Complications”), or any surgical DRG with a principal discharge diagnosis indicative of GIB. Moreover, selected cases were stratified into upper, lower or unspecified GIB, based on the site of bleeding. Crude in-hospital Case-Fatality Risks (CFR) were calculated among all GIB patients and expressed per 100 patients. Annual trends were analysed in terms of Annual Percentage Change (APC) and Average Annual Percent Change (AAPC).

Results During the 25-year observation period, 99,731 patients were hospitalized for GIB in the Veneto Region. Upper, lower, and unspecified GIB accounted for 46.6%, 39.5%, and 13.9% of cases, respectively. The mean age of patients was 70.6 ± 18.1 years. Males represented 55.2% of all GIB cases and were significantly younger than females (67.0 ± 18.2 vs. 75.1 ± 16.9 years, respectively; $p < 0.001$).

Crude in-hospital CFR for GIB was 5.0% during the 25-year observation period and it was higher in females than in males (5.6% vs 4.5%; crude OR 1.26; 95% CI 1.19 to 1.33). It was 2-fold higher in unspecified GIB (8.8%) than in upper GIB and lower GIB (4.4% each). Overall, CFR decreased from 5.4% in 2000 to 4.4% in 2018 (APC -0.71%, 95% CI -4.29 to +0.06, $p = 0.056$) but increased again in the latest years of the study (APC +3.42%, 95% CI -0.14 to +14.15, $p = 0.062$), peaking at 5.9% in 2021. Considering the 25-year period, only unspecified GIB showed a significantly decreasing trend in the crude in-hospital CFR (AAPC -1.31%, 95% CI -2.55 to -0.27, $p = 0.019$).

Conclusions Despite an aging population and a progressive shift toward out-patient management of low-risk cases, the crude in-hospital CFR showed only a slight reduction in the Veneto Region from 2000 to 2024.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP714 Navigating the uncharted cross roads: Endoscopic solutions for Tracheoesophageal Fistula: 15 case series

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DOI 10.1055/s-0046-1822041

Aims To describe real-world outcomes of endoscopic management of Tracheo-Esophageal Fistula (TEF) across varied etiologies and to suggest a practical, algorithm-based approach to intervention selection [1–9].

Methods We present a retrospective series of 15 consecutive TEF cases managed at Yashoda Hospital, Secunderabad, India, a tertiary care centre, seen from December 2022 till November 2025 (► **Table 1**).

► **Table 1** Suggested Algorithm for TEF Management

1. Confirm Diagnosis: Imaging, Scopies, Characterise- Size, location, cause
2. Airway Management +/- Airway Stenting
3. Nutrition management and Assess fitness for Surgery
4. Endoscopic Options

Results We hereby share our experience of 15 cases of TEF. According to the etiology, two main groups have been identified- Malignant and Benign causes of TEF (► **Table 2**).

► **Table 2**

Malignant TEF	Benign TEF
Esophageal SEMS +/- Tracheal Stenting	Defect < 5mm: Clipping +/- APC of edges
	5-10mm: OTSC/ ASD Closure Device
	10-12 mm: ASD Closure Device/ EndoSuture
	> 12 mm: Dual Stenting/ Surgery
	Defect > 15mm: Surgery

1. **Malignant TEF** (n=6) due to Carcinoma Esophagus: All underwent partially covered esophageal SEMS placement, achieving good technical and clinical success.

2. **Benign Causes of TEF** (n=9): According to the etiology again, 3 sub-groups were identified:

i) **Post-intubation TEF** (n=4):

- ASD closure device placement: 2 patients (successful).
- Tracheal stent + OTSC: 1 patient (successful).
- OTSC alone: 1 patient (partial dislodgement at 2 months → PEG for feeding; planned surgery).

ii) **Tracheostomy Tube-related TEF**-Post thyroid cancer laryngectomy (n=2):

- ASD closure device placement: 1 successful case.
- Cervical covered SEMS: 1 case with stent-related erosion → stent removal → spontaneous healing of Erosion over 2 weeks; PEG-J feeding provided.

iii) **Tuberculosis-related TEF** (n=3):

- a) *Small defect*: Anti Tuberculosis Therapy (ATT) + NG feeding, successful.
- b) *Larger defects*:
 - Esophageal covered stent + proximal clipping of stent (1 case), clinically successful.
 - APC margin cauterization + multiple hemoclips (1 case), successful.

Overall, endoscopic therapy for TEF in our series demonstrated high technical and clinical success across varied etiologies. We recommend the following approach to the management of this complex disorder.

Conclusions Tracheo Esophageal Fistula (TEF) is a complex entity requiring a multidisciplinary, individualized approach. Endoscopic therapy—particularly stenting—remains the cornerstone for malignant TEF, while benign TEF may benefit from tailored interventions including clipping, cauterization or device closure. Larger defects may require surgical intervention. Our experience with good number of cases suggests that endotherapy offers favorable outcomes when guided by defect characteristics, patient condition and an algorithmic treatment strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Patel A., Shah P. 2019; Endoscopic treatment of tracheoesophageal fistula: outcomes from a tertiary care center in India. *Indian Journal of Gastroenterology* 38 (2): 156–161
- [2] Sharma R., Gupta S. 2017; Management of acquired tracheoesophageal fistula: a single-center experience. *Indian Journal of Thoracic and Cardiovascular Surgery* 33 (1): 45–50
- [3] Bibas BJ, Cardoso PFG, Minamoto H, Pego-Fernandes PM. Surgery for intrathoracic tracheoesophageal and bronchoesophageal fistula. *Ann Transl Med* 2018; 6 (11): 210
- [4] Brown R.W., Miller S.P. 2020; Endoscopic management of tracheoesophageal fistula: current trends and future perspectives. *Gastroenterology Research and Practice*. 2020; 1–10

- [5] Jones A.B., Smith T.C. 2018; Imaging modalities in the diagnosis of tracheoesophageal fistula: a comparative review. *Radiology* 245 (2): 312–319
- [6] Patel N.J., Brown K.L. 2015; Surgical treatment options for tracheoesophageal fistula: a comprehensive review. *Journal of Thoracic Disease* 7: (Suppl 3): S389–S396
- [7] Rodriguez AN, Diaz-Jimenez JP. Malignant respiratory-digestive fistulas. *Curr Opin Pulm Med.* 2010; 16 (4): 329–33
- [8] Raman Didee, Ian H Shaw. Acquired Tracheo-oesophageal fistula in adults. *Continuing Education in Anaesthesia, Critical care & Pain*, Volume 6:3-2006
- [9] Mathisen DJ, Grillo HC, Wain JC, Hilgenberg AD. Management of acquired nonmalignant Tracheoesophageal fistula. *Ann Thorac Surg.* 1991; 52: 759–65

eP715V Complete Circumferential Endoscopic Submucosal Dissection for a Long segment Esophageal Dysplasia

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DOI 10.1055/s-0046-1822042

Abstract Text

Endoscopic submucosal dissection (ESD) for an extensive circumferential esophageal lesion can be challenging. 56-year-old female who presented with dysphagia since 2 months. On esophagogastroduodenoscopy, circumferential irregular mucosa from proximal to distal esophagus was seen with high definition-narrow band imaging showing abnormal Intra-Papillary Capillary Loop (IPCL) pattern – B1. Circumferential ESD of the entire segment was successfully performed using a J knife. Steroid injections at base of defect followed by esophageal covered stent placement and oral steroids were given to prevent stricture. Histopathology showed a R0 resection, verrucous proliferation with low-grade squamous intraepithelial lesion at the site of nodular lesion. Despite this, patient developed stricture requiring dilations and stricturotomy with ultimately successful resolution.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/fafd428a-5369-4747-801b-cb0f9d17e4ea/Uploads/19978_Circum_ESD.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP716 Green Endoscopy: Insights from the Middle East

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DOI 10.1055/s-0046-1822043

Aims Healthcare systems, especially digestive endoscopy (DE) procedures, add significantly to climate change. Data on environmental awareness within DE units, especially in the Middle East remain limited. This study aimed to assess DE healthcare professionals' knowledge of climate-change concepts, understanding of environmental sustainability in endoscopy, and attitudes toward green-endoscopy practices in the Middle East.

Methods From July 2025 to October 2025, a cross-sectional study was conducted. An electronic survey (Qualtrics) was distributed to endoscopists, nurses, technicians, and trainees across 11 Middle Eastern countries. The questionnaire evaluated climate-change knowledge, environmental awareness within healthcare, understanding of green-endoscopy principles (13 questions), as well as

beliefs and attitudes toward sustainability practices (17 questions). Another section of the questionnaire was on participants' demographic and work data (12 questions). Descriptive statistics and mean-rank data were used for analysis.

Results 130 participants completed the survey: endoscopists 72 (55.4%), nurses/technicians 58 (44.6%); male 66 (50.8%), female 64 (49.2%). 77 of 130 (59.2%) respondents correctly defined climate change as long-term shifts in temperature and weather patterns, and 50 (38.5%) attributed it to human activity. Knowledge of greenhouse gases was mixed: 73 (56.2%) answered correctly, while 27 (20.8%) selected gases essential for life and 13 (10%) associated it with ozone depletion. Hospital carbon emissions contributors were frequently misidentified, with 86 (66.2%) selecting waste disposal as the major source. Awareness of endoscopy units' contribution to hospital waste was limited, as only 55 (42.3%) correctly ranked endoscopy units third, and 40 (30.8%) were unsure. Understanding of carbon footprint was low: 69 (53.1%) equated it as a measure for waste generation, whereas only 31 (23.8%) correctly identified greenhouse-gas emissions. In contrast, recognition of green endoscopy was high 120 (92.3%), although only 77 (59.2%) correctly identified that high-quality curative services are not a pillar of green endoscopy. Knowledge related to water use varied: 54 (41.5%) reported that filtered water is allowed for high-level disinfection, and 80 (61.5%) indicated that potable tap water is not permitted for mucosal irrigation.

Concern about climate change was high (n 116, 89.2%). Most participants acknowledged healthcare's negative impact on the environment (n 71, 54.6%) but perceived limited institutional action. Most respondents (n 86, 66.2%) perceived single-use endoscopes and accessories as a major contributor to the procedure's environmental burden. In total, 84 respondents (64.6%) believed that adopting a "reuse" approach could compromise patient safety. The majority (n 92, 70.8%) of respondents believed that financial models tied to procedural volume hinder the adoption of environmentally sustainable practices in endoscopy. There was strong support for mandatory training on waste management (n 115, 88.5%), minimizing patient visits when feasible (n 103, 79.2%), and integrating environmental criteria into purchasing decisions (n 101, 77.7%). Almost all respondents expressed interest in further education on sustainable endoscopy (n 123, 94.6%).

Conclusions Healthcare professionals across Middle Eastern endoscopy units demonstrated strong concern for climate change and high support for sustainable practices. However, substantial knowledge gaps existed regarding greenhouse gases, carbon footprints, hospital carbon emission sources, and endoscopy-related environmental impact. Moreover, institutional supportive actions were limited. Present data provide guidance to develop focused, tailored educational programs, clear protocols, and practical policies to help endoscopy teams implement greener, more environmentally responsible practices in the Middle East.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP717V EUS-guided drainage of an infected pancreatic cyst complicating FNA

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DOI 10.1055/s-0046-1822044

Abstract Text

A 62 old-year-male, with no medical history, was admitted for jaundice. The clinical examination noted cholestatic jaundice and scratching lesions. CT scan showed a pancreatic head cyst with upstream dilation of the common bile duct and intrahepatic duct. Biochemical examination showed acute cholangitis with total bilirubin at 16 mg/dL. Endoscopic ultrasound examination showed a cystic lesion at the head of the pancreas with multiple septation inducing upstream dilation of the common bile duct. FNA of the cyst showed clear liquid (dosage of ACE, glucose, and amylase requested). the patient presented 24 hours later

with fever and tenderness of the abdomen. Re-EUS examination demonstrated a muddy aspect of the cyst suspecting an infection. We decided to perform a drainage with two double pigtail stents. The evolution was very favorable.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7a040332-de9e-4a9a-8f23-40c2798b7e52/Uploads/19978_infected_cyst%20final%20esge%2026.mpeg

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP718 When Diffuse Lymphadenopathies Mimic Lymphoma: A Diagnostic Pitfall

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DOI 10.1055/s-0046-1822045

Introduction Whipple's disease, caused by *Tropheryma whipplei*, is a rare multisystem infection. Although classically presenting with malabsorption or arthralgia, atypical manifestations may mimic hematologic disorders, leading to diagnostic delay. Accurate diagnosis relies on integrating clinical, biochemical, imaging, histologic, and molecular findings [1]. We report a case of Whipple's disease in which diffuse lymphadenopathies and marked inflammation initially raised concern for a lymphoproliferative disorder.

Case Description A 39-year-old woman with perinatal hypoxic brain injury was referred for persistent systemic inflammation associated with chronic peri-umbilical pain, vomiting and a 20 kg weight loss over two years. Laboratory investigations demonstrated CRP up to 120 mg/L, ESR 115 mm/h, polyclonal hypergammaglobulinemia, elevated vitamin B12. Autoimmune work-up showed an elevated rheumatoid factor, while anti-CCP was negative and C3/C4 levels were within normal range. Infectious work-up including blood cultures and Quantiferon was negative.

CT and PET-CT revealed multiple supraclavicular, mediastinal, mesenteric, and retroperitoneal lymphadenopathies with hypermetabolic activity suggesting lymphoma. Peripheral blood immunophenotyping identified a monoclonal B-cell population compatible with marginal zone lymphoma. Supraclavicular lymph node biopsy was unremarkable.

EUS showed a cluster of hyperechoic retroperitoneal mesenteric lymph nodes, the largest 2 cm near the SMV, sampled using FNB. Endoscopy revealed a brownish, atrophic duodenal mucosa with suspected lymphoid infiltration. Duodenal biopsies and lymph node FNB demonstrated numerous PAS- and PAS-diastase-positive macrophages. Molecular analysis and PCR on paraffin-embedded material confirmed *Tropheryma whipplei*, establishing disseminated Whipple's disease.

The patient was initiated on intravenous ceftriaxone for 14 days, followed by long-term oral doxycycline for 12 to 24 months.

Conclusion This case illustrates an uncommon presentation of Whipple's disease mimicking lymphoma and underlines the important role of endoscopy providing histology and PCR testing for *Tropheryma whipplei* in unexplained systemic inflammation and atypical lymphadenopathy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Boumaza A, Ben Azzouz E, Arrindell J, Lepidi H, Mezouar S, Desnues B. Whipple's disease and *Tropheryma whipplei* infections: from bench to bedside. *Lancet Infect Dis* 2022; 22: e280–e291

eP719 Comparative Analysis of Efficacy and Tolerability of Bowel Preparations for Colonoscopy: A Multi-Center Prospective Study in Lebanon

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DOI 10.1055/s-0046-1822046

Aims Adequate bowel preparation is essential for high-quality colonoscopy, yet comparative data on preparation efficacy and tolerability in Middle Eastern populations remain limited. We compared commonly used bowel preparations in Lebanese clinical practice

Methods This prospective, multi-center observational study enrolled 600 patients undergoing elective colonoscopy at three Lebanese hospitals over six months. Patients received polyethylene glycol 4L (Klean-prep, n = 124), polyethylene glycol 2L with ascorbic acid (Moviprep, n = 317), sodium picosulfate/magnesium citrate (Picoprep, n = 136), or other preparations (n = 23). Primary outcome was preparation quality assessed by the Boston Bowel Preparation Scale (BBPS). Secondary outcomes included patient compliance ($\geq 80\%$ consumption), adverse effects, and willingness to repeat the same preparation. Chi-square tests and logistic regression identified factors associated with adequate preparation (BBPS ≥ 6 with all segments ≥ 2).

Results Overall, 91.3 % of patients achieved adequate preparation with no significant difference in mean BBPS scores between Moviprep (7.52 ± 1.63), Picoprep (7.60 ± 1.55), and Klean-prep (7.51 ± 1.64 , $p = 0.283$). However, low-volume preparations demonstrated superior compliance (97.8% vs 87.9% , $p < 0.001$) and patient acceptance. Willingness to repeat was significantly higher for Moviprep (86%) and Picoprep (74%) versus Klean-prep (25% , $p < 0.001$). Split-dosing improved compliance ($p < 0.001$) but did not significantly affect BBPS scores ($p = 0.283$). Independent predictors of inadequate preparation included constipation ($p < 0.001$), multiple comorbidities ($p < 0.001$), and regular laxative use ($p < 0.001$). Unexpectedly, inpatient status was associated with superior preparation quality ($p < 0.001$) [1–6].

Conclusions While all preparations achieved high adequacy rates, low-volume PEG-based formulations offer superior patient tolerability and acceptance, which may enhance long-term screening adherence. Patient-specific factors including comorbidities and dietary compliance significantly impact preparation quality

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] El Sayed AM, Kanafani ZA, Mourad FH, Soweid AM, Barada KA, Adorian CS, Nasreddine WA, Sharara AI. A randomized single-blind trial of whole versus split-dose polyethylene glycol-electrolyte solution for colonoscopy preparation. *Gastrointest Endosc* 2003; 58: 36–40 PMID: 12838218. doi:10.1067/mge.2003.318
- [2] ASGE Standards of Practice Committee Saltzman JR, Cash BD, Pasha SF, Early DS, Muthusamy VR, Khashab MA, Chathadi KV, Fanelli RD, Chandrasekhara V, Lightdale JR, Fonkalsrud L, Shergill AK, Hwang JH, Decker GA, Jue TL, Sharaf R, Fisher DA, Evans JA, Foley K, Shaikat A, Eloubeidi MA, Faulx AL, Wang A, Acosta RD. Bowel preparation before colonoscopy. *Gastrointest Endosc* 2015; 81: 781–794 PMID: 25595062. doi:10.1016/j.gie.2014.09.048
- [3] Hassan C, Bretthauer M, Kaminski MF, Polkowski M, Rembacken B, Saunders B, Benamouzig R, Holme O, Green S, Kuiper T, Marmo R, Omar M, Petruzzello L, Spada C, Zullo A, Dumonceau JM European Society of Gastrointestinal Endoscopy. Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* 2013; 45: 142–150 PMID: 23335011. doi:10.1055/s-0032-1326186
- [4] Calderwood AH, Jacobson BC. Comprehensive validation of the Boston Bowel Preparation Scale. *Gastrointest Endosc* 2010; 72: 686–692 PMID: 20883845. doi:10.1016/j.gie.2010.06.068
- [5] Rex DK, Vanner SJ. Colon cleansing before colonoscopy: does oral sodium phosphate solution still make sense? *Can J Gastroenterol* 2009; 23: 210–214 PMID: 19319385. doi:10.1155/2009/417296
- [6] Juluri R, Eckert G, Imperiale TF. Meta-analysis: randomized controlled trials of 4-L polyethylene glycol and sodium phosphate solution as bowel preparation for colonoscopy. *Aliment Pharmacol Ther* 2010; 32: 171–181 PMID: 20384609. doi:10.1111/j.1365-2036.2010.04326.x

eP720 Endoscopic ultrasound sugar augmented radiofrequency ablation in pancreatic perivascular space induces controlled necrosis with specific settings before pancreatic surgery in a live swine model: feasibility, safety and survival

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DOI 10.1055/s-0046-1822047

Aims We showed that sugar augmented radiofrequency ablation (SARFA) applied to the pancreatic perivascular tissue in an ex vivo pancreas swine model showed controlled necrotic ablation due to induced sugar better heat conductivity using specific settings for 300 joules of energy [1–5].

Our aim is to show that endoscopic ultrasound SARFA (EUS-SARFA) performed in pancreatic perivascular space in a live swine model using specific RFA settings established in a previous ex-vivo experiment, allows a controlled necrotic ablation without increasing perioperative morbidity and mortality related to pancreatic surgery (duodenopancreatectomy and left pancreatectomy).

Methods EUS-SARFA was performed in the pancreatic parenchyma adjacent to the mesenteric and splenic vessels applying 300 joules of energy using different settings of power (Watts = w) and time (sec = s) in a live swine model. In group 1 (n = 1) and group 2 (n = 4), EUS-SARFA was compared with EUS-saline-RFA and EUS-RFA. These groups without survival had tested different settings with same energy. In group 3 (n = 3) with survival time of 2, 4 and 7 days (D2, D4 and D7) respectively, used EUS-SARFA was carried-on with preferred settings selected during the previous experiments. Then, surgery was performed starting with duodenopancreatectomy followed 1 hour later by left pancreatectomy. In group 4 (n = 1) only surgery was performed.

CT scan 3 acquisitions and 1.5 Tesla magnetic resonance imaging (MRI) were carried-out before and after therapeutic EUS procedures. Each pancreatic specimen was harvested separately at the end of the procedures for histopathological examination.

Surgery was assessed with a pancreatic surgery difficulty score index and compared with the control group 4 (n = 1) including duodenopancreatectomy followed by left pancreatectomy.

Results All procedures were successfully completed. CT-scan and MRI performed immediately after EUS-SARFA showed normal splenic and mesenteric vessels with a clear hypodense and non-enhancing demarcated area between them and the pancreatic gland due to ischemia of the perforant vessels. Histopathological examination showed largest necrotic ablation volumes with SARFA at 40w x 7.5sec and 30w x 10sec (300 joules) in non survival specimens when compared with saline-RFA and RFA alone. The survival group surgery at D4 and D7 showed pancreatic local necrosis, adiponecrosis and inflammatory reaction with focal venous thrombosis of small capillaries with more pronounced early fibrosis observed in at D7. Also, surgery at D7 was scored more difficult than surgery at D4 because of incipient fibrosis.

Finally, intraoperative or immediate postoperative complications for EUS-SARFA were non observed, also EUS-SARFA did not increase perioperative morbidity and mortality related to duodenopancreatectomy at D4 and D7 when compared with the control group 4. In the swine with surgery at D2 acute

pancreatitis was confirmed after EUS-SARFA and total pancreatectomy was performed due to acute necrotic inflammation.

Conclusions Pancreatic perivascular EUS-SARFA with specific settings at 300 joules performed the same day before pancreatic surgery was an efficient and safe technique enabling a controlled necrotic ablation. This technique could be promising for treatment of pancreatic cancer.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Pulikkathara M, Mark C, Kumar N, Zaske AM, Serda RE. Sucrose modulation of radiofrequency-induced heating rates and cell death. *Converg Sci Phys Oncol.* 2017;
- [2] Sosa-Valencia L, Pecorella G, Averous G, Montanelli J, Wanert F, Swanson L. Direct image-guided retroperitoneal approach and treatment of the pancreas by using natural orifice transluminal endoscopic surgery after EUS sugar-assisted radiofrequency ablation (with video). *Gastrointest Endosc* 2022; 95 (3): 573–81
- [3] Montanelli J, Sosa-Valencia L, Badaoui A, Averous G, Swanson L, Mutter D, Pessaix P, Seeliger B. Endoscopic Ultrasound guided perivascular pancreatic Radiofrequency Ablation using a Hydroxyethyl Starch Solution prior to Pancreatectomy. *Endosc Int Open* 2023; 11: E1123–E1129
- [4] Badaoui A, Lara AH, Lanza D, Montanelli J, Breton E, Averous G et al. Effect of augmented radiofrequency ablation in ex vivo pancreatic tissue using endoscopic ultrasound needle with sugar solution as a booster. Towards an improved pancreatic cancer surgery. *Endoscopy.* 2024; 56 (S 02): eP510
- [5] Badaoui A, Lanza D, Lara AH, Averous G, Giraudeau C, Breton E et al. Effect of augmented radiofrequency ablation in ex vivo pancreatic tissue using a percutaneous needle with sugar solution as a booster. Towards an improved pancreatic cancer surgery. *Endoscopy.* 2024; 56 (S 02): eP516

eP721V Slicing with Style: The Hybrid Polypectomy

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DOI 10.1055/s-0046-1822048

Abstract Text

Hybrid polypectomy techniques offer a practical balance between safety, efficiency, and high-quality resection for intermediate and large colorectal lesions. We present two rectal polyp cases demonstrating complementary hybrid approaches. The first case features a 3-cm Paris Is, NICE 2 rectal polyp removed using the Precut-EMR technique: after submucosal injection, a circumferential incision is created with the tip of the snare, allowing placement of the snare into the groove and achieving en bloc resection. The second case shows a 2-cm LST-G-NM, NICE 2 lesion resected by Tip-in EMR, where a small mucosal incision on the oral side serves as an anchor to prevent slippage and facilitate en bloc capture. These hybrid methods are technically simpler than ESD, time-efficient, improve en bloc resection rates compared with conventional EMR, and are particularly useful for 15–30 mm polyps [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0d8c13ec-307f-4df6-ba74-09eabf672904/Uploads/19978_esge_2026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Oh CK et al. *Endoscopy.* 2023;
- [2] Zhang X-Q et al. *World journal of gastroenterology.* 2022;
- [3] Yoshida N et al. *VideoGIE.* 2018;

eP722 Long-term proton pump inhibitor requirements in patients treated with POEM

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DOI 10.1055/s-0046-1822049

Aims Peroral endoscopic myotomy (POEM) is the treatment of choice for achalasia; however, the development of gastroesophageal reflux disease (GERD) after the procedure is considered a limitation. In that regard, the aims of this study were:

- To assess the proportion of patients treated with POEM who require long-term proton pump inhibitor (PPI) therapy (> 12 months).
- To evaluate the rate of GERD during post-POEM follow-up.

Methods We conducted a retrospective study of patients who underwent POEM between June 2018 and June 2024 in our center (tertiary referral hospital for achalasia). We only included patients with a minimum follow-up of 12 months. GERD was defined as the presence of: a) typical symptoms, b) erosive esophagitis on endoscopy (Los Angeles Classification grade $\geq$ B), and/or c) abnormal pH monitoring (acid exposure time $\geq$ 6% combined with manual interpretation consistent with acidic reflux) [1].

Results A total of 85 patients were included (57% male; mean age 54 ± 15 years). The baseline Eckardt score was 7 ± 2 , decreasing to 1 ± 2 post-POEM (median follow-up 20 months, interquartile range (IQR) 13–37). Mean esophageal myotomy length was 6 ± 2 cm and gastric myotomy 2 ± 1 cm. Long-term, 37% of patients did not require PPIs, 34% were on standard-dose PPIs, and 29% on double-dose PPIs (mean follow-up 26 ± 16 months). Indications for maintaining PPI therapy were: abnormal pH monitoring and/or esophagitis without GERD symptoms (49%), abnormal pH monitoring and/or esophagitis with GERD symptoms (40%), and symptoms alone without esophagitis or abnormal pH monitoring (11%). A pathological pH monitoring result was documented in 48% of patients during follow-up. At 3 months post-POEM, the esophagitis rate was 31% (20% grade B, 10% grade C, 1% grade D), but it decreased to 13% long-term (11% grade B, 2% grade C; mean follow-up 22 ± 14 months).

Conclusions More than one-third of patients do not require long-term PPI therapy after POEM. Post-POEM GERD is generally mild, minimally symptomatic, and tends to decrease over time.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] So Taa Kum A, Nunes BCM, Moura ETH, Franco MC, de Moura EGH. Gastroesophageal reflux disease over time in endoscopic versus surgical myotomy for treatment of achalasia: Systematic review and meta-analysis. *Endosc Int Open* 2025; 13:a26215421

eP723 Feasibility of patient-controlled sedation with remimazolam in outpatient colonoscopy

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DOI 10.1055/s-0046-1822050

Aims Remimazolam is a novel, short-acting benzodiazepine with organ-independent metabolism, offering rapid onset and fast recovery, making it well-suited for outpatient procedures. Its pharmacokinetic properties also make it an attractive candidate for patient-controlled sedation (PCS), enabling patients

to self-titrate sedation within predefined limits for optimized, individualized dosing (Davodi J, et al. *Journal of Patient Safety and Risk Management* 2025). In this proof-of-concept study, we aimed to evaluate, for the first time, the feasibility, safety, and patient satisfaction of PCS with remimazolam during outpatient colonoscopy.

Methods Ten randomly selected patients (median age 61 years, range 53–71; 50% female) scheduled for outpatient colonoscopy were enrolled. Indications included colorectal cancer screening due to positive fecal occult blood test ($n = 7$), inflammatory bowel disease surveillance ($n = 2$), and adenoma surveillance ($n = 1$). PCS was delivered via an infusion pump (CADD-Solis, ICU Medical, San Clemente, USA), with an initial bolus of 5–7.5 mg remimazolam combined with 1 mg of alfentanil, followed by patient-activated 2.5 mg boluses with a 2-minute lockout period. Vital signs (oxygen saturation, heart rate, respiratory rate, and non-invasive blood pressure) were continuously monitored. Any adverse events were classified according to the international reporting tool on adverse events in sedation. Patient satisfaction was assessed post-procedure using a validated 5-point Likert scale.

Results All ten colonoscopies were completed successfully. The median number of remimazolam boluses was 3.5 (range 0–7), corresponding to a median total dose of 14.0 mg (range 5.0–27.5 mg). The median procedure duration was 41 minutes (range 23–105). The safety profile of remimazolam was favorable, and no serious adverse events occurred. Only minimal adverse events were observed in three patients (30%), consisting of brief and transient oxygen desaturation, which resolved spontaneously. No clinically relevant effects on hemodynamic parameters were noted throughout the procedures, and no patients required airway support or reversal agents. One patient was transferred to the recovery room as a precaution due to subcutaneous infiltration at the infusion site; all others were discharged directly from the endoscopy room.

Overall patient satisfaction was high across all participants. All participants reported high or very high satisfaction with the sedation quality (median 5.0), pain relief (median 5.0), and anxiety reduction (median 5.0). Notably, all patients expressed high satisfaction with the ability to control their sedation levels, which is reflected in some patients opting to use fewer or no boluses than others. Satisfaction also appeared to be higher than what we have previously observed with nurse-administered propofol sedation (NAPS) in our earlier study, which used identical questionnaires (Steenholdt C, et al. *Clinical Gastroenterology and Hepatology* 2022; 559–568). Feedback from the endoscopists indicated that the sedation regimen provided satisfactory working conditions without compromising procedural quality.

This pilot experience also highlighted inter-patient variability in sedation needs. Some patients required few boluses, while others required more frequent dosing, suggesting that a standardized protocol may not fit all. Factors such as anxiety level, frailty, previous procedural experience, or body weight may influence sedation demand, emphasizing the adaptability of PCS to individual needs.

Conclusions PCS with remimazolam is a feasible, safe, and well-tolerated option for outpatient colonoscopy. The setup is straightforward, and the built-in lockout mechanism provides an inherent safety feature that helps prevent over-sedation. An antidote is also available if needed. This approach may reduce staff workload by allowing nurses to focus more on procedural assistance rather than manually titrating sedatives. Unlike propofol, which is generally contraindicated in high ASA patients, PCS with remimazolam may be a promising option for frail individuals or patients who prefer to remain partially conscious during the procedure. Our proof-of-concept observations support the rationale for controlled trials to evaluate PCS with remimazolam as a potential alternative to current standards in endoscopic sedation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP724V Salvage circumferential endoscopic submucosal dissection with concomitant stricture resection for recurrent, strictured Barrett's neoplasia following multiple endoscopic mucosal resections

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DOI 10.1055/s-0046-1822051

Abstract Text

A 76-year-old patient was referred to our center with Barrett's esophagus (C14M14), esophageal stricture and recurrent early neoplasia. Prior to referral, she had undergone multiple endoscopic mucosal resections (EMR) for early Barrett's neoplasia and subsequently developed a non-traversable mid-esophageal stricture. A circumferential endoscopic submucosal dissection (ESD) of the entire Barrett's segment including stricture resection was performed (Video 1). Histopathology revealed adenocarcinoma pT1a (m3), pNx, L0, Vo, G1, R0. The patient was discharged 48 hours on soft diet and oral prednisolone. Follow-up at 8 weeks demonstrated complete stricture resolution without cancer recurrence. In this case, residual multifocal dysplasia and early cancer after EMR was treated with salvage ESD. Concomitant stricture resection during ESD led to complete resolution of stenosis.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/6a8f064f-5014-4777-a620-12d51ca1217d/Uploads/19978_Barrett_zirkul%C3%A4r%203min.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP725 Biliary cast syndrome: a rare case in non-transplanted patient

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DOI 10.1055/s-0046-1822052

Background: Biliary cast syndrome (BCS) is a rare entity characterized by solid, branching casts conforming to the biliary ducts [1]. It is classically seen after liver transplantation [2], and its occurrence outside the transplant setting is particularly uncommon, with only isolated reports in patients with suspected or confirmed primary sclerosing cholangitis (PSC) [3, 4]. In these cases, the diagnosis can be challenging, especially when patients present with cholangitis.

Case Presentation: A 50-year-old man was admitted for acute cholangitis in the context of newly suspected PSC. MRI showed discreet hepatic dysmorphism and a pruned-tree appearance of the biliary system, prompting endoscopic assessment.

Endoscopic Ultrasound (EUS): EUS revealed mildly dilated intrahepatic ducts and an irregular common bile duct containing dense, adherent material extending from the papilla to the biliary confluence. The exact nature of this material—stones, inflammatory debris, or cast-like elements—could not be clearly distinguished, but the extensive involvement suggested significant ductal inflammation. The pancreas and papilla appeared normal, and a small amount of perihepatic ascites was noted.

ERCP: Selective cannulation of the bile duct was easily achieved. The cholangiogram revealed a pronounced pruned-tree appearance of the intrahepatic ducts with numerous filling defects involving both lobar ducts and the main bile duct, raising suspicion for a mixture of stones and biliary casts. A sphincterotomy was performed, and multiple stones and debris were successfully extracted using an extraction balloon. However, clearance remained incomplete, particularly in the intrahepatic ducts. To ensure sufficient drainage, plastic stents (7 Fr × 15 cm) were placed in both the left and right hepatic ducts,

and an 8.5 Fr × 12 cm stent was positioned in the main bile duct. A second ERCP with cholangioscopy and lithotripsy was scheduled to complete ductal clearance.

Outcome: The patient improved clinically with resolution of cholangitis under antibiotic therapy and biliary drainage. He was discharged with planned follow-up and staged therapeutic management.

Discussion: Although BCS is rare in non-transplant patients, it should be considered in individuals with suspected PSC presenting with severe or recurrent cholangitis. In this case, EUS and ERCP together clarified the intraductal pathology and allowed partial clearance with effective decompression. Staged endoscopic therapy is often required, particularly when intrahepatic disease is extensive.

Conclusion: This case highlights a rare non-transplant presentation of biliary cast syndrome in a patient with suspected PSC. Endoscopic evaluation played an important role in establishing the diagnosis and providing initial management, while planned staged treatment remains essential for complete biliary clearance and prevention of recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sa-Hong J., Ho-Cheol C., Sung-Eun P et al. A case of Biliary Cast Syndrome with cholangiocarcinoma-like lesion in a Patient with no History of Liver Transplantation. *Medicina (Kaunas)* 2023; 59 (7): 1272
- [2] O-nyoung K., Seung Hyun C., Chang Keun P. Biliary cast formation with sclerosing cholangitis in critically ill patient: case report and literature review. *Korean J Radiol* 2012; 13 (3): 358–62
- [3] Gor NV, Levy RM et al. Biliary cast syndrome following liver transplantation: Predictive factors and clinical outcomes. *Liver Transpl* 2008; 14 (10): 1466–72
- [4] Lemmers A., Pezzullo M., Hadeji A. et al. Biliary cast syndrome after liver transplantation: A cholangiographic evolution study. *J Gastroenterol Hepatol* 2021; 36 (5): 1366–1377

eP726V Endoscopic ultrasound-guided radiofrequency ablation of a pheochromocytoma: a case report

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DOI 10.1055/s-0046-1822053

Abstract Text

A 67-year-old woman with prior right adrenalectomy for pheochromocytoma (2021; clear margins, low proliferation) presented with elevated plasma metanephrines. F-18-DOPA PET/CT revealed a low-attenuating, DOPA-avid lesion in the left adrenal gland, suspicious of a pheochromocytoma. To avoid adrenal insufficiency, multidisciplinary evaluation favored EUS-guided radiofrequency ablation as an organ-preserving approach. EUS-RFA was performed using a dedicated system (EUSRA, Taewoong Medical, South Korea), with three energy applications. A transient hypertensive response occurred (systolic BP to 240 mmHg), successfully managed with vasodilators. The patient remained hemodynamically stable and was discharged the next day after uneventful recovery. This represents one of the first reported uses of EUS-RFA for this indication. Biochemical and radiologic follow-up outcomes will be presented at the conference.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/656114f7-26a2-4050-907a-b446ceedac61/Uploads/19978_EUS-RFA_PHEO.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP727 Beyond Acute Cholecystitis: Expanding the Role of EUS-Guided Gallbladder Drainage

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DOI 10.1055/s-0046-1822054

Aims This study aims to assess and compare the outcomes of EUS-GBD in patients presenting with acute cholecystitis (AC) versus those treated for non-cholecystitis indications (NC).

Methods We conducted a retrospective single-center study including all consecutive patients who underwent EUS-GBD for any indication (AC or NC) between May 2020 and October 2025. We compared technical success—defined as appropriate LAMS placement within the gallbladder confirmed by EUS—clinical success (based on clinical and laboratory improvement), adverse event (AE) rates, and mortality between the AC and NC groups. All procedures were performed by an endoscopist (S.M) with advanced training in interventional EUS. Statistical analyses were performed using Jamovi software version 2.3.

► **Table 1** Baseline Characteristics and procedural results of patients who underwent EUS-GB procedures

Variable	Value n (%)
Age (Years, Mean ± SD)	67.2 ± 15.3
Gender, male	25(65.8)
Indication	
AC	25(65.8)
NC	13(34.2)
Symptomatic gallstones	6(15.8 %)
Malignant biliary obstruction	2(5.3)
Symptomatic common bile duct stones	1(2.6)
Gallstone pancreatitis	1(2.6)
Comorbidities	
Cardiopathy	11(28.9)
Advanced Age	10(26.3)
Hepatopathy	5(12.2)
Other	6(15.8)
Material	
Nagi 16mm	2(5.3)
Axios 10mm	18(47.4)
Axios 15mm	13(34.2)
Taewoong 16mm	5(13.2)
Location of the stent	
Gastric wall	34(88.8)
Duodenum	4(11.2)
Adverse events	7(18.4)
AC	5(13.2)
NC	2(5.3)
Clinical Success	36(94.7)

Results A total of 38 patients underwent EUS-GBD; 65.8 % were male, with a mean age of 67.2 ± 15.3 years. Overall, 65.8 % were treated for AC. NC indications included symptomatic gallstones (15.8 %), malignant biliary obstruction (5.3 %), symptomatic common bile duct stones (2.6 %), and gallstone pancreatitis (2.6 %). Most stents were deployed via a transgastric approach (88.8 %), with the remainder placed transduodenally (11.2 %). Technical success was 100 % in both groups. AEs occurred in 18.4 % of cases: 13.2 % in the AC group

and 5.3 % in the NC group (p = 0.728). Clinical success was achieved in 84.2 % of the cohort (► **Table 1**). One patient died within one month of follow-up; both belonged to the NC group and had malignant biliary obstruction. Another patient, from the AC group, died within one month of follow-up.

Conclusions EUS-GBD demonstrated excellent technical success and favorable clinical outcomes across both acute cholecystitis and non-cholecystitis indications. AE rates were low and comparable between groups. Overall, EUS-GBD appears to be a safe, effective, and versatile drainage strategy not only for acute cholecystitis but also for selected non-cholecystitis conditions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP728 Bowel obstruction in a patient with prior large bowel resection and newly confirmed Crohn's disease: A rare case of primary true enterolithiasis resolved endoscopically

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DOI 10.1055/s-0046-1822055

Abstract Text

Background: Enterolithiasis refers to the formation of hard intraluminal masses within the gastrointestinal tract and may lead to obstruction. Enteroliths are categorized as primary or secondary. Primary enteroliths originate within the bowel and are classified as *true* or *false*, depending on their composition and formation. True enteroliths arise in areas of anatomical alteration and stasis, and their chemical composition depends on location—distal small bowel stones typically contain calcium phosphate or oxalate. They are most frequently associated with prior intestinal surgery or stricturing Crohn's disease (CD). Although rare, enteroliths can cause acute large bowel obstruction [1–3].

Case presentation: A 58-year-old female presented with a four-week history of diarrhea, nausea, and acute onset of fever and chills. She had previously undergone partial large bowel resection with a caeco-sigmoid anastomosis due to obstruction caused by multiple intramucosal lipomas, followed by balloon dilatation of the anastomosis five years later for symptomatic stenosis. Clinical examination revealed fever and abdominal distension with diffuse tenderness and hyperactive bowel sounds. Abdominal X-ray showed a 6 cm colonic loop in the right lower quadrant, borderline dilated small bowel loops, and a ~40 mm calcified pelvic mass. Computed tomography (CT) confirmed cecal obstruction and identified an additional 20 mm calcified lesion, without signs of perforation. Suspecting anastomotic stenosis, colonoscopy with planned balloon dilatation was performed. It revealed a stenotic anastomosis with an 8 mm lumen, successfully dilated to 12 mm. Advancement of the therapeutic gastro-scope allowed visualization of a large enterolith. Ulcerations were observed at the ileocaecal valve and terminal ileum; biopsies were taken. The enterolith was identified as the likely cause of obstruction, and endoscopic lithotripsy was attempted. Fragmentation was challenging due to the stone's hardness, resulting in multiple lithotriptor wire failures. The second calcified lesion was not detected endoscopically. Following the procedure, symptoms rapidly resolved, and the patient was discharged on day four. Stone analysis confirmed calcium phosphate composition. Histology of ileal biopsies demonstrated features consistent with CD. At three-week follow-up, the patient remained asymptomatic, and a second colonoscopy was arranged to treat the remaining stone.

Conclusion: This case illustrates a rare presentation of primary true enterolithiasis causing large bowel obstruction in a patient with a history of bowel resection and newly diagnosed CD. Endoscopic intervention successfully relieved the obstruction and avoided surgical management. Given the anatomical alteration and underlying CD, recurrence risk remains significant. Careful endoscopic follow-up is warranted. Prompt recognition of enterolithiasis, especially in post-surgical or CD patients, is essential, as timely endoscopic therapy may provide a minimally invasive and effective treatment alternative.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tewari A, Weiden J, Johnson JO. Small-bowel obstruction associated with Crohn's enterolith. *Emergency radiology* 2013; 20 (4): 341–4
- [2] Martens T, Sas S. Enteroliths in Crohn's disease: a case report. *Acta chirurgica Belgica* 2010; 110 (5): 552–4
- [3] Gurvits GE, Lan G. Enterolithiasis. *World journal of gastroenterology* 2014; 20 (47): 17819–29

eP729 Feasibility and diagnostic yield of an ultra-low-volume bowel preparation in acute lower gastrointestinal bleeding: a real-world cohort study

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 DOI 10.1055/s-0046-1822056

Aims Urgent colonoscopy is recommended during hospitalization for acute lower gastrointestinal bleeding (LGIB), but current guidelines still advocate large-volume polyethylene glycol (PEG) lavage (4–6 L), which is often poorly tolerated in elderly or frail patients. Evidence supporting low- or ultra-low-volume regimens in this setting is scarce. This study aimed to evaluate the feasibility, bowel cleanliness and diagnostic performance of an ultra-low-volume preparation in patients undergoing urgent colonoscopy for acute LGIB. We also assessed whether bowel preparation quality differed across demographic subgroups and analysed the impact of colonoscopy timing (≤ 24 h vs > 24 h) on diagnostic yield.

Methods We conducted a retrospective real-world cohort study including all consecutive patients who underwent urgent colonoscopy for acute LGIB at the Gastroenterology Unit of Santa Maria della Misericordia Hospital, Udine, from September 2024 to September 2025. The bowel preparation consisted of a rapid ultra-low-volume regimen (1-L PEG/ascorbate regimen). Demographics, comorbidities, haemoglobin, Shock Index, Oakland score, timing of colonoscopy, bowel cleanliness (Boston Bowel Preparation Scale, BBPS) and endoscopic outcomes were extracted from electronic records. Bowel preparation adequacy was defined as BBPS ≥ 6 . Statistical analyses included χ^2 /Fisher's exact test, Mann–Whitney U test, and multivariable logistic regression to identify predictors of bowel cleanliness and diagnostic yield.

Results Eighty-nine patients were included (median age 74 years; high comorbidity burden in 87.6%; antithrombotic therapy in 39.3%). Colonoscopy was performed < 12 h in 29.2%, 12–24 h in 22.5%, and > 24 h in 48.3% of cases. Bowel cleanliness was adequate in 56/85 patients (65.9%), with a median BBPS of 6. Toilets were comparable across age groups, including patients > 80 years ($p = 0.666$), and across BMI categories ($p = 0.209$). Comorbidities were associated with a higher rate of inadequate preparation (adequate 100% in patients without comorbidities vs 61% with comorbidities; Fisher $p = 0.014$), although this association lost significance in multivariate analysis. Bowel cleanliness did not differ significantly between colonoscopies performed ≤ 24 h and > 24 h (BBPS median 6 vs 6; $p = 0.346$). The overall diagnostic yield was 68.5%, and endoscopic therapy was performed in 24.7%. In unadjusted analyses, procedures performed > 24 h appeared more frequently positive; however, after adjustment for haemoglobin and clinical severity, colonoscopy ≤ 24 h was independently associated with higher diagnostic yield (OR ≈ 3.5 ; $p = 0.049$). Bowel preparation quality did not significantly influence the ability to deliver endoscopic therapy ($p = 0.432$).

Conclusions Ultra-low-volume bowel preparation was feasible and generally effective in a real-world population of elderly and comorbid patients with acute LGIB, achieving adequate cleanliness in two-thirds of cases and maintaining stable performance across age and BMI subgroups. Importantly, early colonoscopy (≤ 24 h) improved diagnostic yield without compromising bowel cleanli-

ness. Compared with standard high-volume lavage and conventional low-volume PEG regimens, the ultra-low-volume preparation demonstrated comparable feasibility and acceptable cleanliness in a frail, highly comorbid population, suggesting that reduced-volume strategies may offer a practical and better-tolerated alternative in the urgent LGIB setting without compromising diagnostic performance. Prospective comparative studies against standard and low-volume PEG regimens are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP730 Beyond Hamartomas: Revealing Pancreatic Malignancy in Peutz–Jeghers Syndrome

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 DOI 10.1055/s-0046-1822057

Introduction Peutz–Jeghers syndrome (PJS) is traditionally managed with structured endoscopic surveillance targeting hamartomatous polyposis and the prevention of small-bowel obstruction. Conversely, despite a markedly elevated lifetime risk of pancreatic ductal adenocarcinoma (PDAC), pancreatic screening practices remain heterogeneous, and consensus on optimal imaging modalities or surveillance intervals is lacking. This discrepancy may lead clinicians to focus predominantly on gastrointestinal polyp management while inadvertently underrecognizing the pancreatic component of the syndrome [1].

Case Presentation A 44-year-old patient with PJS was initially diagnosed following segmental small-bowel resection for acute intestinal obstruction, with pathology confirming multiple hamartomatous polyps > 2 cm. Serial colonoscopies, upper endoscopies, and double-balloon enteroscopies over subsequent years consistently demonstrated recurrent hamartomatous polyps in the jejunum, duodenum, and colon without dysplasia. Entero-MRI examinations some years later showed jejunal polyps < 2 cm with no suspicious features. The patient presented with mild acute pancreatitis. Laboratory workup ruled out biliary, alcoholic, metabolic, autoimmune, and viral causes. CT confirmed acute edematous pancreatitis. A dedicated pancreatic MRI demonstrated dilation of the main pancreatic duct with abrupt corporeo-caudal stricture, secondary duct ectasia and focal parenchymal signal alteration. CA 19-9 raised up to 442 kU/L. Endoscopic ultrasound identified a 20-mm hypoechoic lesion in the pancreatic body causing ductal narrowing with mild upstream dilatation, along with several distal microcysts. Fine-needle biopsy confirmed PDAC. Retrospective review of prior abdominal imaging (entero-MRI) revealed 2 cystic lesions in the pancreatic body suggestive of branch-duct IPMN. The patient underwent left pancreatectomy with splenectomy. Histopathologic staging showed pT-2N1M0 PDAC, BRCA wild-type and KRAS-mutated. Postoperative management included adjuvant FOLFIRINOX chemotherapy.

Conclusion This case illustrates how the dominant focus on hamartomatous polyposis in PJS may mask the substantial risk of PDAC, leading to delayed recognition of pancreatic malignancy. The absence of harmonized, evidence-based pancreatic surveillance protocols persists despite the well-established high-risk profile of these patients. Our case underlines the need to re-evaluate existing surveillance frameworks and supports the integration of structured MRI- and EUS-based pancreatic screening to enable earlier detection and ultimately improve outcomes in individuals with PJS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Boland CR, Idos GE, Durno C, Giardiello FM, Anderson JC, Burke CA, Dominitz JA, Gross S, Gupta S, Jacobson BC, Patel SG, Shaikat A, Syngal S, Robertson DJ. Diagnosis and Management of Cancer Risk in the Gastrointestinal Hamartomatous Polyposis Syndromes: Recommendations From the US Mul-

eP731 Vedolizumab dose intensification: Is there an endoscopic benefit?

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DOI 10.1055/s-0046-1822058

Aims Vedolizumab is an established treatment for inflammatory bowel disease (IBD). Loss of response is occasionally encountered. Data regarding dose intensification are limited¹. Aim of the study was to evaluate the effectiveness of interval shortening for intravenous vedolizumab (300mg/4 weeks).

Methods Data were collected retrospectively from patients' medical records, in two Greek tertiary centers. All patients received IV vedolizumab every 4 weeks. Endoscopic and biochemical response was evaluated at 12 months. The intervention was considered successful if treatment was maintained, whereas failure was defined as the need to either switch or operate.

Results Twenty-one patients [14 (66.7%) men, median age 53 years (range: 25–85 years)] were included. 15 (71.4%) with ulcerative colitis (UC), 4 (19.1%) with Crohn's (CD) and 2 (9.5%) with pouchitis. UC patients: 10 (66.6%) with left-sided colitis (E2) and 5 (33.3%) with extensive disease (E3). All CD patients had ileocolitis (L3), whereas two (50%) had stenotic phenotype and two (50%) perianal involvement. Previous treatments: 5-ASA and corticosteroids (95.2%), immunosuppressants (38.1%) and biologics (57.1%). Vedolizumab was offered as 1st, 2nd and 3rd line treatment in 9, 3 and 9 patients, respectively. Dose intensification was employed after a median duration of 33 months for UC (IQR: 41) and 19.5 months for CD (IQR: 35) ($p = 0.41$). The intensified scheme was applied for a median of 9 months in CD [IQR: 24.5, range 3–48] and 7.5 months in UC [IQR 10, range 3–58, ($p = 0.98$)]. Endoscopic Mayo score decreased from 2.35 to 0.88 and the effect was significant ($p = 0.001$, $r = 0.79$). The mean CRP value decreased significantly from 1.42 to 0.44 ($p = 0.007$). Intensification was successful in fourteen (66.7%) cases (11 UC, 2 CD and one pouchitis). Seven patients failed and switched to another biologic. None underwent surgery. No treatment-related adverse events were observed.

Conclusions Vedolizumab intensification scheme was successfully maintained for the majority of IBD patients, beyond six months. The endoscopic and biochemical responses were both significant.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP732 Endoscopic ultrasound-guided drainage of a peripancreatic pseudocyst in a patient with ductal disconnection syndrome using a new lumen-apposing metal stent (LAMS): the Z-EUS IT Hanarostent "free-hands" model

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DOI 10.1055/s-0046-1822059

Introduction Endoscopic ultrasound (EUS)-guided drainage of peripancreatic collections has become the standard approach following the development of lumen-apposing metal stents (LAMS). Until now, only a single "free-hands" deployment model of this type of stent was available; the Z-EUS IT model by Hanarostent has been recently commercialized.

Case Report We present the case of a 60-year-old male with an episode of severe necrotizing acute pancreatitis and subsequent development of an 80 x 100 mm peripancreatic pseudocyst in the body of the pancreas, which was communicating with the main pancreatic duct. A cholangio-MRI also showed compression of the splenic vein and ductal disconnection syndrome.

Endoscopy EUS was performed, confirming the well-defined wall of the pseudocyst and the absence of interposed vessels along the needle path. EUS-guided cystogastrostomy was performed using a 14 x 20 mm Z-EUS IT lumen-apposing metal stent via a "free-hands" technique, under endoscopic ultrasound and fluoroscopic guidance, confirming its successful deployment. Abundant liquid content was observed draining into the stomach. Subsequently, a 7 Fr x 5 cm double pigtail plastic stent was telescopically placed inside the LAMS without complications, and the patient was discharged 24 hours later.

A control MRI performed at 4 weeks showed complete resolution of the pseudocyst, and the LAMS was removed using the stent retrieval thread with forceps, without incidents. Three months later, we confirmed no pseudocyst recurrence performing a CT scan.

Comment The new "free-hands" Z-EUS IT lumen-apposing metal stent is easy to use and effective for EUS-guided drainage of peripancreatic collections. Different sizes are available than those previously commercialized, what can be useful in selected patients. Additionally, it has a retrieval thread to make easier its removal.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP733 Dual site rapid urease test improves *Helicobacter pylori* detection in dyspeptic patients and those on Proton Pump Inhibitors

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DOI 10.1055/s-0046-1822060

Aims *Helicobacter pylori* is a common infection linked to dyspepsia, peptic ulcer disease, and gastric cancer. The rapid urease test (RUT) is widely used for diagnosis, but its accuracy is influenced by proton pump inhibitor (PPI) use and site of gastric sampling. This study aimed to evaluate the effect of PPI use on RUT positivity, compare detection rates between corpus and incisura, and determine the incremental value of dual-site sampling.

Methods We conducted a single-center observational study of 503 adult patients undergoing upper gastrointestinal endoscopy for dyspepsia. RUT was performed from the gastric corpus and incisura using identical kits. Clinical data, including PPI use, demographics, and symptoms, were recorded. Statistical analyses included Chi-square tests, McNemar's test, Cohen's kappa, and logistic regression.

Results Overall *H. pylori* prevalence by RUT was 25.4%. Positivity was 22.7% from corpus, 18.9% from incisura, and 25.4% when either site was positive. Corpus positivity was significantly higher than incisura (McNemar's $\chi^2 = 6.89$, $p = 0.009$). Dual-site sampling significantly increased detection compared to corpus alone (25.4% vs 22.7%, McNemar's $\chi^2 = 12.07$, $p = 0.0005$). If only corpus was sampled, 10.9% of positive cases would have been missed; if only incisura was sampled, 25.8% would have been missed. Agreement between corpus and incisura was good ($\kappa = 0.717$). PPI use reduced incisura positivity ($p = 0.02$) but not corpus ($p = 0.09$). On subgroup analysis, the incremental benefit of dual-site sampling was more pronounced in PPI users ($p = 0.023$). RUT positivity was associated with male gender ($p = 0.038$) and younger age ($p = 0.046$).

Conclusions Dual-site RUT sampling improves detection of *H. pylori*, especially in patients on PPIs, and reduces false negatives compared with single-site testing. Corpus alone performs better than incisura, but dual-site testing should be considered in routine clinical practice to maximize diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP734 Gastric Neuroendocrine Neoplasms: Insights From a 15-Year Cohort

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DOI 10.1055/s-0046-1822061

Aims Gastric neuroendocrine neoplasms (g-NENs) include heterogeneous entities with distinct etiological, biological and clinical profiles. Type 1 g-NENs are classically associated with autoimmune chronic atrophic gastritis, whereas type 3 lesions behave more aggressively with higher metastatic potential. Long-term European real-world data remain limited. This study aimed to describe the epidemiology, autoimmune background, treatment strategies and outcomes of g-NENs diagnosed over 15 years at a high-volume Italian tertiary center, and to compare risk factors for recurrence and metastatic spread.

Methods We performed a retrospective observational cohort study including all consecutive patients diagnosed with g-NENs at the Gastroenterology Unit, Santa Maria della Misericordia Hospital, Udine (Italy) between 2010 and 2025. Clinical, biochemical, endoscopic, histological and therapeutic data were retrieved from electronic records. Variables included demographics, autoimmune markers (APCA), presence of autoimmune atrophic gastritis (AAG), tumor location, size, Ki-67, grading, treatment modality, recurrence, lymph-node involvement and distant metastasis. Statistical analyses included chi-square/Fisher's exact test, Mann-Whitney U test and odds ratios with 95 % confidence intervals.

Results Thirty patients were included (66.7 % male; mean age 68.8 ± 11.3 years). Autoimmune disorders were present in 54.2 %, AAG in 36.7 % and APCA positivity in 36.7 %. Strong associations emerged between type 1 g-NENs and AAG (10/11 with AAG; $p < 0.001$; OR 10.0) as well as APCA positivity (10/11 APCA +; $p = 0.002$; OR 28.0). Half of the cohort had type 1 g-NENs ($n = 15$) and half type 3 ($n = 15$). Type 1 patients were significantly younger than type 3 (64.7 ± 10.6 vs 72.9 ± 10.5 years; $p = 0.019$). Overall, 63.6 % of tumors were G1, 22.7 % G2 and 13.6 % G3/NEC. Mean lesion size was 12.7 ± 8.4 mm (median 10 mm). Lymph-node metastases occurred in 3/30 patients (10 %), and distant metastasis in 1 patient (3.3 %), exclusively in tumors with very high Ki-67 (90–100 %; $p = 0.024$) and larger size ($p = 0.018$). Treatment consisted of endoscopic resection in 55.6 % and surgery in 29.6 %; type 1 lesions showed a non-significant trend toward less surgery ($p = 0.678$). Local recurrence occurred in 3/29 patients (10.3 %), all intragastric and manageable endoscopically. No tumor-related deaths were observed during available follow-up.

Conclusions This long-term experience confirms the distinct biological behaviors of gastric NENs, with indolent type 1 lesions linked to autoimmunity and more aggressive type 3 tumors associated with high proliferative index and metastatic risk. The strong link between AAG/APCA positivity and type 1 g-NEN supports the role of autoimmune biomarkers in diagnostic classification. Endoscopic therapy was effective and safe in most low-risk lesions, while high-grade or large type 3 tumors required surgical management. Recurrence was infrequent and locally manageable. These findings align with current ENETS guidance and highlight the need for structured long-term endoscopic surveillance in AAG-associated type 1 NENs, and for early multidisciplinary evaluation in type 3 disease. Prospective multicenter studies with standardized follow-up intervals are warranted to refine prognostic stratification and optimize treatment pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP735 Permanent EUS-gallbladder drainage in high-risk patients after acute cholecystitis: a double center experience

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DOI 10.1055/s-0046-1822062

Aims Therapeutic endoscopic ultrasonography (EUS) has become an essential tool in the management of gallbladder diseases. EUS-guided gallbladder drainage (EUS-GBD) using lumen-apposing metal stents (LAMS) have demonstrated efficacy and safety in the treatment of acute cholecystitis (AC) in patients unfit for surgery. With the progressive aging of the population and the rise of complex comorbidities, the number of individuals unfit for cholecystectomy is increasing. The role of permanent EUS-GBD remains insufficiently defined. We aim to describe a double center experience with permanent EUS-GBD following at least one episode of AC, in patients unfit for cholecystectomy [1–3].

Methods Observational study. We prospectively collected data from all patients undergoing permanent EUS-GBD between 2023 and 2025. Demographics, comorbidities, technical, clinical outcomes and follow-up data were collected. Descriptive analyses were performed by reporting mean and standard deviation for continuous variables and frequencies with percentages for categorical variables.

Results A total of 41 patients were included (44 % female). All had experienced one or more episodes of AC prior to the procedure. EUS-GBD was performed within 3 days of the AC episode in 76 % of patients, and within one month in the remaining 24 %. Two patients (6 %) underwent EUS-GBD following percutaneous drainage. LAMS size were 10 x 10 mm or 10 x 15 mm. 21 patients (51 %) required ERCP for cholangitis: 10 in the same week as EUS-GBD, 5 within the preceding month, and 6 more than one month before the procedure. We reported one case of LAMS maldeployment (2 %) that was successfully, conservatively managed.

Comorbidity burden was high: 37 % of patients were ASA IV, 54 % ASA III, and 9 % ASA II. Mean age was 78 ± 11.2 years, 34 % of the patients were > 85 years old, including all the ASA II patients. Five people (12 %) had Child-Pugh B or C cirrhosis, 29 % NYHA III stage, 34 % advanced neoplasia, and 15 % had severe obesity. 30-days mortality was 0 %. Three patients (7 %) developed cholecystitis between 30 and 60 days after LAMS placement, in all cases conservatively treated.

Conclusions Permanent EUS-GBD represents a safe and effective therapeutic option for patients not candidates for cholecystectomy due to severe conditions. It can be performed during the acute phase of AC or in an elective setting after clinical resolution. Despite the need of longer follow up and larger series, data support the consideration of EUS-GBD as a long-term management strategy in presence of advanced age, severe comorbidities, high ASA class.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lisotti A. Endoscopic ultrasound gallbladder drainage (EUS-GBD) with LAMS: While we know how to drain we are still questioning who to drain. *Endosc Int Open*. 2025;
- [2] Marasco M, Signoretti M, Esposito G, Crinò SF, Panzuto F, Galasso D. Endoscopic ultrasonography guided gallbladder drainage: "how and when". *Expert Rev Gastroenterol Hepatol*. 2025;
- [3] Hayat U, Al Shabeeb R, Perez P, Hensien J, Dwivedi A, Sakhawat U, Ahmad O, Haseeb M, Siddiqui AA, Adler DG. Safety and adverse events of EUS-guided gallbladder drainage using lumen-apposing metal stents and percutaneous cholecystostomy tubes: a systematic review and meta-analysis. *Gastrointest Endosc*. 2024;

eP736 A Subepithelial Lesion at the Gastroesophageal Junction Presenting as Primary B-Cell MALT Lymphoma: A Rare Case Report

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DOI 10.1055/s-0046-1822063

Introduction Primary mucosa-associated lymphoid tissue (MALT) lymphoma rarely arises at the gastroesophageal junction (GEJ). Subepithelial presentation is particularly uncommon and often misclassified as a mesenchymal tumor. Because GEJ subepithelial lesions are frequently presumed to represent GISTs or leiomyomas, lymphoid neoplasms may escape early consideration. We present a rare case of a GEJ subepithelial lesion originating from the muscularis mucosae, ultimately diagnosed as primary MALT lymphoma, emphasizing the diagnostic value of EUS-guided deep-tissue sampling [1–5].

Case Description A 68-year-old man was evaluated for an incidentally identified GEJ subepithelial lesion. Endoscopy demonstrated a smooth, intact mucosal surface over a well-defined 23 × 10 mm mass. Endoscopic ultrasonography revealed a homogeneous, hypoechoic lesion confined to the muscularis mucosae, without perigastric lymph nodes. The differential diagnosis included gastrointestinal stromal tumor, leiomyoma, neuroendocrine tumor, and lymphoid neoplasia. EUS-guided tissue acquisition was performed using a 22-gauge fine-needle biopsy (FNB).

Histopathology revealed dense CD20(+) /CD3(–) B-cell infiltration, LCA(+), with absence of epithelial or neuroendocrine markers (Pankeratin–, Chromogranin A–, CD56–). Hematopathology demonstrated a monomorphic population of small B-cells expressing CD20 and bcl-2, negative for CD5, CD23, and Cyclin-D1, with a low proliferative index (Ki-67 ≈ 10%). These findings supported a diagnosis of primary MALT lymphoma. Staging CT identified no systemic disease, consistent with localized lymphoma.

Discussion MALT lymphoma at the GEJ is exceptionally rare, and subepithelial morphology poses a diagnostic pitfall because EUS features may overlap with GIST or leiomyoma. High-resolution EUS is essential for characterizing the layer of origin, while FNB provides adequate deep-tissue samples crucial for immunophenotyping. The immunoprofile—CD20(+), bcl-2(+), Cyclin-D1(–), CD5(–), CD23(–)—allows differentiation from mantle cell and follicular lymphomas. Early diagnosis is clinically relevant, because localized disease carries an excellent prognosis and can be managed with organ-preserving therapeutic strategies.

Conclusion This case illustrates a rare GEJ MALT lymphoma mimicking a mesenchymal subepithelial lesion. Accurate diagnosis required correlation of endoscopic appearance, EUS characterization, and targeted FNB with detailed immunohistochemistry. Lymphoid neoplasms, although rare, should be included in the differential diagnosis of GEJ subepithelial lesions, particularly those arising from the muscularis mucosae.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Raderer M et al. *J Clin Oncol*. 2024;
- [2] Song JH et al. *Gastrointest Endosc*. 2023;
- [3] Pimentel-Nunes P et al. *ESGE Guideline on Subepithelial Lesions*. *Endoscopy*. 2022;
- [4] Thieblemont C et al. *Nat Rev Clin Oncol*. 2022;
- [5] Zucca E et al. *Lancet Oncol*. 2020;

eP737 Accuracy of MRI for identifying endoscopically resectable early rectal cancer: a retrospective institutional study

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DOI 10.1055/s-0046-1822064

Aims Increasing numbers of early rectal cancers are detected due to improved screening. MRI can assist in selecting lesions suitable for endoscopic resection [1]. At our institution, all suspicious rectal lesions undergo MRI assessment. We aimed to evaluate the accuracy of MRI in predicting the depth of submucosal invasion in early rectal cancers.

Methods We conducted a retrospective study of T1/2 rectal cancers managed by endoscopic submucosal dissection between October 2019 and October 2025. Each MRI scan was independently reviewed by two radiologists, both blinded to endoscopic and histological findings. Radiologists assigned T-stage based on predefined MRI criteria: absence of submucosal invasion (T0); submucosa ≥ 1 mm with intact muscularis propria (MP) (T1 sm1/2); submucosa < 1 mm but with ≥ 1 mm intact MP (T1 sm3/early T2); or deep invasion characterised by < 1 mm intact MP or extension beyond it (deep T2/T3). Radiological staging was compared with final histology and Japan NBI expert team (JNET) or Kudo based optical assessment. Categorical variables were analysed using χ^2 testing, continuous variables with the Mann–Whitney U test, and inter-radiologist agreement using Cohen's kappa (κ).

Results Of the 21 cases identified, 13/21 (63 %) had at least one technical issue. Motion artefact was the most common issue (8/13, 62 %), followed by inadequate distension (3/13, 23 %), absence of a true short-axis imaging (3/13, 23 %), incomplete coverage (3/13, 23 %) and faecal residue (1/13, 8 %). However, this did not appear to affect diagnostic performance: MRI correctly staged 6/8 (75 %) scans without technical issues and 11/13 (85 %) with issues. Overall, one or both radiologists correctly staged 17/21 cases (81 %). All radiologists correctly identified lesions with ≥ 1 mm preserved MP which is a key determinant for endoscopic resectability. Staging concordance between radiologists was 13/21 (62 %) consistent with moderate agreement ($\kappa = 0.48$).

Optical assessment was then compared with MRI and histology. JNET 2B lesions were all T1 on histology except one T2 case, yet MRI overstaged 4/7 cases (57 %), indicating a conservative bias for superficial disease. JNET 3 lesions showed strong alignment between all modalities, with MRI correctly staging 5/6 cases (83 %). Kudo IV lesions were heterogeneous, including overstaging of one Tis lesion. Among Kudo V lesions, histological depth varied; MRI correctly staged 5/6 cases (83 %) and overstaged one case with no understaging. Overall, optical assessment correlated more closely with histology for superficial disease, but MRI performed best for lesions with deeper invasion. MRI tended to overstage disease compared with final histology (9/21; 43 %), with no instances of understaging (► **Table 1**).

► **Table 1** summarises clinical and procedural characteristics stratified by MRI accuracy.

		MRI Staging		p value
		Correct N = 17	Incorrect N = 4	
Age (median)		67.5	65.0	1.00
Sex	Male, N (%)	10 (58.8)	3 (75.0)	0.50
	Female, N (%)	7 (41.2)	1 (25.0)	
Lesion size in mm (median)	32.5	40.5	1.00	
Location	Upper rectum, N (%)	7 (41.2)	1 (25.0)	0.66
	Lower rectum, N (%)	10 (58.8)	3 (75.0)	
Morphology	LST-NG, N (%)	9 (52.9)	1 (25.0)	0.59
	LST-G mixed nodular type, N (%)	8 (47.7)	3 (75.0)	
Procedural duration in minutes (median)		133.5	178.0	0.09

There were no identifiable predictors of correct staging (all $p > 0.05$).

Conclusions MRI demonstrated high accuracy in identifying early rectal cancers suitable for endoscopic resection, with excellent sensitivity for detecting preserved MP. Accuracy was unaffected by frequent technical issues, although inter-radiologist agreement was moderate and MRI consistently overstaged disease. Optical assessment corresponded more closely to histology for superficial disease, whereas MRI performed best for deeper lesions. MRI is a safe and conservative staging tool, with scope for improvement through targeted MDT feedback.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Van der Schee L, Carten R, Albers SC, van den Bergh J, Braat MNGJA, Goede AC, Kol S, Lacle MM, Mearadji B, Moos SI, Nota IM, Peters NHGM, Prince JF, Reimerink JJ, Fariña Sarasqueta A, van Vooren J, van Waesberghe JHTM, Bastiaansen BAJ, Vleggaar FP, Moons LMG, Horsthuis K, Brown G. Assessing the accuracy of magnetic resonance imaging in identifying early rectal cancers suitable for endoscopic intermuscular dissection. *Endoscopy*. 2025. doi:10.1055/a-2621-2515 Epub ahead of print PMID: 40419241

eP738 When a single stone causes major obstruction: Bouveret's syndrome treated by ElectroHydraulic Lithotripsy (EHL)

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DOI 10.1055/s-0046-1822065

Abstract Text

Bouveret's syndrome (BS) is a rare form of gallstone ileus that can result in benign gastric outlet obstruction (GOO). It occurs when a gallstone migrates

through the cystic wall, forming a cholecystoenteric fistula with subsequent impaction of the calculous material in the duodenal lumen. [1–3]

We report the case of an 80-year-old woman presenting with chronic abdominal pain, weight loss, and sudden-onset vomiting. Initial evaluation was challenging due to cognitive impairment and early dementia. However, blood tests and computed tomography (CT) imaging revealed a 50 mm gallstone impacted in the duodenal bulb, associated with acute cholecystitis. CT additionally showed gastric dilation secondary to duodenal obstruction. Although BS has traditionally been managed surgically, often requiring laparotomy and limited small-bowel resection, the patient's frailty prompted a multidisciplinary decision to pursue a less invasive endoscopic approach. [4]

Initial management included nasogastric decompression and intravenous proton-pump inhibitor therapy. Subsequent upper gastrointestinal endoscopy confirmed the presence of food debris in the stomach and a 50 mm impacted gallstone obstructing the pyloric outlet. Electrohydraulic lithotripsy (EHL) was performed under direct endoscopic visualization using a high-power setting (pulse level 15) to facilitate fragmentation.

Given the substantial size and calcified consistency of the stone, all eight EHL probes available in our center were used during the first session, achieving partial fragmentation and permitting advancement of the endoscope into the second portion of the duodenum. A second procedure was performed 48 hours later, resulting in complete fragmentation. Stone debris and fragments were extracted using a polyp retrieval net and standard polypectomy snare. The cumulative procedure time was approximately three hours, requiring a total of 12 probes. After stone extraction, two large, round Forrest III ulcers were identified on the lateral wall of the duodenal bulb, while the opening of the cystic duct with adjacent cholecystic mucosa was visualized on the medial wall. Clinical and endoscopic follow-up at ten days confirmed complete symptom resolution, successful clearance of all stone material, and healing of the duodenal ulcers. This case demonstrates successful endoscopic management of duodenal Bouveret's syndrome in a frail, surgically ineligible geriatric patient.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nuño-Guzmán CM, Marín-Contreras ME, Figueroa-Sánchez M et al. Gallstone ileus, clinical presentation, diagnostic and treatment approach. *World J Gastrointest Surg* 2016; 8: 65–76
- [2] Singh G, Merali N, Shirol S, Drymoussis P, Singh S, Veeramootoo D. A case report and review of the literature of Bouveret syndrome. *Ann R Coll Surg Engl* 2020; 102 (1): e15–e19. doi:10.1308/rcsann.2019.0161 Epub 2019 Dec 20 PMID: 31859521 PMID: PMC6937608
- [3] Jue Terry L. et al ASGE. Guideline on the role of endoscopy in the management of benign and malignant gastroduodenal obstruction. *Gastrointestinal Endoscopy Volume 93 (Issue 2): 309–322.e4*
- [4] Bouveret L. Stenose du pylore adherent a la vesicule calculeuse. *Rev Med (Paris)* 1896; 16: 1–16

eP739 Untutored colorectal endoscopic submucosal dissection: learning curve of a single operator in a non-academic European center

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DOI 10.1055/s-0046-1822066

Aims Colorectal endoscopic submucosal dissection (ESD) allows en-bloc removal of early neoplastic lesions but remains technically demanding in Western non-academic settings, where exposure to high-volume training is limited. This study aimed to evaluate learning progression and performance determinants of untutored colorectal ESD in a European non-academic center.

Methods This retrospective cohort included all consecutive colorectal ESD procedures performed by a single operator from March 2016 to October 2025. Demographic, lesion, and procedural data were prospectively collected. Learn-

ing-curve assessment used case-by-case speed analysis and linear regression. The operator's concurrent experience with additional third-space endoscopy procedures was also considered. Adverse events were classified by ASGE severity criteria and categorized as mild, moderate, severe, or fatal and immediate or delayed.

Results A total of 114 colorectal ESDs were performed (mean age 66.5 ± 12.0 years; 56.5 % male). Key outcomes included: median lesion size 11.2 cm (range 0.36–89.25), median max diameter 4.0 cm (range 0.6–10.5), median dissection speed 7.5 cm/hour (range 1–48), high en-bloc and R0 resection rates (97.3 % and 93.8 %) and overall complication rate 13.2 % (3.6 % perforation rate), including two macro-perforations (the only treated surgically), two micro-perforations, four early and two delayed bleeding events and three strictures. The learning curve showed speed increasing progressively from cases 20–60 and peaking at 70–90 (cumulative experience from additional third-space endoscopy procedures, ~70 and ~50 cases during these respective periods). Dissection speed reached above 9 cm/hour after 30 colorectal ESD cases and became consistent after 60–70. Significant location-based differences were observed in lesion size ($p = 0.036$), dissection speed ($p = 0.02$), circumferential involvement ($p = 0.001$), and perforation rates ($p = 0.04$), with rectal and sigmoid lesions showing higher adjusted speeds and right-sided lesions being more challenging. En-bloc and R0 rates did not differ by location. Complications clustered between cases 15–30 before declining after case 35, reflecting an initial learning-curve vulnerability followed by sustained proficiency.

Conclusions In this single-operator European cohort, colorectal ESD exhibited a clear learning curve, with early variability progressively replaced by stable improvements in dissection speed and procedural efficiency, while en-bloc and R0 rates remained consistently high. When colorectal ESDs were combined with other ESD-related procedures, the broader technical exposure likely accelerated skill acquisition. Consequently, the true proficiency threshold for colorectal ESD is likely higher than the apparent cutoff observed here, with at least 100 procedures required to achieve an expert level.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP740V Afferent limb syndrome (ALS) after DPC and Roux-en-Y reconstruction. Endoscopic resolution with jejuno-jejunal LAMS

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DOI 10.1055/s-0046-1822067

Abstract Text

A 65-year-old woman with pancreatic adenocarcinoma s/p Whipple and Roux-en-Y reconstruction developed locoregional recurrence on palliative chemotherapy. She presented with cholangitis; PTBD improved infection but clamping caused symptom recurrence, suggesting afferent limb syndrome (ALS).

Therapeutic EUS with afferent limb distension (saline/methylene blue/contrast via PTBD) confirmed ALS and revealed an enterolith. Safe access was obtained from the afferent jejunal limb; a 15 × 10 mm Hot-AXIOS LAMS was placed free-hand with a coaxial double-pigtail stent to prevent obstruction/dislodgment. Cholangiography later showed hepaticojejunal anastomosis stenosis, treated with an uncovered 10 × 60 mm SEMS. The patient achieved complete clinical and laboratory recovery, and was discharged.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/cdec9212-fc67-4a23-803c-d7bbc8b8a308/Uploads/19978_SAA_v2%20ESGE26.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP741V A Timely Blessing for a Traditionally Challenging Technique: Endoloop-Assisted Underwater Resection of Large Pedunculated Colonic Polyps

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DOI 10.1055/s-0046-1822068

Abstract Text

ESGE guidelines recommend prophylactic endoloop placement before resecting large pedunculated colonic polyps, but positioning the loop can be technically demanding and may affect procedural safety.

This video presents three cases of endoloop-assisted underwater resection of large pedunculated colonic polyps. Underwater immersion provides buoyancy, lifting the polyp and facilitating accurate endoloop placement. This approach improves stability, precision, and safety, helping reduce the risk of post-polypectomy bleeding. In some cases, water irrigation alone achieved adequate colonic distension, overcoming spasm and rapid CO₂ expulsion.

In conclusion, underwater immersion simplifies endoloop placement and enhances snare capture and resection of large pedunculated colonic polyps.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/5d4ae4d5-7dc0-463f-bfb3-28d7543ba64b/Uploads/19978_Underwater_Endoloop-Assisted%20Polypectomy.mp4

Conflicts of Interest E.Pijoan has received speaker fees from NorgineF. González-Huix has been consultant for Boston Scientific

eP742 Determinants of Procedural Duration in Colorectal Endoscopic Submucosal Dissection and a Validated Score for Identifying Prolonged Cases

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DOI 10.1055/s-0046-1822069

Aims Procedure duration is a key determinant of safety, resource utilization, and scheduling in colorectal endoscopic submucosal dissection (ESD). Although several lesion- and patient-related factors have been associated with procedural difficulty, a validated model for predicting prolonged duration is lacking. This study aimed to identify independent predictors of procedure duration in colorectal ESD and quantify their relative contribution through categorical regression (CATREG), and develop and validate a clinically applicable risk score to predict prolonged procedures.

Methods We retrospectively analyzed 114 consecutive colorectal ESDs recorded in a prospectively maintained database. Procedure duration was the primary outcome. Normality testing demonstrated significant deviation from normality, so non-parametric statistics were employed. Variables with $p < 0.05$ were entered into a multivariable CATREG model with optimal scaling and ridge regularization (tolerance ≥ 0.40). Independent predictors were used to construct a weighted risk score based on normalized CATREG F-statistics. The score was validated against prolonged duration (≥ 1.5 hours) using receiver operating characteristic (ROC) analysis.

Results Duration correlated positively with age, lesion size, maximal axis and circumferential involvement (all $p < 0.001$). No significant differences were observed for sex, location, type of sedation, antithrombotic use, bleeding, perforation, en bloc resection, clip and band traction or underwater technique, even if the last two substantially contributed to the procedure effectiveness. Significantly longer procedures occurred in cases with complications ($p = 0.001$), fibrosis ($p = 0.023$), tunnel technique ($p = 0.001$), LST-G morphology ($p = 0.028$), previous interventions ($p = 0.007$), intermuscular involvement ($p < 0.001$), and R1 resection ($p = 0.014$). Multivariable CATREG identified seven independent

predictors which were used to construct a weighted risk score (range 0–22 points) for predicting prolonged procedures with excellent performance. The predictors included: circumferential involvement ($p < 0.001$, 9 points) lesion size ($p < 0.001$, 4 points), age ($p = 0.001$, 3 points), complications ($p = 0.011$, 3 points), intermuscular involvement ($p = 0.010$, 2 points) LST-G morphology ($p = 0.037$, 1 point) and previous interventions ($p = 0.046$, 1 point). CATREG-derived optimal cutoffs included: size ≥ 12 mm, age ≥ 70 years, circumference $\geq 180^\circ$.

Conclusions Colorectal ESD duration is driven primarily by lesion complexity—particularly circumferential extent and lesion size—with additional contributions from age, intermuscular dissection, complications, LST-G morphology, and prior interventions. An ESD risk score incorporating these factors reliably predicts prolonged procedures and offers a practical tool for preprocedural planning. Prospective validation is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP743 VAC therapy as rescue treatment of a big esophageal perforation after endoscopic submucosal dissection in eosinophilic esophagitis

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DOI 10.1055/s-0046-1822070

Abstract Text

A 74-year-old woman presented with dysphagia. Upper endoscopy revealed eosinophilic esophagitis (EoE) and two squamous lesions: a 15-mm lesion in the upper esophagus with low-grade dysplasia (LGD) and a 30-mm lesion in the mid–lower esophagus with high-grade dysplasia (HGD). We prioritized endoscopic resection before initiating steroid therapy [1–3].

After multidisciplinary discussion, we elected to resect the smaller lesion first to minimize the risk of complications. Endoscopic mucosal resection yielded an 18-mm specimen with confirmed LGD and R0 margins. No complications occurred.

We then performed endoscopic submucosal dissection (ESD) of the distal lesion, obtaining a 35 × 30 mm specimen, HGD, R0, without immediate adverse events.

Twenty-four hours later, the patient developed dyspnea and oxygen saturation dropped to 70 %. A CT scan revealed mediastinitis with a large esophageal perforation. Thoracic surgeons performed mediastinal washout and placed three drains.

During endoscopy, we observed that the esophagus had become detached from the stomach along one-third of its circumference over a length of 7 cm, while the resected area showed no perforation; the breach had occurred laterally.

We elected to reconnect the esophagus and stomach using a VAC-stent system. The patient stabilized, and after three days the stent was replaced. Remarkably, the previously open segment had reapproximated.

Six days later, we placed a fully covered 12-cm metal stent, which was kept in place for one month. The patient recovered well and was discharged after one month.

A follow-up gastroscopy two months later revealed a stricture at the mucosectomy site in the upper esophagus, with fragile mucosa along all the organ, but no recurrent lesions. Five months later, the patient is eating normally and remains on PPI therapy. Re-evaluation and management of the underlying EoE are pending.

Only a few cases of ESD in patients with EoE have been reported in the literature, and perforation appears to be a common complication in this setting. In our patient, the perforation site was unusual, underscoring both the technical challenges of resection and the difficulty in predicting complications in these patients. Nonetheless, the rapid mucosal healing achieved with VAC therapy was remarkable. We believe that in such cases a careful choice between ESD and

mucosal resection is essential, and that VAC therapy may represent a valuable option when severe complications occur in these patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dell'Anna G, Fanti L, Fanizza J, Barà R, Barchi A, Fasulo E, Elmore U, Rosati R, Annese V, Laterza L, Fuccio L, Azzolini F, Danese S, Mandarino FV. VAC-Stent in the Treatment of Post-Esophagectomy Anastomotic Leaks: A New "Kid on the Block" Who Marries the Best of Old Techniques-A Review. *J Clin Med*. 2024;
- [2] Liguori G, Cortale M, Cimino F, Sozzi M. Circumferential mucosal dissection and esophageal perforation in a patient with eosinophilic esophagitis. *World J Gastroenterol*. 2008;
- [3] Sawatzki M, Schoepfer A, Borovicka J, Meyenberger C, Frei R. Stenting after severe iatrogenic submucosal dissection in a patient with newly diagnosed eosinophilic esophagitis. *Gastrointest Endosc*. 2015;

eP744 Case report: Endoscopic Submucosal Dissection of Gastric Heterotopia in the Rectum

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DOI 10.1055/s-0046-1822071

Background: Gastric heterotopia (GH) is the presence of gastric mucosa outside its normal anatomical location. Although commonly reported in the upper gastrointestinal tract, GH in the rectum is rare, with fewer than 100 cases documented. GH may be congenital (heteroplasia) or acquired (metaplasia) and can present with nonspecific gastrointestinal or anorectal symptoms. Furthermore, the risk of transformation of heterotopic gastric mucosa to malignancy is currently unknown, but cases of malignant transformation are described in the literature.

Case Presentation: We report the case of a 19-year-old man presenting with chronic abdominal burning, bloating, early satiety, and constipation. Initial investigations were unremarkable. A colonoscopy revealed a well-demarcated, granular lesion with rolled borders in the distal rectum, biopsied and confirmed as gastric heterotopia. The lesion was successfully resected en-bloc via endoscopic submucosal dissection. Histopathology confirmed gastric heterotopia without dysplasia or malignancy. At six-month follow-up, there were no signs of recurrence, and patient reported partial improvement of the symptoms.

Conclusion: Rectal gastric heterotopia is a rare entity that can mimic other anorectal conditions and has a yet unknown risk of transformation to malignancy. Diagnosis requires histopathological confirmation. Endoscopic resection via ESD is an effective and minimally invasive treatment option. Awareness of this condition can facilitate timely diagnosis and appropriate management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP745 Per-oral plication of the (neo)esophagus (POPE) for end-stage achalasia and delayed gastric conduit emptying after esophagectomy: a systematic review of case reports and case series

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DOI 10.1055/s-0046-1822072

Aims To evaluate the feasibility, clinical effectiveness, and safety of per-oral plication of the esophagus (POPE) in patients with sump-related refractory esophageal emptying due to end-stage achalasia or delayed gastric conduit emptying (DGCE) after esophagectomy. Evidence remains limited to case reports and small series [1–9].

Methods A systematic review was conducted in PubMed, Embase, Scopus, and Web of Science through July 2025. We included case reports and case series reporting extractable clinical information on POPE performed for end-stage achalasia or DGCE after esophagectomy. Clinical and endoscopic data were collected. Study selection followed PRISMA guidelines (► **Table 1**).

► **Table 1** Demographic data, clinical outcomes, and adverse events

	Total = 59 patients	
Country of study		
USA	58	88.89
Spain	1	11.11
Gender		
Female	31	52.54
Diagnosis prior to treatment		
End-stage achalasia	48	81.36
DGCE after esophagectomy	11	18.64
Clinical response		
End-stage achalasia	43/48	89.58
DGCE after esophagectomy	8/11	72.73
Intraprocedural adverse events	4	6.78
Mucosal perforation	3	5.08
Bleeding	1	1.69
Late adverse events	6	8.47
Bleeding	1	1.69
Pain	1	1.69
Aspiration pneumonia	2	3.39
Gastric obstruction that required gastrostomy tube placement	1	1.69

Results Nine publications were identified (4 case series, 3 case reports, 2 conference abstracts), comprising 59 patients aged 28–86 years (mean 70 years). Forty-eight patients were treated for end-stage esophageal achalasia with sump formation and 11 for DGCE after esophagectomy. All achalasia patients had undergone previous interventions at the esophagogastric junction (endoscopic and/or surgical); in the DGCE group, 72.7 % had undergone pyloromyotomy or pyloroplasty before POPE. Technical success was 100 % with a mean procedure time 71.4 minutes (Range 48–97). Clinical improvement (complete or partial) was reported in 89.6 % of end-stage achalasia cases and 72.7 % of DGCE cases, with overall clinical benefit in 86.4 % of the pooled population. Re-intervention (Re-POPE) was required in 22 % of patients to maintain symptom response. Adverse events were uncommon and generally mild. Intraprocedural events included three mucosal perforations and one bleeding event, all successfully managed endoscopically. Post-procedural events consisted mainly of aspiration pneumonia (n = 2), mild delayed bleeding, or transient pain. No related mortality was reported. Hospital stay was typically ≤ 3 days. Mean reported follow-up across publications was 13.5 months, ranging from 4 months to 6 years.

Conclusions POPE appears to be a feasible and safe endoscopic option for patients with refractory esophageal sump formation due to end-stage achalasia or DGCE after esophagectomy. Clinical improvement was frequent and the

technique was repeatable, with low rates of significant adverse events. Given that all available evidence originates from uncontrolled case reports and small series, these findings should be interpreted as exploratory. Prospective studies with standardized outcomes and long-term follow-up are needed to validate the durability and comparative effectiveness of POPE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Andalib I, Tyberg A, Shahid H et al. Peroral Endoscopic Plication For Megaesophagus Post Poem: How Efficacious Is It ? *Gastrointestinal Endoscopy* 2024; 99 (6): AB1076
[2] Ndalib I, Tyberg A, Shahid H et al. Peroral Endoscopic Plication For Megaesophagus Post Poem: How Efficacious Is It ? *Gastrointestinal Endoscopy* 2024; 99 (6): AB1076
[3] Khan MZ, Suresh S, Ichkhanian Y et al. Use of endoscopic plication to repair a dysfunctional gastric conduit. *VideoGIE* 2024; 9 (2): 78–81
[4] Uchima H, Muñoz-González R, DalOglio S et al. Modified per-oral plication of the neo-esophagus for refractory delayed gastric conduit emptying: a novel endoscopic approach. *Endoscopy*. 2025; 57:
[5] Crafts TD, Seidel H, Hedberg HM et al. Efficacy and outcomes of per oral plication of the (neo)esophagus (POPE) for impaired emptying in achalasia and post-esophagectomy patients. *Surg Endosc* 2024; 38 (9): 5239–5245
[6] Bateman AD, Bhanat E, Evans MM, Moremen JR. Endoscopic suture plication for end-stage achalasia safely improves symptoms and is repeatable. *Journal of Gastrointestinal Surgery* 2025; 29 (7): 102089
[7] Alexander RG, Wong Kee Song LM, Nehra AK et al. Peroral plication of the esophagus as a treatment option for end-stage achalasia with sump formation. *Diseases of the Esophagus* 2025; 38 (2): doaf013
[8] Hedberg HM, Attaar M, McCormack MS, Ujiki MB. Per-Oral Plication of (Neo)Esophagus: Technical Feasibility and Early Outcomes. *Journal of Gastrointestinal Surgery* 2023; 27 (8): 1531–1538
[9] Bazerbachi F, Blackmon SH, Ravi K, Wong Kee Song LM. Endoscopic esophagoplasty for megaesophagus with sump stasis in end-stage achalasia. *VideoGIE* 2017; 2 (10): 274–275

eP746V Successful Complete Closure Of Anastomotic Leak In Ileal Pouch Anal Anastomosis With Endoscopic Through-the-scope X-TACK Helix Suturing System

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DOI 10.1055/s-0046-1822073

Abstract Text

Anastomotic leaks remain a serious complication after ileal pouch–anal anastomosis. We report the case of a 53-year-old male patient who underwent laparoscopic subtotal colectomy with ileal pouch for ulcerative colitis. On the fifth postoperative day, the patient developed fever and purulent output from the surgical drain and computed tomography demonstrated an anastomotic leak. The patient was referred to the gastroenterology department for endoscopic management. During endoscopy, a leak approximately 20 mm in diameter was identified near the dentate line and was completely closed using the X-Tack Helix suturing system. Follow-up endoscopy at four and twelve months after the procedure demonstrated the X-Tack system in place. The patient showed clinical improvement soon after the endoscopic closure and remained asymptomatic through the 12-month follow-up.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/469a9965-3113-4052-89dc-120fe762defb/Uploads/19978_X_TACK%20VIDEO.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP747 Z-POEM, a safe and effective approach for Zenker's diverticulum: a single center experience

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DOI 10.1055/s-0046-1822074

Aims Endoscopic Zenker Peroral Endoscopic Myotomy (Z-POEM) is beginning to establish itself as a valuable, minimally invasive treatment option for Zenker's Diverticulum (ZD). However, the available evidence regarding this approach is still growing. This study aims to assess the technical and clinical performance of endoscopic Z-POEM for ZD, specifically evaluating technical success rates, clinical efficacy, the length of hospitalization, and the occurrence of adverse events.

Methods We included all patients that underwent Z-POEM for Zenker's diverticulum in our Center from February 2022 to August 2025, collected through a prospectively maintained database. The primary outcome we evaluated was clinical success, measured by symptomatic improvement based mainly on the resolution of dysphagia and defined by a Kothari-Haber score <3 at 3 months, and for the patients with a long enough follow up, at 1 year. As for secondary outcomes, we evaluated technical success, length of hospital stay, and incidence of adverse events.

Results In total, 30 patients were treated with Z-POEM (males 66%, mean age 73,7 ± 7,6 years), all with Zenker diverticula and one with concomitant esophageal spasm; we excluded 4 patients with exclusive esophageal spasm without presence of a diverticulum. Most patients were naïve, while 4 had already undergone treatment for ZD, 2 of them through a surgical approach and 2 endoscopic, experiencing symptom recurrence a few years post treatment. The average pre-procedural Kothari-Haber score in our population was 5,73 (± 1,8), with all patients presenting with dysphagia and many experiencing daily regurgitations along with weight loss and halitosis. The mean size of the diverticulum was 2,16 cm. Technical success was observed in 100% of cases and clinical success was achieved in 100% of patients, with a post-procedural Kothari-Haber score ≤ 1 in all patients at 3 months post treatment. For the 21 patients treated until September 2024 the Kothari-Haber score was still ≤ 1 at the 1 year follow up, and no patient suffered from symptom recurrence. The average duration of hospitalization was 2,03 days. No patient experienced post-procedural adverse events, which we also documented by contrast X-ray performed at 24 hours before attempting refeeding. All patients restarted oral feeding without complications before discharge.

Conclusions Endoscopic Z-POEM is a feasible and effective treatment for Zenker's diverticulum, showing optimal rates of technical and clinical success, and resulting in a short hospital stay. This procedure represents a safe and minimally invasive option for patients with ZD, including those with recurrence of symptoms after a previous surgical or endoscopic intervention.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP748 Superior Mesenteric Artery Syndrome Mimicking Malignant Duodenal Obstruction in a Patient with Metastatic Breast Cancer: A Rare Case of Benign Compression Syndrome treated with EUS-guided Gastroenterostomy

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DOI 10.1055/s-0046-1822075

Background: Gastric outlet obstruction (GOO) in oncologic patients is usually attributed to malignant duodenal infiltration or peritoneal carcinomatosis. However, careful imaging review in mandatory in the context of profound cachexia because rarely benign extrinsic compression of the third portion of the duodenum may closely resemble malignant obstruction. International guidelines increasingly recognize EUS-guided gastroenterostomy (EUS-GE) with lumen-apposing metal stents (LAMS) as a minimally invasive alternative to surgical bypass in both malignant and selected benign GOO, particularly when performed in high-expertise centers [1–9].

Case: We report a 72-year-old woman with metastatic ductal breast carcinoma and severe cachexia presenting with non-traversable duodenal stenosis in a context of normal duodenal mucosa. Endoscopy and computed tomography showed obstruction of the third duodenal portion without clear malignant infiltration. Despite initial PEG-PEJ placement for decompression and nutrition, symptoms persisted. Following multidisciplinary evaluation, an EUS-guided gastroenterostomy using a 15 × 10 mm LAMS was performed, resulting in rapid symptom resolution, restored enteral continuity, and nutritional improvement.

Conclusion: EUS-GE is a valuable minimally invasive therapeutic option for benign or indeterminate GOO in oncologic patients, particularly when the distinction between malignant and benign etiologies is challenging. Current ESGE and ASGE guidelines, supported by recent meta-analyses, endorse its use in expert centers.

Keywords: EUS-guided gastroenterostomy, lumen-apposing metal stent, gastric outlet obstruction, SMA syndrome-like compression, metastatic breast cancer

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tyberg A, Perez-Miranda M, Poletto D, Berzosa M, Gaidhane M, Sanchez-Ocaña R et al. EUS-guided gastroenterostomy, with focus on technique and practical tips. *Endosc Ultrasound.* 2021; 10 (2): 93–103
- [2] Giri S, Vaidya A, Kale A, Jearth V, Sundaram S. Efficacy of lumen-apposing metal stents for the management of benign gastrointestinal stricture: a systematic review and meta-analysis. *Ann Gastroenterol.* 2023; 36 (5): 524–532
- [3] Armellini E, Metelli F, Anderloni A, Cominardi A, Aragona G, Marini M, Pace F. Lumen-apposing-metal stent misdeployment in endoscopic ultrasound-guided drainages: a systematic review focusing on issues and rescue management. *World J Gastroenterol.* 2023; 29 (21): 3341–3361
- [4] Endoscopic ultrasonography-guided gastroenterostomy for malignant and benign gastric outlet obstruction: a systematic review and meta-analysis. *PubMed.* 2025;39 studies, 2845 patients (pooled technical success 95.1%, clinical success ~93.5%, adverse-events 18.5%)
- [5] EUS-Guided Gastroenterostomy for Benign Gastric Outlet Obstruction: A Systematic Review and Meta-analysis. *PubMed.* 2025;10 studies, 181 patients (technical success 95%, clinical success 90.6%, adverse-events 11%)
- [6] Gökce E, Devisscher L, Rashidian N, Palmeri E, Hindryckx P. Lumen-apposing metal stents for anastomosis creation throughout the gastrointestinal tract: a large single-center experience. *DEN Open.* 2024; 5 (1): e419. technical success 97.2%, clinical success 95.2%, AEs 13.8%
- [7] Patel P, Reddish S, Maurice A et al. Lumen Apposing Metal Stents for Gastrojejunal Anastomotic Stricture Following Metabolic Bariatric Surgery. *Obes Surg.* 2025; 35: 2755–2761
- [8] Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) versus enteral stenting for malignant gastric outlet obstruction: a retrospective propensity score-matched study. *Cancers.* 2024; 16 (4): 724
- [9] Optimizing outcomes for EUS-guided gastroenterostomy: results of a Standardized Clinical Assessment and Management Plan (SCAMP). *Gastrointest Endosc.* 2025; 102 (3):

eP749V Endoscopic Submucosal Dissection for a Giant Ulcerated Gastric Lipoma Presenting with Acute Bleeding: A Video Case Report

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DOI 10.1055/s-0046-1822076

Abstract Text

Gastric lipomas are rare benign tumors, and acute bleeding from these lesions is exceptionally uncommon, usually occurring in large ulcerated antral lipomas. A 65-year-old high-risk patient presented with melena, syncope, and acute anemia. Endoscopy revealed a giant ulcerated subepithelial mass in the antrum, and EUS confirmed a well-defined hyperechoic submucosal lesion consistent with a lipoma. After stabilization, the patient underwent ESD. ESD enabled complete en bloc removal without complications, with rapid clinical recovery and stabilization of hemoglobin. Histology confirmed a large submucosal lipoma with ulceration. ESD is a safe and effective minimally invasive treatment for large or bleeding gastric lipomas, even in comorbid patients, offering a valid alternative to surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/f21abb75-f150-488a-9475-f7eeb0bce9a0/Uploads/19978_Video_Lipoma%202-0.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP750 Association Between Dermatologic Manifestations of Ulcerative Colitis and Serum Activin-A Levels

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DOI 10.1055/s-0046-1822077

Aims Dermatological findings are commonly observed among patients with IBD and significantly impact their quality of life. These skin-related issues, including pyoderma gangrenosum, erythema nodosum, and psoriatic rashes, often become during the active phases of the disease. Recently, new biomarkers have been identified as being correlated with inflammatory bowel disease (IBD) activity and complications. Activin-A, a member of the Transforming Growth Factor-beta (TGF-β) superfamily, stands out as a noteworthy molecule [1, 2].

Methods The present study was an observational investigation that enrolled 34 patients with ulcerative colitis who were receiving treatment. The patients underwent a dermatological evaluation and their serum activin A levels were measured (► **Table 1**).

Results There was no significant difference in activin-α levels between the patients with and without dermatological involvement. Normally distributed numerical variables are presented as means ± standard deviations, and categorical variables are presented as numbers (%). Numerical variables that are not normally distributed are presented as medians (minimum-maximum).

Conclusions The role of activin-A in managing dermatological involvement in UC appears to be limited. Clinically, a broader panel of biomarkers should be used to assess the inflammatory status in these patients

► **Table 1** Age, sex, activin-a levels and dermatologic findings among the group

Parameters	Patient (n = 34)
Age	43.7415.16
Sex	
Male	23 (%67.6)
Female	11 (%32.4)
Serum Activin-a	527.34 (231.68-2134.54)
Dermatologic involvement	
Yes	21(%61,8)
No	13(%38,2)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Li M., Zhu W. 2010; The role of Activin-A in inflammatory bowel disease. Cytokine 51 (1): 48–55

[2] Rinawi F., Assa A. 2021; Extraintestinal Manifestations of Inflammatory Bowel Disease—A Clinical Review. Minerva Gastroenterology 67 (4): 317–329

eP751 Cancers and IBD: Hospital-Based Series

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DOI 10.1055/s-0046-1822078

Aims The aim of our study was to assess the frequency of digestive and extra-digestive cancers in IBD and to identify associated risk factors.

Methods We conducted a retrospective–prospective monocentric cohort study based on hospitalization records from the Department of Gastroenterology at CHU Mohamed Lamine Debaghine. All patients with a confirmed diagnosis of IBD—Crohn's disease (CD) or ulcerative colitis (UC)—hospitalized between 2000 and 2025 were included [1–4].

For each patient, a standardized data sheet recorded demographic characteristics, disease features, and any cancer that occurred during follow-up. We calculated the overall frequency of digestive and extra-digestive cancers as well as the frequency of each cancer type. We also analyzed potential risk factors. Data entry and analysis were performed using Epi-Info 6.

Results A total of **724 patients** were included: **513 (70.9%) with Crohn's disease** and **209 (28.9%) with ulcerative colitis**. Overall, **428 patients (59.1%)** had long-standing IBD (> 10 years), with a mean disease duration of **13.05 ± 7.82 years**.

Thirty-five patients (4.8%) developed cancer. Cancers were distributed as follows: **Colorectal adenocarcinoma**: 2.34% (n = 17), **B-cell lymphoma**: 0.82% (n = 6), **Cholangiocarcinoma**: 0.27% (n = 2), **Anal cancer**: 0.27% (n = 2), **Small bowel adenocarcinoma**: 0.13% (n = 1), **Non-melanoma skin cancer**: 0.13% (n = 1), **Breast cancer**: 0.41% (n = 3), **Lung cancer**: 0.13% (n = 1), **Others**: 0.27% (n = 2)

We observed a significantly higher frequency of cancer in: **UC patients** (P < 0.008), **IBD diagnosed after age 40** (P < 10^{−6}), **IBD associated with PSC** (P < 0.0004), **Patients exposed to immunosuppressants** (P < 0.01). No significant association was found with: Sex (P = 0.3), Duration of IBD (P = 0.6), Exposure to combination therapy (P = 0.4), Exposure to anti-TNFα (Infliximab or Adalimumab) (P = 0.8).

Conclusions In our hospital-based series, colorectal cancer was the most frequently observed malignancy. IBD diagnosed after age 40, UC phenotype, associated PSC, and exposure to immunosuppressive therapy were the main risk factors for cancer development in IBD patients

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jacques BELAICHE Service de Gastroentérologie CHU Sart Tilman 4000 Liège (Belgique) Gastroentérologie – 2006-07-29 – CF –
- [2] Screening by Chromo Endoscopy for Colorectal Cancer and Dysplasia in Ulcerative Colitis: An Algerian Prospective Cohort (journal article) ; Saoula, Houria | Fatima Boutaleb, Amira | Charaf Amir, Zine | Berkane, Saadi | Balamane, Abdelmalek | Nakmouche, Mhamed Journal of Gastroenterology and Hepatology Research volume 7 (issue 3): pages 2598–2603 2018. doi:10.17554/j.j.issn.2224-3992.2018.07.767
- [3] CESAME Study Group Beaugier L., Svrcek M., Seksik P., Bouvier A.M., Simon T., Allez M. 2013; Risk of colorectal high-grade dysplasia and cancer in a prospective observational cohort of patients with inflammatory bowel disease. *Gastroenterology* 145 (1): 166–175
- [4] Bernstein C.N., Blanchard J.F., Kliever E., Wajda A. 2001; Cancer risk in patients with inflammatory bowel disease. *Cancer* 91: 854–862. doi:10.1002/1097-0142(20010215)91:4<854::AID-CNCR1073>3.0.CO;2-Z

eP752 Budesonide for Celiac-like Enteropathy in Common Variable Immunodeficiency

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DOI 10.1055/s-0046-1822079

Introduction: Impaired immunoglobulin production is linked to Common Variable Immunodeficiency (CVID), which can be manifested as autoimmune or celiac-like enteropathy. Distinguishing between CVID-related enteropathy and true celiac disease can be difficult especially when there are no serological markers [1, 2].

Case Description: A 52-year-old man who had been previously treated for lung adenocarcinoma and had a history of CVID on immunoglobulin replacement therapy was assessed for persistent diarrhea. Lower limb edema and hypoalbuminemia were found during the initial work-up and paraneoplastic etiology was ruled out by imaging. The patient underwent upper and lower GI endoscopy which showed scalloping of the duodenal folds and histology consistent with celiac disease.

After initial response to strict gluten-free diet the patient developed relapse with severe weight loss and protein losing gastroenteropathy. Under the suspicion of CVID-related enteropathy rather than refractory celiac disease he was successfully treated with oral budesonide.

Conclusion: Although celiac-like enteropathy in CVID may resemble classical celiac disease, it frequently exhibits no IgA serological response and may only partially respond to gluten-free diet. It is important to distinguish between CVID-associated enteropathy and true celiac disease especially in patients who continue to experience symptoms despite strict gluten withdrawal since they can successfully respond to immunomodulatory treatment like budesonide.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Andersen IM, Jørgensen SF. Gut inflammation in CVID: causes and consequences. *Expert Rev Clin Immunol* 2022; 18 (1): 31–45
- [2] Ahmed A, King W, Sharma A. Gastrointestinal Manifestations of Common Variable Immunodeficiency: A Mentored Review. *Dig Dis Sci* 2025; 70 (9): 2956–2965

eP753 Evaluation of the Global Polypectomy Assessment Tool (GPAT) in Endoscopic Training: Insights from a Single-Center Experience

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DOI 10.1055/s-0046-1822080

Aims Validated performance metrics for colonoscopic polypectomy remain limited. The ESGE Training Curriculum Taskforce has recently introduced the Global Polypectomy Assessment Tool (GPAT). We aimed to evaluate GPAT in real-life endoscopic training by assessing a GI trainee's learning curve and interobserver agreement among raters with different levels of experience.

Methods We conducted a prospective single-center study at Isola Tiberina–Gemelli Isola Hospital from January to October 2025. Thirty colorectal endoscopic resections (polypectomy and endoscopic mucosal resection, EMR) were included: 10 performed by a GI trainee under supervision and 10 performed by each of two expert endoscopists. All procedures were video-recorded and independently evaluated using GPAT by all three raters. The trainee's learning curve was assessed by comparing mean GPAT scores in the first 5 versus the last 5 trainee cases (t-test). Interobserver agreement was measured using intraclass correlation coefficients (ICC), with $p < 0.05$ considered statistically significant.

Results Thirty procedures in 23 patients were analyzed (median lesion size 25 mm; 90 % conventional EMR; 57 % piecemeal resection). Adverse events included 3 delayed bleedings (10 %) and no perforations. GPAT demonstrated progressive improvement in the trainee's performance, with convergence of scores after the 6th case (► Fig. 1). Overall interobserver agreement for GPAT was weak (ICC = 0.33, 95 % CI 0.09–0.57). Agreement between the two experts was poor (ICC = 0.21, 95 % CI –0.08 to 0.50; $p = 0.086$). Agreement between the trainee and expert 1 was also poor (ICC = 0.38, 95 % CI 0.03–0.64; $p = 0.017$), while agreement between the trainee and expert 2 was fair (ICC = 0.44, 95 % CI 0.01–0.72; $p = 0.022$). When analyzing only the trainee-performed videos, agreement among the three raters remained poor (ICC = 0.24). Interobserver agreement was weak for expert 1-performed cases (ICC = 0.39) and fair for expert 2-performed cases (ICC = 0.41).

Conclusions GPAT offers a structured and practical method for assessing polypectomy competency during endoscopic training. Nevertheless, the low inter-rater reliability observed in real-world conditions highlights the need for improved standardization in the interpretation and scoring of the tool. Structured training in score application, together with refinement of specific scoring criteria, may be required to enhance consistency and validity. Larger multi-center studies are warranted to establish GPAT as a reliable standard for competency assessment in colonoscopic polypectomy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP754 Gel Immersion Endoscopic Mucosal Resection (GIEMR) using food thickener for non-pedunculated duodenal and colorectal polyps: a pilot study

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DOI 10.1055/s-0046-1822081

Aims In recent years, underwater endoscopic mucosal resection (UEMR) has gained widespread popularity. However, intestinal fluids, bubbles, or bleeding may impair visibility. Gel immersion endoscopic mucosal resection (GIEMR) has

been reported in some Asian series. The use of an electrolyte-free gelling agent may offer advantages over UEMR due to its higher viscosity, and transparency, providing luminal stability, requiring smaller volumes, and ensuring a clearer visual field by displacing particles while limiting dilution with blood. Moreover, its greater weight favours bleeding control through a “slowing effect”.

The main objective of the study was to evaluate the use of a food thickener (xanthan gum), as a gel easily prepared in the endoscopy room, for performing ft-GIEMR of non-pedunculated duodenal and colorectal polyps.

Methods A longitudinal, observational, single-centre pilot study was conducted. Consecutive cases prospectively collected in a dedicated database, from January 2024 to June 2025 were retrospectively analysed. Lesions treated with ft-GIEMR (food thickener) were included. The primary endpoint was feasibility and improvement of the visual field. Secondary endpoints included complete and en bloc resection, adverse events and procedure duration. Recurrence data are pending.

Results Among 180 complex lesions resected by EMR, UEMR, EFTR, or ESD, 29 patients (58 % male; median age:70.3 years [IQR: 60–81]) with 29 lesions were selected for GIEMR. Lesion locations included duodenum (n = 2) and the colon and rectum (n = 27), with a median size of 43.5 mm (IQR:32.5–55). Paris classification included Is, 0-IIa, or Is + 0-IIa morphologies. Colorectal lesions were classified as LST-G homogenous (37 %, n = 10), LST-G nodular-mixed (37 %, n = 10), and LST-NG elevated (26 %, n = 7). Gel volumes ranged from 100 to 400 mL per procedure. Median overall procedure time was 87 minutes [IQR:45–120]. Complete resection was achieved in 93 % (27/29), with piecemeal in 27 vs. en bloc resection in 2. One intraprocedural arterial bleed required conversion to CO₂ insufflation and prolonged procedure time. Post-procedure bleeding occurred in 3 cases. No intra or delayed perforations were observed.

Conclusions The use of food thickener for GIEMR appears feasible, effective, and safe, with high complete resection rates (93 %) and no perforations. Prospective comparative studies with UEMR are warranted to confirm these preliminary findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP755 COLON-AI: Evaluating the Reliability and Readability of AI Chatbots in Colonoscopy Counseling

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DOI 10.1055/s-0046-1822082

Aims Adequate bowel preparation critically depends on the delivery of clear and comprehensible pre-procedural information. Although a recent study has assessed the effectiveness of AI chatbots (GoogleGemini and ChatGPT) in providing colonoscopy instructions, comparative evidence including the most widely disseminated chatbot, Meta, is still lacking, and no data are available concerning the readability of these systems. The objective of the present study was to systematically evaluate the performance and readability of the most widely accessible AI chatbots in generating patient-facing colonoscopy preparation instructions [1–7].

Methods We conducted a prospective, single-center observational study at Maggiore Hospital Bologna between August and September 2025, in accordance with the METRICS checklist. Frequently asked questions (FAQ) regarding colonoscopy were collected from Italian hospital websites and Quora, and subsequently submitted to MetaAI, ChatGPT, and Google Gemini. The chatbot-generated responses were independently evaluated by five gastroenterologists, who were blinded to the chatbot platform, using a 1–5 Likert scale to assess accuracy, completeness, clarity, evidence-based content, and the absence of irrelevant information. Text readability was assessed using Readability Formulas (FRES score), expressed on a 0–100 scale. In addition, a subgroup performance analysis was conducted by categorizing questions into pre-procedural (e.g., split-dose bowel preparation), intra-procedural (e.g., how polypectomy is performed), and post-procedural aspects (e.g., post-sedation precautions).

Results GoogleGemini achieved the highest overall performance, with mean scores for accuracy (3.14), completeness (3.12), clarity (3.13), evidence-based content (2.91) and relevance (2.99), outperforming ChatGPT and MetaAI. The most satisfactory results were observed for pre-procedural questions compared to intra- and post-procedural ones, especially for accuracy, completeness and relevance. ChatGPT ranked second, with slightly lower yet consistent values for accuracy (2.96), completeness (2.93), clarity (2.95), evidence-based content (2.80) and relevance (2.93), particularly in delivering accurate intraprocedural responses. Conversely, MetaAI showed the weakest performance, with significantly lower scores for accuracy (2.62), completeness (2.56), clarity (2.62), evidence-based content (2.60) and relevance (2.66). Regarding readability, ChatGPT (13.68) generated more understandable texts than GoogleGemini (6.35) and MetaAI (4.21). Post-procedural questions yielded more accessible answers with ChatGPT showing the best readability scores (17.17), followed by GoogleGemini (12.00) and MetaAI (6.50). In contrast, intra-procedural queries produced the least satisfactory results with ChatGPT, GoogleGemini, and MetaAI scoring 11.00, 1.86 and 2.71, respectively. Overall, GoogleGemini provided the best response quality, ChatGPT slightly lower performance but better readability and MetaAI globally less favorable results (► Table 1).

► Table 1

	ChatGPT					MetaAI					Gemini				
	Accuracy	Completeness	Clarity	Evidence-based content	Relevance	Accuracy	Completeness	Clarity	Evidence-based content	Relevance	Accuracy	Completeness	Clarity	Evidence-based content	Relevance
Pre-procedure	2,96	2,88	2,99	2,79	2,97	2,49	2,37	2,49	2,41	2,59	3,22	3,18	3,18	2,94	3,1
Intra-procedure	3	3,05	3	2,79	2,95	2,67	2,62	2,67	2,64	2,64	3,12	3,17	3,19	2,98	2,93
Post-procedure	2,92	2,86	2,86	2,83	2,86	2,69	2,69	2,69	2,75	2,75	3,08	3,03	3,03	2,81	2,94
Overall	2,96	2,93	2,95	2,8	2,93	2,62	2,56	2,62	2,6	2,66	3,14	3,12	3,13	2,91	2,99

Conclusions This is the first study to evaluate both the accuracy and readability of colonoscopy-related information generated by the most widely used chatbots. Further studies involving patient participation are warranted to confirm the clinical applicability of these models in real-life settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sallam M, Barakat M, Sallam M. Pilot Testing of a Tool to Standardize the Assessment of the Quality of Health Information Generated by Artificial Intelligence-Based Models. *Cureus*. 2023; 15: e49373. doi:10.7759/cureus.49373 PMID: 38024074 PMID: PMC10674084
- [2] Sallam M, Barakat M, Sallam M. A Preliminary Checklist (METRICS) to Standardize the Design and Reporting of Studies on Generative Artificial Intelligence-Based Models in Health Care Education and Practice: Development Study Involving a Literature Review. *Interact J Med Res* 2024; 13: e54704. doi:10.2196/54704 PMID: 38276872 PMID: PMC10905357
- [3] Tariq R, Malik S, Khanna S. Evolving Landscape of Large Language Models: An Evaluation of ChatGPT and Bard in Answering Patient Queries on Colonoscopy. *Gastroenterology* 2024; 166 (1): 220–221. doi:10.1053/j.gastro.2023.08.033 Epub 2023 Aug 26. 37634736
- [4] Lee TC, Staller K, Botoman V, Pathipati MP, Varma S, Kuo B. ChatGPT Answers Common Patient Questions About Colonoscopy. *Gastroenterology* 2023; 165: 509–511.e7. doi:10.1053/j.gastro.2023.04.033. Epub 2023 May 5 PMID: 37150470
- [5] Calabrese G, Maselli R, Maida M, Barbaro F, Morais R, Nardone OM, Sinagra E, Di Mitri R, Sferrazza S. Unveiling the effectiveness of Chat-GPT 4.0, an artificial intelligence conversational tool, for addressing common patient queries in gastrointestinal endoscopy. *iGIE* 2025ISSN 2949-7086 . doi:10.1016/j.igie.2025.01.012.https://www.sciencedirect.com/science/article/pii/S2949708625000123
- [6] Donovan K, Manem N, Miller D, Yodice M, Kabbach G, Feustel P, Tadros M. The Impact of Patient Education Level on Split-Dose Colonoscopy Bowel Preparation for CRC Prevention. *J Cancer Educ* 2022; 37: 1083–1088. doi:10.1007/s13187-020-01923-x. Epub 2021 Jan 6 PMID: 33405208 PMID: PMC7785930
- [7] Guo X, Yang Z, Zhao L, Leung F, Luo H, Kang X, Li X, Jia H, Yang S, Tao Q, Pan Y, Guo X. Enhanced instructions improve the quality of bowel preparation for colonoscopy: a meta-analysis of randomized controlled trials. *Gastrointest Endosc* 2017; 85: 90–97.e6. doi:10.1016/j.gie.2016.05.012 Epub 2016 May 14 PMID: 27189659.

eP756 Experience of an Algerian Center in the Management of Upper Gastrointestinal Bleeding in the Emergency Department

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DOI 10.1055/s-0046-1822083

Aims The aim of our study was to describe the epidemiological, clinical, endoscopic, and outcome-related characteristics of UGIB [1–7].

Methods We conducted a prospective, descriptive, single-center study at Bab El Oued University Hospital between January 2023 and August 2025. All patients admitted to the emergency units for overt upper gastrointestinal bleeding and referred for upper endoscopy were included. Clinical, biological, endoscopic, therapeutic, and outcome data were collected and analyzed using SPSS 23.0.

Results A total of 281 patients were included, of whom 57.3% were men, with a mean age of 65.50 ± 16.16 years. The main comorbidities were portal hypertension (48.2%), ischemic heart disease (22.5%), and end-stage renal disease (17.4%). Anticoagulant therapy was documented in 21.1% and antiplatelet use in 3.9% of cases.

UGIB presented as isolated hematemesis (32.4%), isolated melena (37.7%), hematemesis combined with melena (21.7%), melena with hematochezia (5.7%), and massive hematochezia (2.1%). The mean Glasgow-Blatchford score was 10.56 ± 4.04. Endoscopy revealed: peptic gastroduodenal ulcer disease (33.3%), gastroesophageal variceal rupture (26.9%), ulcerative esophagitis (16.5%), neoplasia (5.8%), angiodysplasia (5.4%), Mallory-Weiss syndrome (4%), erosive gastritis (7.1%), Dieulafoy's lesion (1.3%), GAVE (0.6%) and no lesion identified (9.3%)

A blood transfusion was required in 64.8% of patients. Endoscopic hemostasis was performed in 25.6%, including band ligation (21.8%), biological glue (2.5%), APC (10.1%), adrenaline injection (1.3%), and hemostatic clips (2.5%). Surgical intervention was necessary in 1.13% of cases. During hospitalization, rebleeding occurred in 8.4% of patients, and mortality was 2.1%.

Conclusions In our experience, peptic ulcer disease and esophageal variceal rupture remain the leading causes of UGIB. Despite a low rate of surgical intervention and a relatively low in-hospital mortality, the rebleeding rate remains significant. These findings highlight the need for early, optimized management and further studies to identify predictive factors for recurrence

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ESGE Recommendations
- [2] Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021
- [3] Hémorragie digestive haute : utilité des scores pronostiques Stéphane Badel Gian Dorta Pierre-Nicolas Carron. doi:10.53738/REVMED.2011.7.305.1574
- [4] Juan G. et al. Baveno VII – Renewing consensus in portal hypertension de Franchis, RobertoAbralles. *Journal of Hepatology*. Volume 76 (Issue 4): 959–974
- [5] Juan G. et al. 1-Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2021 2-Baveno VII – Renewing consensus in portal hypertension de Franchis, RobertoAbralles. *Journal of Hepatology*. Volume 76 (Issue 4): 959–974 3
- [6] Hémorragie digestive haute : utilité des scores pronostiques Stéphane Badel Gian Dorta Pierre-Nicolas Carron. doi:10.53738/REVMED.2011.7.305.1574
- [7] Samlani-Sebbane Z., Gharaba S., Krati K. et al. Le profil étiologique des hémorragies digestives hautes extérieures dans la région de Marrakech. *J Afr Hepato Gastroenterol* 6: 256–258 2012

eP757 Impact of Artificial Intelligence on Polyp and Adenoma Detection: A Retrospective Real-World Study from a Private Hospital

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DOI 10.1055/s-0046-1822084

Aims To assess the impact of adopting an artificial intelligence computer-aided detection system, namely GI Genius by Medtronic, on the detection of polyps and adenomas during routine colonoscopy in real-world clinical practice

Methods A retrospective analysis was conducted, including all colonoscopies performed over a period of three months before and three months after AI implementation at a private hospital. Demographic data, the indication of colonoscopy (screening, surveillance, diagnostic), and endoscopist experience (1 year, 3 years, > 10 years) were recorded. The number, size, location, morphology according to Paris classification, and histology (adenoma, advanced adenoma, hyperplastic) of the detected polyps were documented for each examination. Categorical variables were analyzed using Chi-square testing, while continuous variables were analyzed using the Mann-Whitney U test [1].

Results A total of 240 patients were included, of whom 55.4% were male, with a mean age of 58.93 ± 13.88 years; 136 procedures (56.7%) were performed

with AI. There were no differences in sex and age of patients between groups. In the AI-assisted cases, the presence of adenomas was significantly higher in screening colonoscopies (16.3 % vs 0 %, $p = 0.018$). There were no differences between the two groups regarding total polyp count, size, or morphology. Among endoscopists with 3 years of experience, AI significantly increased the detection of Paris Is polyps (40 % vs 18.9 %, $p = 0.047$) and right-sided polyps (27.7 % vs 8.1 %, $p = 0.022$). In the overall cohort, no significant differences were observed in the total number of polyps, size, morphology, or histology.

Conclusions AI significantly increased adenoma detection in screening colonoscopies and improved the performance of intermediate-experience endoscopists, especially for Paris Is and right-sided lesions. While overall polyp burden and histological findings were similar between the two groups, these results indicate the selective benefit of AI-assisted colonoscopy in enhancing examination quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Schöler J, Alavanja M, de Lange T, Yamamoto S, Hedenström P, Varkey J Impact of AI-aided colonoscopy in clinical practice: a prospective randomised controlled trial. *BMJ Open Gastroenterol.* 2024; 11 (1):

eP758 Rectosigmoid Phytobezoar Caused by *Diospyros lotus*: A Rare Case Mimicking IBS

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DOI 10.1055/s-0046-1822085

Abstract Text

Phytobezoars are concretions of indigestible plant materials in the gastrointestinal tract. While *Diospyros lotus*-related bezoars are typically found in the stomach or small intestine, rectosigmoid localization is rare. Such bezoars may mimic other gastrointestinal conditions, including irritable bowel syndrome (IBS). A 48-year-old male presented with abdominal bloating, pain, and a sense of incomplete defecation for several weeks. He had no known systemic disease or regular medication use. He reported consuming large quantities of *Diospyros lotus* fruit from a tree in his garden shortly before symptom onset. Colonoscopy revealed two bezoars, each 3–4 cm in diameter, located in the rectum and sigmoid colon. These were fragmented and removed using a snare and basket catheter. A small number of *Diospyros lotus* seeds were identified within the bezoars. At follow-up, the patient was symptom-free. Rectosigmoid bezoars are uncommon and usually linked to seed ingestion (e.g., pumpkin, watermelon). *Diospyros lotus* typically causes gastric phytobezoars or small bowel obstruction. In this case, bezoar formation in the lower colon likely resulted from impaired passage due to anatomical narrowing. The symptom pattern resembling constipation-dominant IBS adds clinical complexity and underscores the need for thorough evaluation in similar cases. This rare case highlights that *Diospyros lotus* can cause phytobezoars beyond the stomach, including the rectosigmoid colon. Clinicians should consider bezoars in the differential diagnosis of chronic constipation-like symptoms, especially with a relevant dietary history [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Eitan A, Bickel A, Katz IM. Fecal impaction in adults: report of 30 cases of seed bezoars in the rectum. *Dis Colon Rectum* 2006; 49 (11): 1768–1771. doi:10.1007/s10350-006-0713-0

eP759 Artificial intelligence and FLIP panometry: automatic characterization of motility patterns under the Dallas consensus

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DOI 10.1055/s-0046-1822086

Aims Functional lumen imaging probe (FLIP) panometry was developed for real time assessment of esophagogastric junction opening and esophageal body contractile response during index endoscopy. Despite its proven value in functional esophageal disorders and its potential to reshape diagnostic pathways in Neurogastroenterology, substantial heterogeneity persists in catheter selection, procedural protocols and exam interpretation. In 2025 the Dallas Consensus provided standardized guidance on indications, performance, interpretation and reporting, yet exam interpretation remains complex and largely confined to high expertise centers. Artificial intelligence offers a pragmatic opportunity to simplify interpretation and support broader adoption of FLIP panometry in lower volume settings. This study aimed to develop an AI model capable of automatic interpretation of motility patterns during FLIP panometry according to the Dallas Consensus, with the goal of enabling more consistent and accessible use in clinical practice [1].

Methods 123 exams from 5 centers from both the European and American continents and performed with both 8- and 16-centimeter catheters were used for model development. Each procedure was classified with a two-expert based consensus decision according to the latest Dallas Consensus. Several machine learning models were trained and tested for evaluation of the esophagogastric junction opening and esophageal body contractile response. Data was divided in training and testing datasets with a 80 %/20 % patient split design, using 5-fold cross validation in the training dataset. Models' performance was evaluated with the testing dataset through their accuracy and area under the receiver-operating characteristic curve (AUC-ROC).

Results Disorders of esophagogastric junction opening were detected by CatBoost with 96.6 % accuracy and an AUC-ROC of 0.989. Regarding disorders of contractile response, they were detected by XGBoost with 78.2 % accuracy and an AUC-ROC of 0.913. Pathological planimetry patterns according to Dallas Consensus were identified by LightGBM with a mean accuracy of 92.1 % and AUC-ROC of 0.955.

Conclusions This study represents the first application of AI analysis to FLIP panometry, incorporating data from multiple probe types and heterogeneous demographic contexts while adhering to the most recent Dallas Consensus criteria, demonstrating robust accuracy in identifying pathological planimetry patterns. Subsequent research will refine these findings through dedicated validation efforts and explore the capacity to discriminate among distinct motility abnormalities. The integration of AI into FLIP panometry has the potential to meaningfully advance the diagnostic evaluation of suspected esophageal disorders during endoscopy by improving interpretative precision, reinforcing procedural standardization and expanding access beyond specialized centers, thereby contributing to more timely and effective patient management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Carlson DA, Pandolfino JE, Yadlapati R et al. A Standardized Approach to Performing and Interpreting Functional Lumen Imaging Probe Panometry for Esophageal Motility Disorders: The Dallas Consensus. *Gastroenterology*. 2025; 168 (6): 1114–1127

eP760V Closure of a choledochoduodenostomy presenting with refractory reflux cholangitis

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Abstract Text

A 75 years-old patient with metastatic pancreatic cancer presented with cholangitis and asymptomatic duodenal stenosis. An endoscopic ultrasound (EUS)-guided choledochoduodenostomy using a 6x8mm lumen apposing metal stent (LAMS) was decided. The patient presented with reflux cholangitis despite the use of coaxial stenting by plastic and fully covered metal stents. The recurrent cholangitis with significant cholestasis affected the oncological plan.

A closure of the choledochoduodenostomy by EUS-guided antegrade stenting combined with a hepaticogastrostomy assisted by a 7 French catheter in the intrahepatic bile duct through the LAMS was performed. A EUS-guided gastrojejunostomy was also performed in the same time.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/9e058200-3925-4212-a19e-deaec1ee0358/Uploads/19978_Closure_CDS%20vEN.mp4

Conflicts of Interest Enrique Perez is consultant for Boston Scientific

eP761 Spontaneous gastrointestinal fistula after necrotising pancreatitis: Presentation and Management

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DOI 10.1055/s-0046-1822088

Aims Spontaneous gastrointestinal (GI) fistula is an uncommon but serious complication of necrotising pancreatitis, associated with significant morbidity and mortality. Early identification is crucial, yet published data on its presentation and management remain limited [1].

Methods We retrospectively analysed a prospectively maintained database of 146 patients with acute pancreatitis who developed pancreatic fluid collections. Clinical presentation, imaging findings and management outcomes of patients with pancreatoenteric fistula were reviewed.

Results Spontaneous pancreatoenteric fistula was identified in 5.3% of patients using contrast enhanced CT with oral/rectal contrast and/or gastrointestinal endoscopy. The most common clinical presentation was worsening or recurrent abdominal pain with intermittent fever, observed in 5 patients (50%). Gastrointestinal bleeding occurred in 4 patients (40%). Most patients were managed successfully with minimally invasive approaches: percutaneous drainage in 6 patients (60%) and EUS guided cystogastrostomy in 2 patients (20%). Only one patient required surgical intervention.

Conclusions Spontaneous gastrointestinal fistula should be suspected in patients with necrotising pancreatitis who develop new or worsening abdominal pain, sepsis, or GI hemorrhage. Minimally invasive management including percutaneous drainage and EUS guided interventions forms the mainstay of treatment, while surgery should be reserved for patients who fail conservative management or show rapid clinical deterioration.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Jiang W, Tong Z, Yang D, Ke L, Shen X, Zhou J, Li G, Li W, Li J. Gastrointestinal Fistulas in Acute Pancreatitis With Infected Pancreatic or Peripancreatic Necrosis: A 4-Year Single-Center Experience. *Medicine (Baltimore)* 2016; 95 (14): e3318. doi:10.1097/MD.0000000000003318 PMID: 27057908 PMID: PMC4998824

eP762 Role of Ursodeoxycholic Acid in Preventing Biliary Stent Occlusion After ERCP

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DOI 10.1055/s-0046-1822089

Aims Stent occlusion represents a major cause of recurrent biliary obstruction (RBO) after biliary stent placement. Whether ursodeoxycholic acid (UDCA) can reduce stent occlusion remains uncertain. This study aimed to evaluate the efficacy of UDCA following biliary stenting for RBO.

Methods We performed a retrospective analysis of patients with RBO who underwent ERCP between January 2021 and December 2023 and required at least one reintervention within 36 months after initial stent placement. A total of 531 patients previously treated with either plastic or metallic stents were screened and included in the study cohort.

Results Of the 492 eligible patients, 348 (70.7%) received UDCA and 144 (29.3%) did not. Overall stent patency was longer in the UDCA group (median 90 days, IQR 60–150) compared with non-UDCA patients (median 90 days, IQR 60–90) ($p = 0.03$). Cholangitis at re-intervention occurred in 181/348 (52.0%) UDCA users versus 58/144 (40.3%) non-users ($p = 0.02$). In patients with plastic stents ($n = 320$), patency was similar between groups (median 90 days, IQR 60–120 for both; $p = 0.55$), as were cholangitis rates (51.3% vs. 45.6%; $p = 0.42$). In contrast, among patients with self-expandable metallic stents (SEMS; $n = 81$), patency was significantly longer with UDCA (median 180 days, IQR 120–180) than without (median 180 days, IQR 60–180) ($p = 0.045$), while cholangitis rates remained comparable (73.4% vs. 64.7%; $p = 0.68$). Sphincterotomy, performed in 92.7% (455/492) of cases, showed a non-significant trend toward prolonged patency (median 90 vs. 60 days; $p = 0.10$).

Conclusions UDCA improved overall stent patency, particularly in patients with metallic stents, supporting its role as a useful adjunct after ERCP. Although cholangitis rates were unchanged, the patency benefit suggests added value in the management of recurrent biliary obstruction

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP763 Artificial intelligence as the new reference standard for accurate polyp size measurement

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Problem to solve The best reference standard for size measurement after polypectomy so far is caliper-based size measurement. However, this is time-consuming and may be inaccurate because of polyp fragmentation, distortion, or other deformations due to piecemeal resection, retrieval-related damage, inappropriate compression, or folding. This underscores the need for novel measurement tools.

Innovation MAGENTIQ-COLO (MAGENTIQ EYE, Haifa, Israel) is an AI-based system that offers real-time polyp size assessment during colonoscopy or retrospective video evaluation. A video-based validation study was performed to assess the accuracy of this AI system compared to caliper-based size measurement of colorectal polyps.

Results A total of 77 polyps was measured in 55 patients (male sex, n (%): 29 (52.7%), age median, interquartile range (IQR): 67 (13)). Colonoscopy indica-

tions were surveillance in 38 (69.1 %), screening in 7 (12.7 %), and diagnostic in 10 patients (18.2 %). Of the 77 polyps, the majority of polyps were adenomas (n = 52; 67.5 %). Polyps were equally distributed through the colon. The AI-based system correctly identified size in 37/46 polyps (80.4 %) as ≤ 5 mm and 5/6 polyps (83.3 %) as ≥ 10 mm (► **Table 1**). The system had a mean accuracy of 0.80 for ≤ 5 mm polyps (n = 46), 0.88 for 6–9 mm polyps (n = 25), and 0.83 for ≥ 10 mm polyps (n = 6), with a total mean accuracy of 0.84. Accounting for the skewed number of polyps per size category, the weighted accuracy was 0.83, with a weighted sensitivity and specificity of 0.83 and 0.92, respectively. The system reliably estimated polyp size, with a slightly higher accuracy for > 5 mm polyps compared to ≤ 5 mm polyps. From initial polyp detection to showing size, median latency was 5 frames (± 0.17 seconds).

► **Table 1** Confusion matrix of ground truth polyp size by caliper and predicted polyp size by the AI-based system

	AI system (≤ 5 mm)	AI system (6–9 mm)	AI system (≥ 10 mm)
Caliper (≤ 5 mm)	37	9	0
Caliper (6–9 mm)	1	22	2
Caliper (≥ 10 mm)	0	1	5

Conclusions The novel AI-based system demonstrated a high accuracy compared to the reference standard of calipers, signifying that the AI system correctly identified most polyps within their true size categories with a low risk of size misclassification. Furthermore, colonoscopy time only slightly increased, allowing timely size assessment. This system could well replace the caliper as the reference standard for in-vivo size measurement of polyps during colonoscopy, but further prospective studies are needed.

Acknowledgement: We express our gratitude to the MAGTENIQ-COLO study group for their contribution to drafting this abstract.

Conflicts of Interest The study was sponsored by MAGENITQ EYE. Data analysis and drafting of the abstract was performed by the authors.

eP764V A Multi-Method Explainability Framework for Segmentation in Pancreatic EUS: Enhancing Transparency, Clinical Trust and Diagnostic Safety

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DOI 10.1055/s-0046-1822091

Problem to solve Artificial intelligence systems for endoscopic ultrasound (EUS) increasingly achieve high diagnostic accuracy for detecting pancreatic masses [1], yet their “**black box**” nature limits clinical acceptance. Clinicians must understand **why** and **where** an AI model identifies a lesion, yet existing explainability techniques (e.g., CAM-based methods) were designed for image classification, not for segmentation-based object detection. When applied to EUS, these methods often highlight irrelevant features such as depth markers, calipers or acoustic artifacts, producing misleading interpretations and reducing trust. As no dedicated explainability approach exists for segmentation

models in abdominal EUS, there is a need for a reliable, clinically meaningful framework that provides anatomically accurate and artifact-free explanations.

Innovation We developed a dedicated explainability framework for the PAN-CRAIEUS model segmentation architecture used in pancreatic EUS, based on the initial training data of 32713 frames recorded in 202 patients¹. The framework integrates several adapted methods (GradCAM, EigenCAM, occlusion analysis and class-specific attention) technically optimized for the multi-scale, segmentation-based design. Building on this, we introduced two new segmentation-guided strategies. The **Hard Mask** method restricts heatmaps strictly to detected structures, ensuring that explanations correspond only to pancreas, tumor or cyst regions. The **Soft Focus** method maintains overall anatomical context while gradually reducing irrelevant areas, producing fluid, intuitive visualizations suitable for real-time interpretation. Both methods were systematically assessed for anatomical fidelity, artifact suppression and clinical interpretability (► **Table 1**).

► **Table 1**

Method	Focus on Relevant Anatomy	Artifact Avoidance	Clinical Usefulness
GradCAM	Moderate	Low	Moderate
EigenCAM	Moderate–High	Moderate	Moderate
Occlusion	High	High	Lower (slow)
Hard Mask	<i>Very High</i>	<i>Very High</i>	<i>Excellent</i>
Soft Focus	<i>High</i>	<i>High</i>	<i>Excellent (best visual continuity)</i>

Results When applied to representative EUS images and videos, standard CAM-based techniques frequently produced activations on image text, bright acoustic interfaces or shadow boundaries. In contrast, the segmentation-guided methods consistently generated precise, clinically coherent explanations.

Hard Mask offered the strongest anatomical specificity, sharply delineating lesion borders and fully eliminating artifact-driven activations, making it useful for documentation and regulatory purposes. **Soft Focus** produced smoother gradients that preserved situational awareness while still suppressing irrelevant regions, making it more intuitive for teaching and potential live use. Across cases, the combined multi-method approach provided a more complete understanding of model behavior than any single technique alone.

Conclusions This work presents the first **explainability framework** tailored to segmentation in pancreatic EUS and demonstrates its ability to produce accurate, clinically trustworthy visual explanations. By integrating multiple adapted techniques with two novel segmentation-guided approaches, the framework enhances transparency, supports safer clinical implementation of AI, and aligns with emerging regulatory expectations for model interpretability. Further work will explore real-time integration and prospective clinical evaluation.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/ae5dc14-d0dd-4384-94a4-1df688ddd4d7/Uploads/19990_Explainable_AI%20with%20titles.mp4

Conflicts of Interest L. Gruionu, A. L. Udriștoiu, E. C. Gheorghe, A. Saftoiu own stock in Medical Software srl

References

[1] Bang JY, Saftoiu A, Udriștoiu A, Gruionu L, Codruța Gheorghe E, Gruionu G, Ramesh J, Wilcox CM, Varadarajulu S. Prospective clinical validation of a novel artificial intelligence system for real-time detection of solid pancreatic masses during endoscopic ultrasonography. *Endoscopy*. 2025. doi:10.1055/a-2701-6530 Epub ahead of print PMID: 40953587

eP765 Feasibility of aggressive endoscopic intervention for delayed perforation after colonic endoscopic resection, a retrospective case series

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DOI 10.1055/s-0046-1822092

Aims Delayed perforation after colonic endoscopic resection has been thought to be fatal and could lead to serious adverse events. However, with the development of endoscopic techniques, endoscopic intervention may avoid the need for emergency surgery. To validate the feasibility of aggressive endoscopic intervention for delayed perforation after colonic endoscopic resection.

Methods Three cases with delayed perforation experienced from April 2023 to March 2024 were enrolled in this retrospective case series. Patients' backgrounds, procedure-related factors, and outcomes were extracted from medical records, and the feasibility of intensive endoscopic intervention was assessed.

Results The median age of the patients was 34 (range 15-49). Two of them were male. Two of them underwent endoscopic submucosal dissection (ESD) and one underwater endoscopic mucosal resection (UEMR). The median tumor size is 27mm (range 20–33mm). The treated sites were sigmoid in two cases and the transverse colon in one. The median time to delayed perforation after endoscopic resection was 57 hours (range 20-69). All of them had no apparent perforation during endoscopic resection and showed severe abdominal pain and free air on abdominal CT, and no findings of peritonitis or septic shock. Emergency colonoscopy under sedation using midazolam and opioid analgesics was performed for all cases. The perforation site was confirmed endoscopically in two cases. One delayed perforation was closed with endo-clips, and the other two perforations were covered with polyglycolic acid sheets. Diet was resumed at a median of 9 (range 4-13) days after the aggressive endoscopic intervention.

Conclusions Aggressive endoscopic intervention may be feasible for delayed perforation after colonic endoscopic resection, although an appropriate patients selection would be mandatory.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP766 Feasibility of differentiating serrated pathway polyps (GCHP, MVHP and SSL) based on endoscopic appearance using deep learning

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DOI 10.1055/s-0046-1822093

Aims Recent molecular studies have suggested a biological link between hyperplastic polyps (HPs) and sessile serrated lesions (SSLs), as early serrated features and BRAFV600E-mutations are frequently found in specific HP subtypes: goblet cell-rich HPs (GCHPs) and microvesicular HPs (MVHPs). This supports the hypothesis that GCHPs, MVHPs and SSLs belong to the serrated neoplasia pathway. In previous work, we demonstrated that deep learning can differentiate GCHPs from MVHPs based on their endoscopic appearance. The present study builds further on this finding by investigating whether deep learning can also distinguish GCHPs, MVHPs and SSLs.

Methods High-quality white light and i-scan virtual chromoendoscopy videos of polyps, acquired in our center with Pentax EC38-i20c and EC34-i10 endoscopes, were retrospectively collected, together with their histopathological analysis. Expert pathologists reviewed all cases and reclassified HPs into GCHPs and MVHPs, resulting in a dataset of 260 polyps from 194 patients: 138 GCHPs, 54 MVHPs, and 68 SSLs. The dataset was split into training (70%), validation (10%) and test (20%) sets. Three binary classifiers (GCHP vs MVHP, GCHP vs SSL and MVHP vs SSL) and one ternary classifier (GCHP vs MVHP vs SSL) were trained identically using an EfficientNet B0 backbone with a single video frame as input. Oversampling was applied to balance underrepresented classes. When applying these models to the test cases, predictions for different video frames were aggregated using majority voting.

Results The test set contained 28 GCHPs, 14 MVHPs and 15 SSLs. The binary GCHP-MVHP model scored 82.7% AUC and 71.4% sensitivity for both classes. The GCHP-SSL model performed similarly with 82.1% AUC and sensitivities of 64.3% and 86.7% for GCHP and SSL respectively. The MVHP-SSL model achieved the highest performance with 87.6% AUC and sensitivities of 71.4% and 80% for MVHP and SSL respectively. In contrast, the ternary model yielded sensitivities of 25%, 64.3% and 60% for GCHP, MVHP and SSL respectively, with GCHP mostly misclassified as MVHP and SSL as GCHP.

Conclusions Our findings demonstrate that deep learning can differentiate GCHPs, MVHPs and SSLs based on their endoscopic appearance using binary models. The consistently high sensitivity for SSL across the binary models suggests that SSLs have more distinct endoscopic features while differences between GCHP and MVHP are more subtle. The ternary model struggled to reliably discriminate the three classes directly, likely due to the complexity of the task and the limited dataset used. Overall, this study highlights the potential of AI to support endoscopists in recognising a broader spectrum of serrated polyp types, further enhancing diagnostic precision.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP767 Evolving the Approach: From Conventional to Pancreatoscopy-Guided Removal of Migrated Pancreatic Duct Stents – A Single-Centre Experience

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Aims Pancreatic stent migration is a recognized complication of therapeutic endoscopy, often posing significant technical challenges for retrieval. Migrated stents can lead to ductal obstruction, pancreatitis, or infection if not removed promptly. While several endoscopic accessories are available, there is limited prospective data comparing their utility in real-world scenarios. The aim of this prospective study was to evaluate the feasibility, safety, and success of different endoscopic techniques for removal of migrated pancreatic stents in a small cohort of patients, highlighting the role of pancreatoscopy and adjunctive laser-assisted methods [1].

Methods Between January 2024 and April 2025, eight consecutive patients presenting with migrated pancreatic stents were prospectively enrolled. Demographic data, clinical presentation, and procedural details were recorded. All procedures were performed under conscious sedation.

A stepwise approach was adopted, beginning with conventional endoscopic accessories (rat tooth forceps, stone retrieval balloon, hurricane balloon, so-hendra stent retrieval) and escalating to advanced Spy glass pancreatoscopy – guided methods (SpyBite max forceps, Spyglass retrieval snare, and laser-assisted fragmentation) when conventional techniques failed. Each patient's final successful retrieval technique was documented. Procedural success was defined as complete removal of the migrated stent without need for surgical intervention (► Table 1).

► Table 1

No.	Age	Gender	Diagnosis	Duration of stent	Use of spy	Procedure duration (in min)
1	37	M	CCP	8 years	yes	124
2	45	M	CCP	4 months	yes	144
3	65	M	CBD stone	2 months	No	11
4	48	M	CBD stone	Immediately during prophylactic pd stent placement	No	66
5	19	F	CCP	3 months	yes	59
6	47	M	CCP	6months	No	28
7	28	M	CCP	8 months	Yes	88
8	35	M	CCP	1 year	Yes	80

Results The cohort consisted of seven male patients and one female patient, with ages ranging from 19 to 65 years (mean age 40.5 years). All eight patients underwent successful endoscopic removal of the migrated pancreatic stent. Conventional techniques were effective in three patients: one with rat tooth forceps and two with a stone retrieval balloon. In five patients, advanced Pancreatocopy-guided methods were required. SpyGlass-guided retrieval combined with SpyBite max forceps was successful in one patient, while SpyGlass with laser fragmentation followed by Spyglass retrieval snare or SpyBite max forceps was required in four patients. Laser guided fragmentation of stent was performed in four patient as the ends of stent were impacted in the side branch. No major complications such as perforation, severe bleeding, or pancreatitis were observed. Procedure times varied depending on technique, with mean procedure time was 75 minutes.

This prospective series demonstrates that while conventional accessories may suffice in select cases, migrated stents often necessitate advanced visualization and retrieval tools. The SpyGlass system, particularly when combined with laser fragmentation, provided enhanced ductal visualization and facilitated safe removal in complex scenarios.

Conclusions This prospective series demonstrates that while conventional accessories may suffice in select cases, migrated stents often necessitate advanced visualization and retrieval tools. The SpyGlass system, particularly when combined with laser fragmentation, provided enhanced ductal visualization and facilitated safe removal in complex scenarios.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Jayanna SH, Bush N, Sharma R, Gupta R, Rana SS. Endoscopic removal of proximally migrated pancreatic duct stents: a case series and literature review. *Ann Gastroenterol* 2025; 38 (2): 230–236

eP768 Performance of Large Language Models in Addressing Patient Queries on Colorectal Cancer Screening in Different Languages: an international study across 28 countries

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DOI 10.1055/s-0046-1822095

Aims Colorectal cancer (CRC) screening reduces incidence and mortality, yet participation rates remain suboptimal worldwide. Large language models (LLMs), such as ChatGPT, may help overcome communication barriers by providing accessible, multilingual information. However, their performance across different languages and cultural contexts has never been systematically evaluated. This study aims to assess ChatGPT's accuracy, completeness, and comprehensibility in answering colorectal cancer screening questions across 23 languages and 28 countries, and to evaluate cross-linguistic variability in performance.

Methods Between April and June 2025, we conducted a cross-continental study involving 28 countries and 23 languages. A standardized set of 15 CRC screening-related questions was manually translated by native researchers to preserve linguistic accuracy and cultural nuances. Translated questions were submitted to ChatGPT (GPT-4o), and the generated responses were independently assessed by 140 senior gastroenterologists (five per country). Each response was rated for accuracy, completeness, and comprehensibility using a 5-point Likert scale. Statistical analyses included t-tests, Chi-square tests, and two-way ANOVA.

Results The study collected 2,100 expert ratings across six continents. Overall mean scores ($\pm$ SD) were 4.1 ± 1.0 for accuracy, 4.1 ± 1.0 for completeness, and 4.2 ± 0.9 for comprehensibility. High-quality performance (score ≥ 4) was observed in 73.9%, 86.9%, and 82.6% of languages for the three domains, respec-

tively. Italian, Turkish, Swahili, and Japanese achieved the highest ratings, while Traditional Chinese, Dutch, and Greek consistently showed lower performance across all domains. Significant differences between languages were found for each metric ($P < 0.001$).

Subtle intra-language variability was also observed in languages spoken in multiple countries (e.g., Dutch in Belgium vs. the Netherlands; English in the UK, US, and Australia), although without statistically significant differences. Question-level analysis revealed a broad score dispersion across languages, with most ratings ranging between 3 and 5.

Conclusions ChatGPT showed strong ability to answer CRC screening questions across multiple languages, supporting its promise as a multilingual patient education tool. However, a significant variability in performance across different languages was demonstrated, highlighting the need for language-specific validation prior to widespread clinical implementation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP769 Endoscopic findings in patients with positive FIT test within the Greek National Colorectal Cancer Screening Program: A single-center experience

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DOI 10.1055/s-0046-1822096

Aims In October 2024, a national screening program for colorectal cancer using the fecalimmunochemical test (FIT) for hemoglobin detection in stool was implemented for the first time in Greece. The aim of the present study is to describe colonoscopy findings in individuals with a positive FIT test [1–3].

Methods This is a retrospective observational study including patients aged 50–70 years in the Attica region who were referred for colonoscopy due to a positive FIT test. Patients were categorized based on prior endoscopic evaluation, and colonoscopy findings were recorded: adenomas, advanced adenomas (size ≥ 10 mm), and cancer.

Results A total of 140 patients were included. Of these, 96 (68.6%) had never undergone colonoscopy, 11 (7.9%) had been examined more than 10 years earlier, and 2 (1.4%) had a history of incomplete endoscopy. Adenomas were detected in 73 patients (52.1%), of whom 37 (26.4%) had advanced features. Of the advanced adenomas, 30 (81.1%) were located in the left colon. Among the 41 patients with advanced adenomas or cancer, one (2.4%) had undergone a recent prior colonoscopy (3 years earlier), representing an interval advanced adenoma. Colorectal cancer was diagnosed in 4 patients (2.8%), all stage I according to the TNM classification.

Conclusions The implementation of the FIT test within the national screening program appears to successfully target a population without prior adequate endoscopic evaluation and achieves neoplasia detection rates comparable to international reports. The high proportion of early-stage detections supports the importance of expanding and establishing the program at a national level.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kim NH, Jung YS, Lim JW, Park JH, Park DI, Sohn CI. Yield of repeat colonoscopy in asymptomatic individuals with a positive fecal immunochemical test and recent colonoscopy. *Gastrointest Endosc* 2019; 89 (5): 1037–1043. doi:10.1016/j.gie.2019.01.012
- [2] O'Reilly SM, MacNally S, O'Donoghue D et al. Correlation of Fecal Immunochemical Testing Levels With Pathology Results in a National Colorectal Cancer Screening Program. *Clin Transl Gastroenterol*. 2021; 12 (1): e00277. Published 2021 Jan 12. doi:10.14309/ctg.0000000000000277
- [3] . doi:10.1016/j.gie.2022.04.004

ePosters 10

eP770 Diagnostic Yield of EUS-FNB in Solid Pancreatic and Extrapancreatic Lesions: single center Age-Stratified Analysis

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DOI 10.1055/s-0046-1822097

Aims To evaluate the Diagnostic Yield (adequacy rate) of Endoscopic Ultrasound-Guided Fine Needle Biopsy (EUS-FNB) in a cohort of patients with solid pancreatic (NP) and solid non-pancreatic (OTHER) lesions, stratifying the results across four age groups (<50, 50–70, 71–80, >81 years).

Methods A single-center, retrospective analysis was conducted on data collected over an extended period, between May 2019 and August 2025, to ensure technique homogeneity. The study included 398 patients who underwent EUS-FNB of solid lesions; cystic lesions and pancreatic cysts were excluded from the analysis. Diagnostic Yield was calculated as the proportion of Adequate samples (Positive or Negative result, 1 + 3) relative to the total number of procedures, distinguishing between Pancreatic Neoplasm (NP) and Other Diagnoses (OTHER) (► Table 1).

► Table 1

Age Group	NP (n)	NP Adequate	OTHER (n)	OTHER Adequate
<50 yrs	22	95.5 %	20	95.0 %
50–70 yrs	106	93.4 %	41	92.7 %
71–80 yrs	121	99.2 %	31	96.8 %
>81 yrs	47	93.6 %	10	80.0 %
Total	296	95.9 %	102	93.1 %

Results The overall Diagnostic Yield (Adequate) for EUS-FNB was 95.2 % (379/398). The age-stratified analysis yielded the following adequacy rates indicated in the table.

Conclusions EUS-FNB for solid lesions provides an excellent and stable Diagnostic Yield (>93 %) for Pancreatic Neoplasm across all ages, aligning with the highest reported rates from high-volume centers in the literature. The procedure is confirmed to be robust, and its effectiveness is not compromised by patient age. However, the risk of obtaining a non-adequate sample is concentrated particularly in patients over 81 with solid non-pancreatic lesions, emphasizing the need for further studies and optimized protocols for EUS-FNB in this frail population and challenging anatomical locations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP771 Reliability and validity of Texture and Colour Enhancement Imaging (TXI) in assessing mucosal inflammation in Ulcerative Colitis

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DOI 10.1055/s-0046-1822098

Aims Accurate endoscopic assessment of mucosal inflammation is critical in managing Ulcerative Colitis (UC). Mayo endoscopic score (MES) and Ulcerative Colitis Endoscopic Index of Severity (UCEIS) have significant interobserver variability. The role of Texture and Colour Enhancement Imaging (TXI) in assessing inflammation is uncertain. We aimed to assess the reliability of TXI in UC.

Methods A multicentre international survey-based study was designed with 20 sets of high-definition white light (HDWLE) images or videos matched with TXI. Each set had varying severities of inflammation as determined by Nancy and Picasso histopathology scores. The MES and UCEIS were rated along with confidence level (high vs low). To assess interobserver variability, we used percentage agreement and Kappa score with 95 % confidence intervals stratified by imaging modality and scoring system. A mixed logistic regression model was constructed to assess accuracy.

Results 30 gastroenterologists from 4 centres were included. 19 (63.3 %) were experts and 10 (33.3 %) had prior TXI experience. Interobserver variability was moderate overall with percentage agreement between 66-70 % and Kappa scores between 0.51-0.58. There was no difference in interobserver variability between HDWLE and TXI. Agreement was slightly higher for UCEIS than MES (► **Table 1**). 75 % reported high confidence prediction with confidence consistent across histological severity. Participants rated severity accurately 75 % of the time using MES with accuracy increasing with increase in histological severity. Results for UCEIS were similar with accuracy of 74 %. There was no evidence of a difference in accuracy between the two imaging modalities irrespective of the index used for scoring.

► **Table 1** Interobserver variability results

Imaging modality	Mayo	UCEIS
HDWLE	Percent agreement = 68 % Kappa = 0.56 (0.45, 0.67) *	Percent agreement = 66 % Kappa = 0.51 (0.40, 0.63) *
TXI	Percent agreement = 67 % Kappa = 0.55 (0.44, 0.66) *	Percent agreement = 70 % Kappa = 0.58 (0.45, 0.70) *

*95 % confidence interval

Conclusions Interobserver variability remains a challenge in accurately assessing inflammation in UC despite advances in technology and validated scoring systems. Our study suggests that TXI achieves moderate interobserver agreement with accuracy of 75 % and is not superior to HDWLE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP772 Diagnostic and Therapeutic Value of Over-The-Scope Clip-Assisted EFTR for Indeterminate Small Upper GI Subepithelial Tumors: A "Total Biopsy" Approach

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DOI 10.1055/s-0046-1822099

Aims Small subepithelial lesions (SELs) in the upper gastrointestinal tract present a diagnostic challenge; endoscopic ultrasound (EUS) often struggles to definitively differentiate between gastrointestinal stromal tumors (GISTs) and leiomyomas. This study evaluates the diagnostic yield and therapeutic efficacy of endoscopic full-thickness resection (EFTR) using a suction-based over-the-scope clip system as a definitive "total biopsy" strategy for indeterminate SELs.

Methods We retrospectively analyzed data from 28 consecutive patients with gastric or duodenal SELs who underwent device-assisted EFTR at a regional public hospital between January 2022 and October 2024. The procedure utilized a suction-based over-the-scope clip (Padlock Clip; Steris, USA) and involved routine mucosal incision to facilitate clear tumor exposure prior to clip deployment. The primary outcome was the definitive histological diagnosis rate, and secondary outcomes included the R0 resection rate, procedure time, and adverse events.

Results A total of 28 patients (median age 57 years) were included. Lesions were located in the stomach (n = 24) and duodenum (n = 4), with a median size of 7 mm. The technique achieved a 100 % technical success and R0 resection rate. Histopathological analysis provided definitive diagnoses for all cases, revealing low-grade GIST in 50.0 % (14/28), leiomyoma in 42.9 % (12/28), and ectopic pancreas in 7.1 % (2/28). This distinction was crucial as half of the cohort harbored lesions with malignant potential (GIST) that required distinct management compared to benign leiomyomas. The median procedure time was 29 minutes. One patient (3.6 %) experienced delayed bleeding, managed endoscopically, with no perforations or other serious adverse events observed.

Conclusions Suction-based over-the-scope clip-assisted EFTR is a safe and effective technique that serves a dual role in diagnosis and therapy for small upper GI SELs. By providing a full-thickness specimen, it enables precise histological differentiation between GISTs and benign mimics, ensuring appropriate risk stratification and curative treatment in a single session.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP773V Refractory diverticular bleeding: a never ending case

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Abstract Text
A 50-years-old man presented with rectal bleeding and anemia. CT scan suggested left colic diverticular bleeding. During the first colonoscopy a suspicious diverticulum was clipped. Three days later, the patient had recurrent bleeding and syncope. A second colonoscopy identified the bleeding diverticulum, treated with 5 endoclips. Rebleeding the following day required a third colonoscopy with hemostasis using an over-the-scope clip (OTSC). After 4 days the peridiverticular mucosa grasped by the OTSC bled and was treated with coagrasper. Recurrent bleeding required two superselective arterial embolizations, which finally stopped it after 13 days. Diverticular bleeding can be refractory despite repeated endoscopic and radiological interventions. The use of OTSC as a res-

cue therapy can fail, as bleeding in the responsible diverticulum may exceed its haemostatic capacity.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1bad8dfa-be89-4ed7-bb84-68b1ff880ebf/Uploads/19978_refractory_diverticular%20bleeding%20agg.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP774 Comparative Effectiveness Of Computer-Aided Detection (CADe) Systems For Adenoma Detection: A Network Meta-Analysis Of Randomized Controlled Trials

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DOI 10.1055/s-0046-1822101

Aims Multiple artificial intelligence (AI) computer-aided detection (CADe) systems have been developed to improve adenoma detection rate (ADR) during colonoscopy. However, their comparative effectiveness remains uncertain. This network meta-analysis aims to compare the efficacy of different AI-based CAdE systems in increasing ADR.

Methods We systematically searched MEDLINE, Embase, Scopus, and the Cochrane Library for randomized controlled trials (RCTs) comparing any CAdE system with standard high-definition colonoscopy or with another CAdE system. The primary outcome was ADR, expressed as risk ratio (RR) with 95 % confidence interval (CI). A random-effects network meta-analysis (DerSimonian and Laird method) was performed to synthesize direct and indirect evidence. The relative ranking of all interventions was estimated using the surface under the cumulative ranking curve (SUCRA). Methodological quality was assessed with the Cochrane risk-of-bias (RoB2) tool.

Results The network included standard colonoscopy and 12 CAdE systems (CAD EYE FujiFilm, CAdE Henan, CAdE LPIXEL, Deep2 FujiFilm, Eagle-Eye, ENDO-AID Olympus, Endoangel, Endoscreener, Endovigilant, GI Genius, MAGENTIQ-COLO, SKOUT, YOLOv3). Compared with standard colonoscopy, most CAdE systems significantly increased ADR, with the highest effect estimates observed for YOLOv3 (RR 1.76; 95 %CI 1.35–2.30), CAdE Henan (RR 1.64; 95 %CI 1.31–2.04), Endoangel (RR 1.55; 95 %CI 1.15–2.08), Deep2 FujiFilm (RR 1.37; 95 %CI 1.06–1.76), ENDO-AID Olympus (RR 1.25; 95 %CI 1.14–1.38) and GI Genius (RR 1.13; 95 %CI 1.06–1.21). On the other hand, Eagle-Eye, SKOUT, CAdE LPIXEL, MAGENTIQ-COLO, and Endovigilant did not reach statistical significance. SUCRA-based ranking showed YOLOv3, CAdE Henan, Endoangel, Deep2 FujiFilm, and ENDO-AID Olympus as the top-performing systems, while Endovigilant ranked lowest. Most RCTs were of moderate or high risk of bias due to inability to blind endoscopists to the intervention.

Conclusions This network meta-analysis provides a comprehensive comparative assessment of the relative efficacy across all currently evaluated CAdE systems, with YOLOv3, CAdE Henan, Endoangel, Deep2 FujiFilm, and ENDO-AID Olympus emerging as the most effective. These findings may help endoscopy units prioritize AI solutions according to expected diagnostic yield and comparative performance.

Conflicts of Interest LHSL has research collaborations with Olympus Co. Ltd., ASUSTeK Computer Inc. and GenieBiome Ltd., and served as advisory board for AstraZeneca and GenieBiome Ltd., and served as lecture speaker for Olympus Co. Ltd., Boston Scientific Co. Ltd., Pfizer Inc. and GenieBiome Ltd. All other

authors have no proprietary, financial, professional or other personal interest of any nature or kind in any product, service and/or company that could be construed as influencing the position presented in, or the review of this manuscript.

eP775 EUS-guided versus surgical gastroenterostomy for the management of malignant gastric outlet obstruction: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1822102

Aims Gastric outlet obstruction (GOO) is a late complication of several malignancies, markedly impairing quality of life. Surgical gastroenterostomy (S-GE) has long been the palliative standard, but outcomes are variable and morbidity remains considerable. Endoscopic ultrasound-guided gastroenterostomy (EUS-GE) has emerged as a minimally invasive alternative. We conducted a systematic review and meta-analysis comparing EUS-GE and S-GE, with a specific focus on malignant GOO.

Methods MEDLINE, Embase, Scopus, and the Cochrane Library were searched through September 2025. Eligible studies directly compared EUS-GE and S-GE and reported clinical success (CS), adverse events (AEs), severe AEs, and recurrence/reintervention. Pooled odds ratios (OR) with 95 % confidence intervals (CI) were calculated using random-effects models.

Results Thirteen studies (2 RCTs, 11 retrospective; 1,611 patients) were analyzed. Overall, EUS-GE achieved higher CS (OR 2.69; $p = 0.007$), fewer AEs (OR 0.21; $p < 0.001$) and severe AEs (OR 0.54; $p = 0.05$) compared to S-GE, with no significant difference in recurrence/reintervention rate (OR 0.54; $p = 0.22$). In malignant GOO, CS (OR 1.90; $p = 0.12$) and recurrence/reintervention rate (OR 0.68; $p = 0.50$) were comparable, while overall AEs remained lower with EUS-GE (OR 0.26; $p < 0.01$).

Conclusions In malignant GOO, EUS-GE provides comparable clinical efficacy to S-GE with fewer overall AEs. These data support EUS-GE as a preferred minimally invasive option in selected patients.

Conflicts of Interest Andrea Anderloni and Carlo Fabbri served as consultants for Boston Scientific and Olympus. Ilaria Tarantino served as a consultant for Olympus. All other authors have no proprietary, financial, professional or other personal interest of any nature or kind in any product, service and/or company that could be construed as influencing the position presented in, or the review of this manuscript.

eP776 Key Clinical Factors Influencing Outcomes in Endoscopic Endovacuum Therapy

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Aims Endoscopic Endovacuum Therapy (EVT) is a safe and efficient method for treating post-surgical collections communicating with the gastrointestinal (GI) tract [1], but it requires longer hospitalization and repeated treatments. We aim to identify clinical factors that could predict the success or failure of EVT in treating post-surgical collections (► **Table 1**).

Methods We retrospectively analyzed patients treated with EVT in the last 2 years, comparing 2 different centers (Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy; A.O.R.N. Moscati, Avellino, Italy). To avoid bias, we considered only patients who had oncological surgery of the rectum, with a diagnosis of colorectal dehiscence communicating with an extraluminal collection, and treated exclusively with EVT. The Endosponge (B. Braun Surgical) was used in all patients, with a negative continuous aspiration between 100 and 125 mmHg; the sponges were exchanged every 72 ± 24 hours. All patients had a colostomy or ileostomy, as allowed adjuvant treatment. The success of EVT was defined as total drainage of the collection and closure of the dehiscence (► **Table 2**).

► **Table 1** Demographic characteristics

Sex (M/F)	7/10 (70%)	7/9 (77,7%)
Mean age (years)	62.6 ± 10.8	64 ± 18
Malignant disease	10/10 (100%)	9/9 (100%).
Type of Surgery:		
Anterior rectal resection	8/10 (80%)	6/9 (66,7%)
Ultra low rectal resection	1/10 (10%)	1/9 (11,1%)
Sigma resection	1/10 (10%)	2/9 (22,2%)
Neoadjuvant treatment (CHT $\pm$ RT)	5/10; (50%)	5/9 (55%)

M: male; F: female; CHT: chemotherapy; RT: radiotherapy

► **Table 2** Clinical characteristics

Intestinal diversion	10/10; 100%	9/9; 100%
Mean size of the collection (mm)	82.7 ± 61.5	$38,8 \pm 41,6$
Median time from diagnosis to start EVT (days)	16.5 (11–65)	7 (1–21)
Mean duration of EVT (days)	24.8 ± 15.0	$17,5 \pm 10,1$
Mean number of sponge replacements	7 ± 3.2	$4 \pm 1,3$
Successful outcome of EVT	5/10 (50%)	8/9; (88,8%)
Complications	0; (0%)	0; (0%)

Results A total of 19 patients were analyzed (10 vs 9). Age, sex, and neoadjuvant treatment were comparable (62 vs 64 years; $7/10$ vs $7/9$ males; $5/10$ vs $5/9$ patients treated). The outcome was different: 50% ($5/10$) vs 88.8% ($8/9$) had complete collection drainage and dehiscence closure. Significant differences were found in timing from diagnosis of the dehiscence to the start of EVT (median of 16.5 vs 7 days), the collection's dimensions (mean $38,8 \pm 41,6$ mm vs 82.7 ± 61.5 mm), and the treatment's duration (mean 24.8 ± 15.0 vs $17,5 \pm 10,1$ days). No complications observed due to EVT.

Conclusions Late start of EVT and larger collection size could negatively impact the outcome of EVT. Longer treatment duration doesn't seem to improve the results.

Conflicts of Interest V. Bove is a consultant for Boston Scientific. C. Spada is a consultant for Medtronic and AnX Robotics, and has received speaker fees from Olympus and Pentax. I. Boskoski is a consultant for Apollo Endosurgery, Boston Scientific, Nitinotes, Pentax, Cook Medical, Microtech, ERBE, Siemens, Myka Labs, and Endo Tools Therapeutics S.A.; conducts sponsored lectures for Apollo Endosurgery, Boston Scientific, Cook Medical, and Microtech; is the recipient of research grants from Apollo Endosurgery, Endo Tool Therapeutics, and ERBE; and is a scientific advisory board member for Nitinotes and Myka labs

References

[1] Kühn F, Schardey J, Wirth U et al. Endoscopic vacuum therapy for the treatment of colorectal leaks – a systematic review and meta-analysis. *Int J Colorectal Dis* 2022; 37 (2): 283–292. doi:10.1007/s00384-021-04066-7

eP777 EUS Tissue Acquisition: “Two Are Better Than One, for If They Fall, One Will Lift Up His Companion”

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DOI 10.1055/s-0046-1822104

Aims This study aimed to evaluate the comparative effectiveness of conventional fine-needle aspiration (FNA), fine-needle biopsy (FNB), and combined cytology–histology sampling (FNAB) using Franseen needles, and to determine whether a dual-modality sampling strategy enhances diagnostic accuracy across diverse pathologies

Methods Background: For EUS guided tissue acquisition in the diagnosis of gastrointestinal, pancreatobiliary, and mediastinal diseases, Franseen-tip needles have shown superior tissue architecture preservation and improved histology adequacy but evidence regarding their overall impact on diagnostic yield remains mixed. Furthermore, whether cytology and histology obtained concurrently using the same needle—an approach now increasingly adopted—improves diagnostic performance is not fully established.

Methods: We conducted a retrospective review of all patients who underwent EUS-guided tissue sampling at a tertiary referral center in Surat, India. Between January 2015 and March 2025, tissue acquisition predominantly involved FNA using 22G or 25G needles with slow-pull suction (Group A), and FNB using 22G ProCore needles when histology was required. From 2019 onward, Franseen needles were adopted as standard, and combined cytology and histology sampling (FNAB) without stylet or suction became routine (Group B). Variables analyzed included tissue adequacy, sensitivity, specificity, malignancy prediction, and disease-specific diagnostic yield. A propensity-matched analysis compared Groups A and B to control for confounders.

Results A total of 989 patients were included; 631 (63.8%) had malignant disease. The most common sampling sites were lymph nodes ($n = 381$), pancreatic lesions ($n = 354$), bile duct ($n = 81$), periampullary region ($n = 45$), gallbladder ($n = 39$), luminal wall ($n = 42$), and others. Franseen needles were used in 816 (82.5%) procedures, while FNB was performed in 748 (75.5%). Overall cytology adequacy was 92.5%, while histology adequacy was 87.0%. Cytology achieved a sensitivity of 92.4% and specificity of 95.3%. When combining cytology and histology with Franseen needles (FNAB), adequacy significantly improved (97.4% vs 91.9% with non-Franseen FNA; $p = 0.0012$), as did specificity (94.8% vs 87.7% ; $p = 0.042$). Sensitivity and PPV were higher with FNAB, though differences were not statistically significant. In malignant lesions, FNAB provided the highest adequacy (98.9%) and sensitivity (96.4%), significantly outperforming both standalone FNA (adequacy 94.1% ; $p = 0.0004$) and FNB (91.6% ; $p < 0.001$). In benign lesions, FNAB also demonstrated superior adequacy (98.7% vs 87.4% with FNA; $p = 0.0048$) and higher sensitivity (95.5% vs 88.8% ; $p = 0.0374$). Disease-specific analysis revealed the greatest advantage of FNAB in pancreatic carcinoma (adequacy 98.9% vs 89.4% with FNB;

$p = 0.0003$) and tuberculosis (adequacy 98.7 % vs 91.0 % with FNA; $p = 0.0048$), particularly in lesions with fibrosis, necrosis, or firm tissue consistency. Propensity-matched comparison of Groups A and B showed no significant difference in overall diagnostic adequacy (92.3 % vs 95.4 %; $p = 0.36$) or sensitivity (93.3 % vs 92.9 %; $p = 1.00$). Discordance between cytology and histology was low (3.7 %), with moderate agreement ($\kappa = 0.49$), indicating complementary contributions rather than redundancy.

Discussion: Franseen needles, propensity-matched analysis showed that needle type alone does not determine diagnostic yield; rather, synergistic combination of cytology and histology enables optimal outcomes.

Conclusions FNAB using Franseen needles offers the most robust diagnostic performance among all tissue acquisition approaches evaluated. The strategy provides higher adequacy and superior sensitivity in both malignant and benign diseases, with particular benefit in pancreatic cancer and tuberculosis. Incorporating both cytology and histology into routine

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP778 Oesophageal Self-expanding Metal Stent Migration: A Single-Centre Audit of Fixation Strategies

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Aims Self-expanding metal stent (SEMS) migration is the most common complication of oesophageal stent placement. A recent systematic review reported an overall migration rate of 17.2 %, with rates varying by indication. [1–3] To mitigate risk, fixation techniques have been deployed such as over the scope clips (OTSC), endoscopic suturing, and through the scope (TTS) clips. A recent meta analysis demonstrated that fixation significantly reduces migration compared to non-fixation, with all fixation techniques superior to non-fixation. [4] However, real world efficacy remains uncertain due to a lack of guidance in indication for stent fixation. This audit aimed to identify clinical and anatomical predictors of migration in routine clinical practice.

Methods Consecutive patients who underwent oesophageal SEMS placement under direct radiological screening between January 2022 and October 2025 were retrospectively analysed. The primary outcome was stent migration by 45 days in patients with and without fixation. Secondary outcomes included time-to-migration, migration rates by indication, age, lesion distance, lesion length, and crossing of the gastro-oesophageal junction (GOJ). Statistical analysis was performed using Fisher's exact test, Chi-Square test and Mann-Whitney U test. Multivariable logistic regression was used to assess independent associations with migration.

Results Sixty-six (66) patients were identified aged 33–88. Indications included post operative leaks/perforations, benign strictures and malignant strictures. Overall migration rate was 9 % ($n = 6$). Stent fixation was not significantly associated with a change in migration rate: 15.4 % with fixation (2/13) compared with 7.5 % without fixation (4/53), OR = 2.23, $p = 0.337$. Migration rates varied by fixation method: OTSC 10.0 % (1/10), Suture 33.3 % (1/3), clip 0 % (0/1), and no fixation 7.7 % (4/52). Patient numbers were not large enough to elucidate statistical significance. Six migration events occurred in stents crossing the GOJ 15.0 % (6/40) compared with zero migration events in stents not crossing the GOJ 0 % (0/26), $p = 0.074$. Indication influenced migration risk: benign stricture 23.1 % (3/13), malignant stricture 5.0 % (2/40), OR = 5.70, $p = 0.088$; post-operative leaks/perforation 8.3 % (1/12). Mean age was similar in migrated (69.8 years) and non-migrated (66.6 years) groups ($p = 0.55$). Mean time to migration was longer with fixation (mean 39 days) than without (mean 15 days), with patient numbers too low to draw statistical significance. Fixation was selectively used in higher risk indications: malignant 2.5 % (1/40), benign 23.1 % (3/13), post-operative leaks/perforation 75.0 % (3/12). Multivariable

regression showed fixation was not independently associated with migration (OR = 2.18, $p = 0.523$) after adjusting for indication.

Conclusions This audit demonstrates that SEMS GOJ crossing is the strongest anatomical predictor of stent migration, with all migration events occurring in this context. Benign indication carries significantly higher migration risk than malignant disease, consistent with literature implicating the role of tumour anchoring.^{1–3} In this cohort, stent fixation was preferentially used in inherently higher risk cases and we do not show that stent fixation was associated with reduced migration. We postulate that crude rates in fixation may reflect selection bias; fixation seems preferentially performed in inherently higher risk cases, benign and post-operative leaks/perforation. Limitations included the lack of uniformity in endoscopy report documentation and the subjective interpretation of SEMS positioning using radiology. These findings show varying real world practice. Further prospective research and larger sample sizes are required to interrogate the benefit of various stent fixation modalities, across all indications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Heutlinger O et al. A systematic review and meta-analysis of factors associated with esophageal stent migration. *J Gastrointest Surg* 2025; 29: 101977
- [2] Thomas S et al. Fully-covered esophageal stent migration rates in benign and malignant disease: a large retrospective cohort study. *Endosc Int Open* 2019; 7: E751–E756
- [3] Jang S et al. Predictors of esophageal self-expandable metal stent migration. *Gastrointest Interv* 2016; 5: 40–46
- [4] Papaefthymiou A et al. Success rates of fixation techniques on prevention of esophageal stent migration: a systematic review and meta-analysis. *Endoscopy* 2024; 56: 128–136

eP779 A study of short-term treatment outcomes for pharyngeal ESD using the Water Pressure Method (WPM) and a thin therapeutic endoscope

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DOI 10.1055/s-0046-1822106

Aims Endoscopic resection for superficial pharyngeal carcinoma has been reported as a minimally invasive therapeutic option; however, the pharyngeal space is anatomically narrow, making the procedure technically challenging. We developed the underwater ESD with Water Pressure Method (WPM), which utilizes endoscopic waterjet pressure under immersion to facilitate submucosal entry, and previously reported its usefulness in pharyngeal ESD. In the narrow working space of the pharynx, a thin therapeutic endoscope may provide additional technical advantages. This study evaluated the short-term treatment outcomes of pharyngeal ESD performed using WPM with a thin therapeutic endoscope.

Methods We retrospectively reviewed lesions treated with pharyngeal ESD using WPM and a thin therapeutic endoscope under general anesthesia with laryngeal exposure at our institution between March 2022 and May 2025. Short-term outcomes were assessed. The submucosal dissection speed was compared with that of lesions treated during the same period using a conventional-diameter therapeutic endoscope.

Results During the study period, 27 pharyngeal ESD procedures were performed, of which 10 patients with 11 lesions were treated using the thin therapeutic endoscope. All lesions were located in the hypopharynx: 3 in the pyriform sinus, 1 in the post-cricoid area, and 7 on the posterior wall. The median tumor diameter was 20 mm (range, 5–40 mm). Both the en bloc resection rate and procedural completion rate were 100 %, and the histological R0 resection rate was 82 %. The median procedure time was 14 minutes (range, 5–67 minutes). The median hospital stay was 6 days (range, 6–8 days).

During the same period, 17 patients with 20 lesions underwent ESD using a conventional-diameter therapeutic endoscope. The median dissection speed was faster with the thin therapeutic endoscope than with the conventional endoscope (22.7 vs. 15.5 mm²/min). No adverse events—including laryngeal edema, postoperative bleeding, or aspiration pneumonia—were observed.

Conclusions In the anatomically narrow pharyngeal region, WPM-assisted ESD using a thin therapeutic endoscope enabled safe and efficient dissection, achieving a faster dissection speed compared with conventional-diameter endoscopes. This approach appears particularly useful for pharyngeal ESD in limited working spaces.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP780 Papilla Morphology as a Predictor of Post-ERCP Pancreatitis: A Retrospective Cohort

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Aims Papilla morphology has been proposed as an anatomical determinant of difficulty in ERCP cannulation and in post-ERCP pancreatitis (PEP) risk, but evidence regarding its predictive value remains inconsistent. We examined whether papilla type and the presence of periampullary diverticulum are associated with PEP in a large cohort of ERCP-naïve patients [1, 2].

Methods A retrospective analysis was conducted on 891 ERCPs that were performed on ERCP-naïve patients at General State Hospital of Athens "G. Gennimatas" during a three-year span. We included only ERCP-naïve patients with non-pathologic papillae; papillary adenomas and inflammatory or distorted ones were excluded from the study. Papillae were classified according to the Haraldsson classification as type I (normal), type II (small), type III (protruding) and type IV (creased/ridged). The diagnosis of PEP was determined according to the ESGE diagnostic criteria. Logistic regression assessed the association between papilla type and PEP while Chi-Square (χ^2) tests were used to evaluate differences in PEP incidence across papilla types and the effect of diverticulum presence on PEP risk. Statistical analyses were performed using SPSS v.23.

Results The papillae type distribution was: Type 1 = 83.4 %, Type 2 = 8.1 %, Type 3 = 7.4 % and Type 4 = 1.1 %. Overall PEP incidence was 6.6 %. Chi-square analysis demonstrated a statistically significant overall difference in PEP incidence across the four types ($p = 0.026$). Post-hoc pairwise comparisons showed that Type 3 papillae differed significantly from Type 1 and Type 2 (both $p < 0.05$). The Type 3 vs Type 4 comparison could not be reliably assessed by χ^2 due to sparse data (only 1 PEP case in Type 4). After logistic regression it was shown that Haraldsson type 3 papilla independently increased the odds of PEP ($p = 0.009$; OR 2.83, 95 % CI 1.31–6.16). Presence of periampullary diverticulum was recorded in 11.7 % of cases, but it was not associated with PEP ($p = 0.94$).

Conclusions In this large ERCP-naïve cohort, Haraldsson Type 3 papilla emerged as a significant predictor of PEP, whereas periampullary diverticulum had no impact on risk of PEP. These findings support evidence stating that differences in papilla morphology are linked with alterations in cannulation complexity and PEP. Papilla morphology may represent a simple, visually accessible parameter to enhance pre-procedural risk stratification and guide PEP-prevention strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dumonceau J.M et al. "ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) guideline.". *Endoscopy* 52 (2): 2020; 127–149
- [2] Haraldsson E. et al. "Endoscopic classification of the papilla of Vater. Results of an inter-and intraobserver agreement study.". *United European Gastroenterology Journal* 5 (4): 2017; 504–510

eP781 Outcomes Of Endoscopic Submucosal Dissection For Colorectal Tumors In Saudi Arabia: A Multicenter Retrospective Cohort Study

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DOI 10.1055/s-0046-1822108

Aims This study evaluates the efficacy, safety, and oncologic outcomes of colorectal Endoscopic Submucosal Dissection (ESD) at two tertiary care centers in Saudi Arabia.

Methods We conducted a retrospective observational cohort study of patients undergoing colorectal ESD from January 2024 up to November 2025 at King Fahad Medical City and Security Forces Hospital. Inclusion criteria comprised all patients with colorectal neoplasms resected via ESD. The primary outcome was the en bloc resection rate. Secondary outcomes included R0 resection (negative lateral/vertical margins), curative resection, adverse events (bleeding, perforation), and local recurrence. Statistical analysis was performed using the R statistical programming language [1–8].

Results A total of 47 patients (mean age 59.5 ± 15.6 years; 52.2 % male) underwent ESD. The cohort had a moderate comorbidity burden (ASA Class II: 70.2 %). Lesions were mostly located in the rectum (46.8 %) and sigmoid colon (17.0 %), with a mean tumor size of 37.6 ± 17.1 mm. Preoperative imaging was performed in 60.9 % of cases. The classic ESD technique was employed in 89.4 % of cases, frequently using a Dual Knife (31.9 %). En bloc resection was achieved in 93.6 % (44/47) of patients. Histopathology revealed adenomas in 71.7 % and early carcinomas (Tis/T1) in 10.9 %. R0 resection was confirmed in 91.3 % for lateral margins and 89.1 % for deep margins. Among evaluable cases, 93.3 % achieved curative resection. The safety profile was favorable, with 95.7 % of patients experiencing no adverse events. Complications occurred in 4.3 % (2/47), comprising one intra-procedural bleeding event managed conservatively and one delayed perforation requiring surgical intervention. Over the follow-up period, surveillance colonoscopy identified local recurrence in 6.4 % (3/47) of patients.

Conclusions Colorectal ESD is a safe and effective modality in Saudi tertiary care settings, achieving high en bloc rates (93.6 %) and low recurrence (6.4 %) comparable to international benchmarks, supporting broader regional implementation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Qari YA Clinicopathological Characterization of Colonic Polyps. *Nigerian Journal of Clinical Practice* 2020; 23 (8): 1048–1053. doi:10.4103/njcp.njcp_490_19
- [2] Ohata K, Ito T, Chiba H, Tsuji Y, Matsuhashi N Effective Training System in Colorectal Endoscopic Submucosal Dissection. *Digestive Endoscopy* 2012; 24 (s1): 84–89. doi:10.1111/j.1443-1661.2012.01272.x
- [3] Yilmaz S, Görgün E Endoscopic Mucosal Resection and Endoscopic Submucosal Dissection. *Clinics in Colon and Rectal Surgery* 2023; 37 (5): 277–288. doi:10.1055/s-0043-1770941
- [4] Sakamoto T, Mori G, Yamada M, Kinjo Y, So E, Abe S, Otake Y, Nakajima T, Matsuda T, Saito Y Endoscopic Submucosal Dissection for Colorectal Neo-

plasms: A Review. *World Journal of Gastroenterology* 2014; 20 (43): 16153. doi:10.3748/wjg.v20.i43.16153

[5] Pang S, Tavakoli P, Shahidi N Prevention and Treatment of Recurrence After Endoscopic Resection of Large Non-Pedunculated Colorectal Polyps. *World Journal of Gastrointestinal Endoscopy* 2025; 17 (7):. doi:10.4253/wjge.v17.i7.107746

[6] Belderbos TD, Leenders M, Moons LM, Siersema PD Local Recurrence After Endoscopic Mucosal Resection of Nonpedunculated Colorectal Lesions: Systematic Review and Meta-Analysis. *Endoscopy* 2014; 46 (5): 388–402. doi:10.1055/s-0034-1364970

[7] Alghamdi A, Almutairi AH, Aldosari FS, Al-Owayed AM, AlOtaibi HK, Alghamdi TA, Aldossary AS Knowledge, Attitude, and Practice of Colorectal Cancer Screening Among Primary Healthcare Physicians in Riyadh Second Health Cluster. *Cureus* 2022. doi:10.7759/cureus.32069

[8] Alessa AA, Khan AS Epidemiology of Colorectal Cancer in Saudi Arabia: A Review. *Cureus* 2024. doi:10.7759/cureus.64564

eP782 Endoscopic stent placement for perforation after pneumatic dilation in achalasia

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DOI 10.1055/s-0046-1822109

Abstract Text

Esophageal perforation is a rare but serious complication of pneumatic dilation for achalasia, occurring in 1%–3% of procedures. Early recognition and rapid endoscopic management are crucial to prevent severe consequences such as mediastinitis or sepsis. We report a case of iatrogenic perforation diagnosed immediately after dilation and successfully managed with endoscopic stenting [1–4].

A **58-year-old woman with type II achalasia** underwent her first pneumatic dilation using a **30-mm balloon** inflated for one minute under sedation. Post-dilation endoscopic assessment revealed a **3-cm anterolateral tear**. Shortly afterward, the patient developed severe epigastric pain. A thoraco-abdominal CT scan confirmed a **10-mm esophageal defect** with mediastinal fat infiltration, consistent with perforation.

An early endoscopic intervention was performed, consisting of the placement of a **fully covered self-expandable metal stent (SEMS)** across the tear, secured with **two clips** to avoid migration. Supportive care included **enteral feeding** via a nasogastric tube, **intravenous antibiotics**, and **proton pump inhibitors**. The patient remained clinically stable, without signs of sepsis or subcutaneous emphysema. A control CT scan at **48 hours** showed correct stent positioning and absence of mediastinal leakage. Oral intake was progressively resumed after one week. The stent was removed **two weeks** later, and follow-up endoscopy confirmed **complete healing** of the perforation.

This case highlights the importance of **systematic post-dilation endoscopy** and prompt imaging in symptomatic patients, allowing early diagnosis of perforation. **Endoscopic stent placement with secure fixation** is an effective, minimally invasive therapeutic option that can prevent surgical intervention and reduce morbidity. Early detection and rapid endoscopic management remain key factors in achieving favorable outcomes in iatrogenic esophageal perforation following pneumatic dilation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Borotto E., Gaudric M., Danel B. et al. Risk factors of oesophageal perforation during pneumatic dilatation for achalasia. *Gut* 39: 1996; pp 9–12
- [2] Kaman L., Iqbal J., Kundil B. et al. Management of esophageal perforation in adults. *Gastroenterol Res* 3: 2010; pp 235–244
- [3] Lynch K.L., Pandolfino J.E., Howden C.W. et al. Major complications of pneumatic dilation and heller myotomy for achalasia: single-center experience and systematic review of the literature. *Am J Gastroenterol* 107: 2012; pp 1817–1825
- [4] Lynch K.L., Pandolfino J.E., Howden C.W. et al. Major complications of pneumatic dilation and heller myotomy for achalasia: single-center experience and systematic review of the literature.

eP783 Sedationist-Endoscopist Model Using Capnography and High Flow Nasal Oxygen in ERCP and Advanced HPB Endoscopy

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DOI 10.1055/s-0046-1822110

Aims Most ERCPs in the UK are performed under conscious sedation, yet increasing complexity and duration in HPB endoscopy can challenge patient tolerance. Deep sedation or general anaesthesia is recommended but not consistently available. This study assessed the safety and feasibility of higher-dose conscious sedation delivered through a sedationist–endoscopist model supported by capnography and high flow nasal oxygen [1–3].

Methods We conducted a retrospective review of all ERCPs, combined EUS–ERCPs, EUS-BD, EUS-GE, ampullectomies and cholangioscopies performed between 1 July 2024 and 30 June 2025. All eligible procedures during that period were included. All patients received high flow nasal oxygen with continuous monitoring of oxygen saturation, heart rate and capnography. All patients received midazolam and fentanyl in increments of 1 mg for Midazolam and 25 µg for Fentanyl. This was administered by the sedationist (either trainee or trainer) while the other performed the endoscopy. Sedation doses were compared with JAG age-based thresholds. Outcomes included completion rates, need for reversal and sedation-related adverse events.

Results Across 527 ERCPs, mean midazolam and fentanyl doses were 4 mg and 176.6 µg (median 4 mg and 150 µg). Thresholds were exceeded in 53.9% and 83.3% of patients. No ERCP was incomplete due to sedation. In 244 advanced HPB procedures, mean doses were 4.6 mg and 231.5 µg (median 4 mg and 200 µg). Thresholds were exceeded in 65.1% and 93.4% of cases. Three procedures (1.2%) were incomplete due to sedation. Maximum doses reached 12 mg midazolam and 850 µg fentanyl. No patient had hypoxaemia requiring intervention, no reversal agents were used and no sedation related adverse events were recorded.

Conclusions This sedationist–endoscopist model with capnography and high flow nasal oxygen allowed higher dose conscious sedation to be used safely for ERCP and advanced HPB endoscopy. Completion rates were high and no sedation related complications were observed. This approach provides a practical option where deep sedation or general anaesthesia is limited.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Joint Advisory Group on GI Endoscopy (JAG) JAG Accreditation Programme: Guide To Meeting the Quality and Safety Standards for UK Services. Royal College of Physicians. 2021;
- [2] Sidhu R, Turnbull D, Haboubi H et al. British Society of Gastroenterology guidelines on sedation in gastrointestinal endoscopy. *Gut* 2024; 73: 1–27
- [3] Beaton D, Rutter M, Sharp L, Oppong KW, Awadelkarim B, Everett SM, Mitra V. UK ERCP sedation practices, patient comfort and endoscopist characteristics: National Endoscopy Database (NED) analysis on behalf of the JAG and BSG. *Frontline Gastroenterol*. 2023; 14 (5): 384–391. doi:10.1136/flgastro-2023-102424 PMID: 37581181 PMID: PMC10423606

eP784 Endoscopic detection of migrated coils: A case series

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DOI 10.1055/s-0046-1822111

Aims Placement of coils and embolism material by interventional radiology is crucial for the management of vascular bleedings caused by gastric varices, arterial aneurysms or gastrointestinal ulcers. In rare cases these particles migrate through the gastrointestinal wall and become visible during endoscopy. Here a series of 7 patients with migrated coils was analyzed regarding their management and outcome.

Methods Seven patients were retrospectively identified in 3 German tertiary hospitals in the years 2020-2024. Data on age, gender, indication of coil placement, time to detection and anatomic location of migration, complications, and their management was collected.

Results The 2 female and 5 male patients had a mean age of 64.7 ± 16.7 years at the time point of embolization by interventional radiology. Active bleeding necessitated interventional radiology in 4 patients, 3 of which were located in the duodenum and one from a pseudoaneurysm from the right hepatic artery. Prophylactic treatment reasoned the placement of embolism material in 2 patients with varices located in the gastric fundus and esophagus and in one patient with a pseudoaneurysm of the splenic artery. The mean time to detection of migration was 483 ± 523 days including two early migrations within the first 5 days. All patients were alive at the last follow-up after a mean of 619 ± 649 days. Location of migration was the duodenum in 3 cases, the stomach in 2 cases and the jejunum and pancreatic duct in one case each. In 6 of 7 of cases migrated material was left in place as patients remained asymptomatic. The patient with coil migration into the pancreatic duct presented with a pancreatitis 47 months after placement of 19 coils. In this specific case coils were applied for treatment of the dissection of a pseudoaneurysm of the splenic artery and coeliac trunk. Surgical resection of the left pancreas was performed to retrieve coil material which by itself was complicated by pancreatic fluid leakage from the resection margin resulting in EUS-guided drainage.

Conclusions Coil migration represents a rare complication after vascular embolization by interventional radiology. Our case series supports conservative management in the cases of migration into the lumen of the gastrointestinal tract. Penetration into the pancreatic duct was documented in one case requiring surgical and endoscopic treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP785 Technical systematic review and meta-analysis of randomized controlled trials in malignant distal biliary obstruction

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DOI 10.1055/s-0046-1822112

Aims Malignant distal biliary obstruction (MDBO) is a common complication of peri-ampullary cancers associated with significant morbidity and mortality. Although, recent advances such as endosonography guided biliary drainage (EUS-BD) have emerged, methodological rigorous trials are needed to validate these promising developments. **We aim** to evaluate the quality of published randomized control trials (RCTs) on drainage of MDBO. Our findings are intended to a guide subsequent consensus on a methodological framework for clinical trials in MDBO.

Methods We conducted a systematic review of RCTs assessing biliary drainage in patients with MDBO (PRISMA 2020). We included RCTs published in full that compared at least two biliary drainage modalities or stents in MDBO. Studies

involving hilar obstruction were excluded. A systematic search was conducted in MEDLINE, Embase, CENTRAL, and Web of Science from database inception to Jan. 9, 2025. Study quality was assessed using the revised risk of bias (ROB 2.0).

Results Overall, 4,663 citations were identified with 71 trials ultimately selected. These RCTs compared ERCP stent types in 67.6% with the remaining comparing different modalities of drainage including EUS-BD, percutaneous drainage, and surgery. Most trials assessed patients with unresectable or locally advanced cancer (87.3%). A hypothesis statement was explicitly stated in only 22.5% of the studies. A sample size estimate was lacking in 26.8% of the RCTs. In terms of randomization, timing was missing in 43.7%, with 56.3% of the studies having no consort randomization diagram. Moreover, information on blinding was not described in 47.9% of the trials. In study results, key baseline characteristics such as performance status and comorbidity index were reported in only 29.6% and 11.3% of the studies, respectively. The definition of biliary obstruction was heterogeneous with 12 different definitions identified. In terms of outcomes, stent dysfunction was the most common; however, a precise definition was missing in 19.7% of the studies while 42 different definitions of stent dysfunction were used. Technical and clinical success were defined in only 40.8% and 47.9% of the studies, respectively. Although adverse events were ubiquitously reported, only 36.6% of the trials used a standardized lexicon for reporting. Hospital length of stay and quality of life data were reported in only 21.1% and 11.3% of the trials, respectively. According to the ROB2, 85% of the trials were at high-risk of bias in the measurement of outcomes (► **Table 1**).

► **Table 1**

	N (%), N = 71
Reports Performance status	21 (29.6%)
Co-morbidity index included (ASA score)	8 (11.3%)
Reports liver metastasis	9 (12.7%)
Reports rate of GOO	9 (12.7%)
Outcomes	
Reports definition for stent dysfunction	57 (80.3%)
Reports definition for technical success	29 (40.8%)
Reports definition for clinical success	34 (47.9%)
Uses Standardized definition for adverse events	26 (36.6%)
Reports quality of life data	8 (11.3%)
Reports hospital length of stay	19 (26.8%)
Reports mortality/survival	67 (95.7%)
Reports chemotherapy data	18 (25.4%)
Reports surgical resection rate	14 (19.7%)
Reports 30-days complication of pancreaticoduodenectomy	2 (22.2%)

Conclusions Our review highlights the methodological deficiencies and heterogeneity of current published trials in MDBO. A methodological framework and standardized definitions of outcomes are urgently needed to improve evidence-based medicine for the management of MDBO

Conflicts of Interest Alan Barkun is a consultant for Olympus and Cook MedicalJeremie Jacques is a consultant for ERBE, Fuji Medical, and Boston ScientificAmine Benmassaoud is a consultant for Cook MedicalYen-I Chen is a consultant for Boston Scientific and Cook Medical. He is also the ex-president of Chess Medical

eP786V Single scope transhepatic rendezvous for biliary drainage in hilar cholangiocarcinoma

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DOI 10.1055/s-0046-1822113

Abstract Text

Effective biliary drainage is critical in unresectable cholangiocarcinoma (CCA). The patient, a 53-year-old male, underwent several ERCP sessions for stent revisions and intraductal RFA. During the recent intervention with a novel linear EUS scope (EG-740UT, Fujifilm, Tokyo, Japan), a dilated duct in segment II was punctured using a 19G FNA needle, and a 0.025" curved-tip guidewire was advanced antegradely into the duodenum. The guidewire was retrieved with a pediatric biopsy forceps, achieving a single-scope transhepatic rendezvous. Using the same scope, multiple biliary branches were accessed, RFA was performed, and four 8F plastic stents were placed for optimal drainage. This case highlights the principle of single scope rendezvous with a novel linear EUS scope, which offers stability and momentum for retrograde and antegrade instrumentation to overcome complex hilar strictures.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/d5c9026a-4bdd-4d1f-a6dc-39d5c1cc62c2/Uploads/19978_ESGE_days%202026%20Video%20case.mp4

Conflicts of Interest K.D.C. Pham is a consultant for Ambu, Cook, Fujifilm, Olympus, Ovesco, Taewoong and Ziehm Imaging

eP787 Improving Upper GI Endoscopy Safety and Success in Patients on GLP-1 Agonists

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DOI 10.1055/s-0046-1822114

Aims The increasing use of Glucagon-like peptide-1 receptor agonists (GLP-1 RAs) presents a significant challenge for upper gastrointestinal endoscopy (OGD) due to their effect on delaying gastric emptying. Standard fasting protocols are frequently inadequate, leading to limited views and requiring repeat procedures. This study aimed to identify the key demographic, clinical and procedural predictors of endoscopic success in patients on GLP-1 RAs and evaluate strategies for optimizing outcomes.

Methods We conducted an analysis of a prospective audit database including patients on injectable GLP-1 RAs undergoing OGD in a 6 month period from January to June 2025, across three sites in the UK. Data analysed included demographics, clinical status (diabetes, insulin use, indication), GLP-1 RA type and procedural variables (preassessment, sedation, Nil By Mouth (NBM) duration). Multivariate logistic regression was employed to determine independent predictors of poor views as described by the endoscopist. Outcomes and NBM durations for initial and repeat procedures were compared.

Results The analysis included 223 initial procedures. Poor mucosal views were demonstrated in 19% (43/223) of cases. For the initial procedures, 98% of patients followed a standard 6-hour fast. Multivariate analysis demonstrated that demographic factors, BMI, type of GLP-1 RA (Tirzepatide, Semaglutide and Liraglutide), indication and the presence of diabetes with or without insulin

therapy were not significant predictors of obstructed views during diagnostic gastroscopy in individuals taking GLP-1 RA.

Procedural factors showed strong protective trends with the utilization of sedation (OR 0.51; 95% CI [0.24–1.09]; P=0.082) and completion of a dedicated preassessment (OR 0.47; 95% CI [0.20–1.09]; P=0.078) reducing the odds of poor views by approximately 50%.

Thirty-four patients required repeat endoscopy and nine did not as their indication was achieved on index endoscopy. The strategy for the second attempt involved significantly extending the mean NBM duration from 6.19 hours to 14.62 hours (P<0.0001). 91% (31/34) of patients fasting for at least 12 hours achieved good mucosal views.

Conclusions In patients taking GLP-1 RAs, standard 6-hour fasting is inadequate in one-fifth of cases, irrespective of patient demographics or metabolic status. The key to ensuring successful endoscopy lies in meticulous procedural optimization rather than patient selection. Dedicated preassessment and critically, extending the NBM duration to at least 12 hours are recommended to ensure adequate visualization and minimize the need for repeat procedures in this high-risk cohort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP788V Laser therapy for ablation of an embedded biliary metallic stent

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DOI 10.1055/s-0046-1822115

Abstract Text

Embedded stents in gastrointestinal tract can be challenging to remove. When standard methods such as traction, compression necrosis or radiofrequency ablation fail, surgery maybe needed. Our case is of a 25-year-old man who presented with a common hepatic duct stricture following cholecystectomy for cholelithiasis. He underwent placement of a fully covered metal stent via percutaneous transhepatic biliary drainage (PTBD). Stent removal with standard methods with traction and radiofrequency ablation was unsuccessful. Patient declined surgery. ERC with Cholangioscopy was performed which showed stent embedded in the bile duct wall. Cholangioscopy guided laser ablation (30 watts for 40 minutes) was performed to ablate the tissue overgrowth and fragment the embedded portion of the stent. Ultimately the stent could be removed successfully.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/509c1468-4f76-4b67-b4ff-76b6db8ccba4/Uploads/19978_Embedded_metal%20stent.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP789 Endoscopic ultrasound-guided drainage of the gallbladder (EUS-GBD) in patients with acute calculous cholecystitis who are “definitely” unfit for surgery. Experience at a referral center

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DOI 10.1055/s-0046-1822116

Aims In patients with calculous acute cholecystitis who are not candidates for surgery, gallbladder drainage represents an effective strategy to control infection and prevent complications. Among the available options, endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) stands out as a minimally

invasive, safe, and effective approach for frail patients. Despite its established efficacy, EUS-GBD requires specialized expertise available only in a limited number of centres, underscoring the need for a standardized approach to this technique. Moreover, the long-term management of lumen-apposing metal stents (LAMS) remains a matter of debate and lacks shared guidelines [1–8].

Methods This single-centre retrospective study describes the experience in frail, high-risk surgical patients (Charlson Comorbidity Index Age-adjusted, A-CCI ≥ 5), evaluating the efficacy and safety of EUS-guided gallbladder drainage and proposing a potential long-term management algorithm for these patients (► **Table 1**).

► Table 1	
	N = 19 (%)
Hot Axios	13 (68.4)
Trans-duodenal	16 (84.2)
Technical Success	19 (100)
Intraprocedural AEs	2 (10.5)
Long-term Clinical Success	18 (95)
Hospital Stay (Median)	13 (1–68)
LAMS removal with gallbladder clearance	6 (31.6)

Results EUS-GBD procedures performed at a hub centre between November 2023 and September 2025 were considered. In 19 patients (median A-CCI 8; ASA III–V 100 %), technical success was 100 % and clinical success 95 %, with a mean follow-up of 30 weeks. A transduodenal access was used in 84 % of cases and a transgastric access in 16 %. LAMS types included HOT AXIOS in 68 % and HOT SPAXUS in 32 % of procedures. One duodenal perforation occurred and was managed endoscopically during the same session. No bleeding events or buried LAMS syndrome were observed. Median hospital stay was 13 days. During long-term follow-up, three complications were recorded, all successfully treated endoscopically. Long-term mortality was 37 %, mainly due to non-biliary causes. Stent removal was performed in 32 % of patients after approximately 51 days, following complete gallbladder clearance, resulting in definitive treatment. In the most fragile patients, the LAMS was left in place, no complications related to its permanence were observed.

Conclusions EUS-GBD is a safe and effective definitive treatment option for patients with calculous acute cholecystitis who are not candidates for surgery. Planned LAMS removal is recommended in patients who experience recovery of performance status after the procedure and achieve complete gallbladder clearance, whereas in frail patients the stent can be safely maintained in place. The study highlights the importance of a tailored approach that balances safety, efficacy, and patient tolerance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Vanella G. et al. Outcomes of EUS-guided Gallbladder Drainage in Acute Cholecystitis with Contained Perforation: a prospective cohort. *s.l Gastrointestinal Endoscopy* 2025; Vol. Volume 101 (Issue 5): Supplement S553
[2] Lisotti A, Linguerrì R, Bacchilega I, Cominardi A, Marocchi G, Fusaroli P EUS-guided gallbladder drainage in high-risk surgical patients with acute cholecystitis-procedure outcomes and evaluation of mortality predictors. *s.l Surg Endosc* 2022; Vol. 36 (1): 569–578

[3] Abbasi A.A. et al. Endoscopic-Ultrasound-Guided Gallbladder Drainage: Potential Shift in Practice or Still a Secondary Option? *s.l Current Treatment Options in Gastroenterology* 2025 Vol. 23.12. doi:10.1007/s11938-025-00477-5
[4] Teoh AYB, Kitano M, Itoi T, Pérez-Miranda M, Ogura T, Chan SM, Serina-Higuera C, Omoto S, Torres-Yuste R, Tsuchiya T, Wong KT, Leung CH, Chiu PWY, Ng EKW, Lau JYW. Endosonography-guided gallbladder drainage versus percutaneous cholecystostomy in very high-risk surgical patients with acute cholecystitis: an international randomised multicentre controlled superiority trial (DRAC 1). *s.l Gut* 2020; Vol. Jun 69 (6): 1085–1091
[5] Dollhopf M, Larghi A, Will U, Rımbaş M, Anderloni A, Sanchez-Yague A, Teoh AYB, Kunda R. EUS-guided gallbladder drainage in patients with acute cholecystitis and high surgical risk using an electrocautery-enhanced lumen-apposing metal stent device. *s.l Gastrointest Endosc.* 2017; 86 (4): 636–643. doi:10.1016/j.gie.2017.02.027
[6] Yokoe M, Hata J, Takada T, Strasberg SM, Asbun HJ, Wakabayashi G, Kozaoka K, Endo I, Deziel DJ, Miura F, Okamoto K, Hwang TL, Huang WS, Ker CG, Chen MF, Han HS, Yoon YS, Choi IS, Yoon DS, Noguchi Y, Shikata S, Ukai T, Higuchi R, Gabata T, Mori Y, Washita I Tokyo Guidelines 2018: diagnostic criteria and severity grading of acute cholecystitis (with videos). *s.l Journal of Hepato-Biliary-Pancreatic Sciences* 2018; Vol. 25 (1): 41–54
[7] Gallaher JR, Charles A. Acute Cholecystitis: A Review. *JAMA* 2022; p. 327 (10): 965–975
[8] Pisano M, Allievi N, Gurusamy K, Borzellino G, Cimbanassi S, Boerna D, Cocolini F, Tufo A, Di Martino M, Leung J, Sartelli M, Ceresoli M, Maier RV, Poiasina E, De Angelis N, Magnone S, Fugazzola P, Paolillo C, Coimbra R, Di Saverio S, De Simone B, Weber DG. 2020 World Society of Emergency Surgery updated guidelines for the diagnosis and treatment of acute calculous cholecystitis. *World Society of Emergency Surgery Guidelines* 2020; Vol. Nov 5 15: 61

eP790 Optical diagnosis accuracy and use of artificial intelligence systems for diminutive polyps in clinical practice: a nationwide Italian survey

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DOI 10.1055/s-0046-1822117

Aims The prevalence of competence standards for the optical diagnosis of diminutive colorectal lesions (SODA competence standards) is unknown. We aimed to define the knowledge and adoption of these criteria and the role of artificial intelligence (AI) systems in this setting.

Methods We conducted a survey during a nationwide event on quality in colonoscopy held in Verona, Italy in May 2025 by a self-administered questionnaire. Descriptive analysis was conducted [1–3].

Results 50 out of 58 endoscopists (28/50 F/M) attended the survey, with mean age of 52 years and equal distribution of age, regions and public or private

practice. Most of participants (82 %) perform colonoscopy within a specific program for screening of colorectal cancer. Over 90 % stated real-time in-vivo diagnosis of diminutive colorectal polyps, usually by virtual chromoendoscopy, respectively with Narrow Band Imaging (NBI, 73 %), i-scan (14 %) and Blue Light Imaging (BLI, 13 %). The competence is mainly based as self-training.

82 % reports to monitor diagnostic accuracy and 77 % knows SODA criteria; however, most of them is unable to define its own sensitivity and sensibility in clinical practice. AI availability was confirmed in less than 30 %; its role is expected to improve future monitoring of appropriateness and quality standards of colonoscopy.

Conclusions We found a general lack of adoption of SODA competence standards. Acquiring sensitivity and specificity in the optical diagnosis commonly performed in this setting should be the first step towards improving “resect and discard” or “leave in-situ” strategies in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rondonotti E, Hassan C, Tamanini G, Antonelli G, Andrisani G, Leonetti G, Paggi S, Amato A, Scardino G, Di Paolo D, Mandelli G, Lenoci N, Terreni N, Andrealli A, Maselli R, Spadaccini M, Galtieri PA, Correale L, Repici A, Di Matteo FM, Ambrosiani L, Filippi E, Sharma P, Radaelli F. Artificial intelligence-assisted optical diagnosis for the resect-and-discard strategy in clinical practice: the Artificial intelligence BLI Characterization (ABC) study. *Endoscopy*. 2023; 55 (1): 14–22. 10.1055/a-1852-0330 Epub 2022 May 13 PMID: 35562098
- [2] Dekker E, Houwen BBSL, Puig I, Bustamante-Balén M, Coron E, Dobru DE, Kuvaev R, Neumann H, Johnson G, Pimentel-Nunes P, Sanders DS, Dinis-Ribeiro M, Arvanitakis M, Ponchon T, East JE, Bisschops R. Curriculum for optical diagnosis training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2020; 52 (10): 899–923. doi:10.1055/a-1231-5123 Epub 2020 Sep 3. Erratum in: *Endoscopy*. 2020 Oct;52(10):C10. doi: 10.1055/a-1264-2634 PMID: 32882737
- [3] Houwen BBSL, Hassan C, Coupé VMH, Greuter MJE, Hazewinkel Y, Vleugels JLA, Antonelli G, Bustamante-Balén M, Coron E, Cortas GA, Dinis-Ribeiro M, Dobru DE, East JE, Iacucci M, Jover R, Kuvaev R, Neumann H, Pellisé M, Puig I, Rutter MD, Saunders B, Tate DJ, Mori Y, Longcroft-Wheaton G, Bisschops R, Dekker E. Definition of competence standards for optical diagnosis of diminutive colorectal polyps: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2022; Jan 54 (1): 88–99. doi:10.1055/a-1689-5130 Epub 2021 Dec 6 PMID: 34872120

eP791 Diagnosis of Intestinal Lymphoma Using Capsule Endoscopy and Enteroscopy: Essential Tools for Hard-to-Locate Lesions

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DOI 10.1055/s-0046-1822118

Introduction The gastrointestinal tract is the most frequent site of extranodal lymphomas; however, primary intestinal lymphomas (1–4 %) remain uncommon and represent a diagnostic challenge. The small bowel, given its length, location, and limited accessibility, is particularly difficult to evaluate using conventional techniques such as standard endoscopy or radiological imaging. As a result, advanced modalities including video capsule endoscopy (VCE) and enteroscopy have become indispensable for assessing suspected small-bowel disease. These tools allow high-resolution visualization, detection of subtle mucosal abnormalities, and targeted tissue sampling, thereby improving diagnostic accuracy in complex cases [1–7].

Clinical case We describe the case of a 68-year-old woman undergoing surveillance for previously surgically treated oral melanoma. She had no gastrointestinal symptoms and no significant medical history that could suggest small-bowel pathology. A PET-CT scan performed during routine follow-up

revealed abnormal radiotracer uptake in the small intestine, a finding not correlated with the abdominopelvic CT, which showed no evident lesions. Given the inaccessibility of the suspected segment by conventional upper or lower endoscopy, a VCE was performed. The study identified an exophytic, ulcerated, and infiltrative lesion located in the proximal jejunum.

To further characterize the finding, single-balloon enteroscopy was carried out. This technique made it possible to reach the lesion directly, enabling precise localization, endoscopic marking for potential future interventions, and collection of multiple biopsies. Additional samples were also obtained from an edematous area in the duodenum. Histopathological examination confirmed the diagnosis of primary intestinal follicular lymphoma (PI-FL).

Conclusions PI-FL is a rare subtype of lymphoma (1–3.6 %), most commonly arising in the duodenum and often demonstrating multifocal involvement throughout the small bowel. Endoscopically, it may present as nodular, polypoid, plaque-like, or ulcerated lesions. Because these abnormalities can be subtle and may not produce luminal distortion, they often remain undetected on standard imaging such as CT scans. This case highlights the diagnostic value of VCE and enteroscopy, which proved crucial for identifying and sampling a lesion that would otherwise have remained inaccessible.

These advanced endoscopic techniques are more sensitive and specific for evaluating small-bowel lymphomas, allowing accurate diagnosis and guiding appropriate therapeutic planning. Following confirmation of PI-FL, the patient was referred to Hematology for specialized management and longitudinal follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ESMO Guidelines Working Group Dreyling M., Ghilmini M., Marcus R., Salles G., Vitolo U., Ladetto M. Newly diagnosed and relapsed follicular lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow up. *Ann Oncol*, 25: 2014; pp S76–S82
- [2] Higuchi N., Sumida Y., Nakamura K., Itaba S., Yoshinaga S., Mizutani T et al. Impact of double-balloon endoscopy on the diagnosis of jejunoileal involvement in primary intestinal follicular lymphomas: A case series. *Endoscopy* 41: 2009; pp 175–178
- [3] Iwamura M, Kondo E, Takata K, Yoshino T, Okada H. Diagnosis of follicular lymphoma of the gastrointestinal tract: A better initial diagnostic workup. *World J Gastroenterol* 2016; 22 (4): 1674–1683
- [4] Takeuchi K, Iwamura M, Imagawa A, Kubota Y, Miyatani K, Takata K, Okada H. Primary follicular lymphoma of the duodenum with erosions as atypical macroscopic features. *Case Rep Med* 2012; 2012: 582607
- [5] Takata K., Okada H., Ohmiya N., Nakamura S., Kitadai Y., Tari A. et al. Primary gastrointestinal follicular lymphoma involving the duodenal second portion is a distinct entity: a multicenter, retrospective analysis in Japan. *Cancer Science* 2011; 102 (no. 8): 1532–1536. 2-s2.0-79960385339
- [6] Juanmartíñena Fernández J.F., Fernández-Urién I., Iglesias Picazo R., Aznárez Barrio M.R., Montes Díaz M., Cebrian García A., Vila Costas J.J. Linfoma folicular primario gastrointestinal: hallazgos endoscópicos y papel de la enteroscopia con cápsula. *Gastroenterología y Hepatología* 2017; 40 (no. 9): pp 621–623
- [7] Yamamoto S., Nakase H., Yamashita K., Matsuura M., Takada M., Kawanami C. et al. Gastrointestinal follicular lymphoma: Review of the literature. *J Gastroenterol* 45: 2010; pp 370–388. 2-s2.0-77953322115

eP792 Role of Low-Volume, Same-Day Polyethylene Glycol (PEG) Regimen in Small Bowel Cleansing Before Capsule Endoscopy: A Single-Center Study

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DOI 10.1055/s-0046-1822119

Aims The optimal protocol for small bowel (SB) cleansing in capsule endoscopy (CE) remains controversial. This study aimed to evaluate differences in SB cleansing quality between two low-volume polyethylene glycol (PEG) regimens.

Methods Patients eligible for CE were prospectively enrolled in this single-center, open-label study. All patients followed a low-fiber diet for three days and fasted for 12 hours prior to CE. They were randomly assigned to receive either 1 L of PEG 12 hours before CE (Group A) or 1 L of PEG 3 hours before CE (Group B). All CEs were reviewed by a single endoscopist. SB transit times (SBTT) were measured. Patients tolerability and side effects PEG related were recorded. SB cleanliness was assessed using the Small Bowel Cleansing Assessment and Report (SB-Clear) score and the Brotz score [1, 2].

Results Between October 2024 and October 2025, 29 consecutive patients were prospectively enrolled. Thirteen patients (44.8%) were randomly assigned to group A, sixteen patients (55.2%) to group B. 55.2% were males, 69% were outpatients. The main indication to CE was obscure gastro-intestinal bleeding (16 patients, 55.2%). No differences in compliance of the two PEG regimens were found; all patients received the whole volume of PEG without side effects. The main lesions observed were vascular ones (13 patients, 44.8%).

There were no statistically significant differences in age (mean 65.4 ± 18.4 SD group A vs 55.1 ± 21.9 SD group B) and sex between the two groups. Overall SB cleansing was adequate in 27 patients (93.1%). Cleansing scores were significantly higher in group B (SB-CLEAR mean 7.38 ± 0.9 SD vs 6.38 ± 1.4 SD, t-test $p = 0.04$; Brotz QI mean 6.18 ± 1.2 SD vs 5.07 ± 0.6 SD, t-test $p = 0.008$), no differences were found in Brotz QE and overall adequacy assessment (OAA). No statistically significant correlations were found among SBTT and SB cleansing scores, even if in Group 2 a shorter SBTT was correlated to higher quality SB cleansing scores (SB-CLEAR Pearson $r = -0.220$ $p = 0.412$; Brotz QI Pearson $r = -0.209$ $p = 0.437$). No statistically significant differences were found between detection of vascular lesions and SB cleansing scores. Multivariate analysis were no reliable because of small sample size.

Conclusions A low-volume, same-day PEG regimen is associated with improved small bowel cleansing scores compared with a day-before PEG regimen.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Brotz C et al. A validation study of 3 grading system to evaluate small-bowel cleansing for wireless capsule endoscopy: a quantitative index, a qualitative evaluation, and an overall adequacy assessment. *Gastrointest Endosc* 2009; 69 (2): 262–70
- [2] Macedo Silva V et al. Small Bowel CLeansing Assessment and Report (SB-CLEAR): standardizing bowel preparation report in capsule endoscopy. *J Gastroenterol Hepatol* 2023; 38 (5): 747–751

eP793 Is There a Particular Feature of Portal Hypertension in Myeloproliferative Neoplasms ?

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DOI 10.1055/s-0046-1822120

Aims Clinically significant portal hypertension (PH) is defined as an elevation of the portal pressure gradient above 10–12 mmHg. While cirrhosis remains its most common cause, several non-cirrhotic forms exist, particularly in thrombotic conditions. Among these, myeloproliferative neoplasms (MPNs) represent a rare but important etiology of non-cirrhotic PH because of their chronic thrombotic state.

The aim of this study was to describe the clinical and endoscopic features of PH associated with MPNs and to evaluate the impact of hematologic treatment on the evolution of complications.

Methods This retrospective descriptive study spanned a four-year period. Included were adult patients with confirmed PH whose etiology was an MPN diagnosed either through the presence of JAK2, CALR, or MPL mutations, or through consistent bone marrow biopsy (BMB) findings. Clinical presentation, laboratory results, imaging, endoscopic features, and treatment outcomes were collected and analyzed.

Results Of the 220 patients diagnosed with PH, 9 individuals (4.1%) had an underlying myeloproliferative disorder. The mean age was 62.2 years (range 40–84), and males predominated (66%, male-to-female ratio 3:1).

The most common presenting symptom was upper gastrointestinal bleeding (44.4%), followed by anemia-related symptoms (33.3%) and abdominal pain (22.2%). Splenomegaly was universal among patients (100%), and two-thirds presented with massive splenomegaly extending to the umbilicus or left iliac fossa. Ascites, however, was present in less than half the cases (44.4%), suggesting that PH associated with MPNs may manifest differently from cirrhosis-related PH.

Ultrasound with Doppler revealed predominantly pre-hepatic causes of PH, with portal vein thrombosis (PVT) present in 77.7% of patients. Intra-hepatic forms accounted for 22.2% of cases. Notably, none of the patients exhibited Budd–Chiari syndrome, despite its known association with MPN-related thrombosis.

Genetic testing identified the JAK2 V617F mutation in 88.8% of patients, in line with its recognized prothrombotic potential. Bone marrow biopsy allowed the diagnosis of primary myelofibrosis in 66.6% of patients and essential thrombocythemia in 33.3% of cases. No cases of polycythemia vera or chronic myeloid leukemia were detected.

Endoscopic examination revealed high-grade esophageal varices in a majority of patients: grade III varices with red signs in 55.5%, grade II varices in 11.1%, and grade I varices with red signs in 22.2%. One patient had no esophageal varices but presented with hypertensive gastropathy. Gastric varices were found in 33.3% of patients, and ectopic varices—duodenal and rectal—were observed in 22.2%. Eight patients underwent endoscopic variceal ligation, with an average of 2.6 sessions (range 1–5), resulting in good clinical improvement.

Treatment combined management of PH (beta-blockers, endoscopic ligation, diuretics) with targeted therapy for the underlying MPN (hydroxyurea or ruxolitinib) and anticoagulation for thrombosis. Cytoreductive therapy produced an overall favorable response, with a reduction in spleen size in 50% of patients. Nonetheless, PH remained partially persistent, and no patient achieved re-canalization of the portal vein.

Complications during follow-up included two episodes of recurrent gastrointestinal bleeding (22.2%), a recurrence of ascites in one patient (11.1%), and one death (11.1%).

Conclusions Portal hypertension associated with myeloproliferative neoplasms displays a distinctive clinical profile. Presentation often includes inau-gural gastrointestinal bleeding and marked splenomegaly, whereas ascites is less common. Endoscopic findings tend to be severe, with a high prevalence of advanced esophageal varices and frequent involvement of gastric or ectopic varices.

Although hematologic therapy does not reverse portal thrombosis, it provides significant stabilization of PH manifestations and contributes to the reduction of splenic enlargement in a substantial proportion of patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP794 EUS-Rendezvous vs Precut for Difficult Biliary Cannulation: An Updated Meta-analysis

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DOI 10.1055/s-0046-1822121

Aims Difficult biliary cannulation (DBC) remains a significant challenge in endoscopic retrograde cholangiopancreatography (ERCP) [1]. When cannulation fails, precut techniques are widely used as rescue techniques. Endoscopic ultrasound-guided rendezvous (EUS-RV) is increasingly used by experts as an alternative to precut for cannulating the bile duct. However, there is limited literature comparing these two techniques. This systematic review and meta-analysis aimed to compare the efficacy and safety of EUS-RV versus precut techniques for biliary access in DBC.

Methods A systematic search was conducted across PubMed, Embase, and Cochrane Library databases up to April 2025. Studies comparing EUS-RV and precut techniques in adult patients with DBC were included. Data were pooled using a random-effects model. Primary outcome was technical success rates; secondary outcome was adverse event rates. A P value < 0.05 was considered statistically significant.

Results Five studies (two randomized controlled trials and three retrospective cohorts) comprising 875 patients were included. Pooled technical success was higher with EUS-RV compared with precut (95.9% vs. 91.4%; OR 2.77; 95% CI, 1.39–5.54; P = 0.004). Adverse event rates were 7.7% for EUS-RV and 11.2% for precut, with no statistically significant difference (OR 0.75; 95% CI, 0.42–1.33; P = 0.321).

Conclusions EUS-RV is associated with higher technical success compared with precut techniques for rescue biliary cannulation after failed standard ERCP, with a comparable safety profile. These findings support EUS-RV may become the preferred rescue strategy, in specific settings, when expertise is available; however, further trials are needed to assess its safety, procedural duration, and learning curve.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Testoni P, Mariani A, Aabakken L, Arvanitakis M, Bories E, Costamagna G et al. Papillary cannulation and sphincterotomy techniques at ERCP: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2016; 48 (7): 657–83

eP795 Impact of Sedation Method on Pharyngeal Observation and Procedure Efficiency During Esophagogastroduodenoscopy in Trainees: A Real-World Study

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DOI 10.1055/s-0046-1822122

Aims Pharyngeal observation is an essential but technically demanding step in esophagogastroduodenoscopy (EGD), particularly for trainees. This study

evaluated the impact of sedation method on pharyngeal observation, procedure efficiency, and safety, with a focus on trainee performance.

Methods We retrospectively analyzed 444 consecutive EGDs performed between April 2024 and March 2025 (trainees, n = 327; attending physicians, n = 117). Patients were classified into a propofol group (n = 199) and a midazolam group (n = 245). Patient characteristics were comparable between groups. Outcomes included pharyngeal observation rate, procedure time, safety (hypotension and oxygen desaturation), patient satisfaction, and discomfort. Factors associated with successful pharyngeal observation were assessed using multivariable analysis.

Results Overall, the pharyngeal observation rate was significantly higher in the propofol group than in the midazolam group (91.5% vs 83.3%, p = 0.0110), with a shorter procedure time (6.7 ± 2.4 vs 7.9 ± 3.0 min, p < 0.0001). Safety and patient satisfaction were comparable between groups. Similar results were observed after excluding cases with biopsy. Among trainee-performed EGDs, the pharyngeal observation rate (89.9% vs 80.3%, p = 0.0205) and procedure time (7.2 ± 2.6 vs 8.6 ± 3.0 min, p < 0.0001) favored propofol sedation, whereas no significant differences were observed among attending physicians. In the midazolam group, trainees had a significantly lower observation rate than attending physicians (p = 0.0256), while no such difference was seen in the propofol group. Multivariable analysis identified propofol use as an independent predictor of successful pharyngeal observation (OR 2.21, p = 0.0077) and shorter procedure time.

Conclusions In a real-world training setting, propofol sedation improved the pharyngeal observation rate and reduced procedure time during EGD, particularly among trainees. Optimization of the sedation environment may enhance technical acquisition in the early learning phase without compromising safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP796 Intraoperative Endoscopic Assistance: A Key Tool for the Safe Resection of a Gastric GIST in a Complex Location

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DOI 10.1055/s-0046-1822123

Introduction Gastrointestinal stromal tumors (GISTs) are mesenchymal neoplasms arising from the gastrointestinal tract, most commonly from the stomach and small intestine. They originate from the interstitial cells of Cajal or related stem-cell precursors and typically express KIT (CD117) or DOG1, which aid in diagnosis. For localized tumors, surgical resection with negative margins remains the treatment of choice. Endoscopy—particularly when combined with endoscopic ultrasound (EUS)—plays a crucial role in establishing an accurate diagnosis, characterizing tumor size and layer of origin, and assessing features associated with malignant potential. Moreover, intraoperative endoscopic guidance can be indispensable when managing lesions that are small, intraluminal, or located in anatomically challenging regions, enhancing the safety and precision of minimally invasive surgery [1–5].

Clinical case We present the case of a 57-year-old man with no relevant medical history who sought medical evaluation due to rectal bleeding, epigastric pain, and unintentional weight loss. A thoracoabdominopelvic CT scan identified a 36-mm mass on the lesser curvature of the stomach, raising suspicion for a GIST. Subsequent upper endoscopy, followed by EUS-guided biopsy, confirmed the diagnosis.

During laparoscopic exploration, external visualization did not allow complete identification of the mass due to its intramural and partially endophytic growth pattern. For this reason, intraoperative endoscopic assistance was employed. Through real-time intraluminal visualization, the endoscopy team was able to

precisely localize the lesion along the lesser curvature and delineate its margins. This guidance facilitated a targeted wedge gastrectomy with adequate oncologic margins, avoiding excessive gastric resection and eliminating the need for adjuvant therapy.

Conclusions Intraoperative endoscopic assistance during laparoscopic GIST surgery constitutes a highly valuable tool, especially in cases where tumor location is complex or when endophytic growth limits visualization from the serosal surface. This combined approach enhances intraoperative tumor identification, improves surgical accuracy, and reduces the risk of complications such as inadvertent perforation, incomplete resection, or tumor rupture—an event associated with worse prognosis.

This case highlights the importance of close collaboration between endoscopists and surgeons in digestive oncologic procedures. The integration of endoscopic expertise into minimally invasive surgery ensures precise localization, optimizes surgical strategy, and contributes to safer and more effective management of submucosal gastric tumors.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Demetri GD, Benjamin RS, Blanke CD et al. Gastrointestinal stromal tumors: ESMO Clinical Practice Guidelines. *Annals of Oncology* 2014; 25: (Suppl 3): iii21–iii26
- [2] Otani Y, Furukawa T, Yoshida M et al. Operative indications and procedures for gastrointestinal stromal tumors of the stomach. *British Journal of Surgery* 2006; 93 (12): 1447–1452
- [3] Hwang JH, Rulyak SD, Kimmey MB. American Gastroenterological Association Institute technical review on the management of gastric subepithelial masses. *Gastroenterology*. 2006; 130 (7): 2217–2228
- [4] Demetri GD, von Mehren M, Antonescu CR et al. NCCN Task Force report: update on the management of patients with gastrointestinal stromal tumors. *JNCCN* 2010; 8: (Suppl 2): S1–S41
- [5] Nishida T, Blay JY, Hirota S, Kitagawa Y, Kang YK. The standard diagnosis, treatment, and follow-up of gastrointestinal stromal tumors based on guidelines. *Gastric Cancer* 2016; 19 (1): 3–14

eP797 3 Regenerative therapy

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DOI 10.1055/s-0046-1822124

Problem to solve Current treatments for defects of the gastrointestinal and respiratory tract, such as fistulae and surgical anastomotic dehiscence, often involve complex surgical interventions and endoscopic procedures with the use of synthetic materials, which may lead to complications, prolonged hospitalization, poor outcomes, low quality of life, and death. For these reasons, we began applying regenerative medicine using mesenchymal stem cells derived from autologous adipose tissue, achieving good results [1–3, 5] in treating these conditions by promoting the growth and repair of damaged tissue. Still, in cases of larger defects, a structural support is required to facilitate better healing and complete closure of the defect. Thus, we aim to create a 3D bioprinted patient-specific scaffold seeded with the mesenchymal stem cells [4].

Innovation Fat tissue harvesting and mechanical emulsification of autologous adipose tissue will yield mesenchymal stem cells, as previously described [1–3]. A 3D bioprinter with dual extruder that allows for simultaneous deposition of materials using cartridges at different temperatures will be used to print component I (mechanically strong material made of PLA/PGA or a combination of these materials) and component II (soft bioink for cell support made of collagen, alginate, or hyaluronic acid or a combination). The composition of components I and II is defined based on mechanical testing outcomes (mechanical resistance and flexibility) and on cell growth enhancement in a 3D environment [6–20].

Results A 74-year-old man developed pneumaturia during chemotherapy + radiotherapy performed after laparoscopic radical prostatectomy with lymphadenectomy + rectal resection with colonostomy for prostatic adenocarcinoma (cT4). A CT scan confirmed the clinical suspicion of a rectovesical fistula. Two attempts at trans-anal closure of the fistula were performed without success. A further unsuccessful surgical closure attempt was also performed by an open trans-vesical approach. As a last resort, a permanent urinary catheter was placed. Our rectoscopy showed a 10-mm fistula located on the anterior wall of the rectum, at 2 cm from the internal anal margin. On the rectal side, the mucosa around the fistula borders was massively fibrotic, because of the chronic inflammation due to several surgical closure attempts and radiotherapy. The patient was scheduled for repeated (4 procedures) endoscopic injection of autologous emulsified adipose tissue stromal vascular fraction (tSVFem). Each procedure was performed every 2 months, resulting in a progressive reduction of the fistula diameter to 2 mm, with reduced tissue fibrosis and improved tissue vascularity. Again, complete closure of the fistula was not achieved, and the patient continued to complain of symptoms. Then, we planned to implant a customised 3D-bioprinting-based treatment. The 3D scaffold was a blend of polylactic acid (PLA) and polybutylene adipate-co-terephthalate (PBAT), with a slight curvature and two holes for anchoring to the rectal wall. The scaffold was sutured with Apollo Overstitch, and the tSVFem was injected into the scaffold and the submucosal layer at the fistula borders using a 22-Gauge needle. The post-procedural course was uneventful. The rectoscopy performed 14 days later documented complete healing of the fistula with vascularized mucosal overgrowth and complete degradation of the 3D-printed scaffold. At this stage, the urinary catheter was removed, and no fistula-related symptoms or rectal urinary loss were recorded thereafter. Eight months later, the fistula was still completely closed, and the patient had intestinal recanalisation, without complication or recurrence of the fistula

Conclusions This procedure offers promising advancements in the field of regenerative medicine. It allows tailored, safe, and effective treatments for complex post-surgical defects. Nevertheless, its effectiveness should be confirmed in a larger patient cohort.

Conflicts of Interest V. Bove is a consultant for Boston Scientific. C. Spada is a consultant for Medtronic and AnX Robotics, and has received speaker fees from Olympus and Pentax. I. Boskoski is a consultant for Apollo Endosurgery, Boston Scientific, Nitinotes, Pentax, Cook Medical, Microtech, ERBE, Siemens, Myka Labs, and Endo Tools Therapeutics S.A.; conducts sponsored lectures for Apollo Endosurgery, Boston Scientific, Cook Medical, and Microtech; is the recipient of research grants from Apollo Endosurgery, Endo Tool Therapeutics, and ERBE; and is a scientific advisory board member for Nitinotes and Myka labs

References

- [1] Perini G, Montescagli M, Di Giulio G, Augello A, Ferrara V, Minopoli A, Evangelista D, Marras M, Artemi G, Caretto AA, Gentileschi S, Nachira D, Pontecorvi V, Spada C, Gualtieri L, Palmieri V, Boskoski I, De Spirito M, Papi M. 3D-Bioprinting of Stromal Vascular Fraction for Gastrointestinal Regeneration. *Gels*. 2025; 11 (9): 712. doi:10.3390/gels11090712 PMID: 41002487 PMID: PMC12469681

eP798 Evaluating the Learning Curve of EUS-Guided Liver Biopsy and Portal Pressure Gradient Measurement: A prospective study

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DOI 10.1055/s-0046-1822125

Aims Endoscopic ultrasound (EUS)-guided portal pressure gradient (PPG) measurement and liver biopsy have become alternatives to the traditional transjugular methods, providing combined hemodynamic and histological assessment in patients with liver disease in a single session. However, data on the procedural learning curve remain limited. This study evaluates learning curves for combined EUS-guided PPG and LB during a single procedure, focusing on proficiency, milestones, and safety as these techniques are integrated into clinical practice.

Methods A learning curve analysis of a prospectively maintained EUS-guided PPG and LB database was conducted, which involved 29 consecutive outpatients who underwent combined EUS-guided procedures performed by a single operator at a tertiary center. The procedures were performed by an endoscopist with 4 years of independent practice (approximately 2000 EUS procedures and 1000 non-liver fine needle aspirations/biopsies). Before learning curve analysis, the operator had only carried out three EUS-guided PPG measurements and no prior LB. PPG reliability was defined as duplicate or triplicate measurements within 1 mmHg of difference, LB adequacy was based on AASLD criteria (≥ 25 mm length and ≥ 11 complete portal tracts), and procedure duration was defined as duration between scope insertion and scope withdrawal. Learning curves were assessed using case-sequence-based logistic regression for binary outcomes (technical success, LB and PPG outcomes) and linear regression for procedure time.

Results Technical success was achieved in 90% of cases ($n = 26$), adequate LB were obtained in 93.1% ($n = 27$), and reliable PPG measurements were obtained in 82.8% ($n = 24$). A learning curve analysis of EUS-guided LB showed no significant improvement in obtaining adequate biopsy specimens over consecutive cases. For the primary endpoint—adequate liver tissue the odds ratio (OR) per case was 0.98 (95% CI: 0.82–1.61), indicating a slight non-significant 2.3% decrease in odds of adequacy per additional case. When both adequate LB and reliable PPG were considered, the OR was 1.00 (95% CI: 0.89–1.12), showing negligible change with experience. For secondary outcomes, technical success increased marginally with experience (OR 1.02, 95% CI: 0.89–1.18), representing a 2% improvement per additional case. The mean procedure time for combined EUS-guided LB and PPG was 20.7 ± 4.8 minutes and procedural time showed a non-significant negligible trend toward increase (slope = 0.08 min/case, $p = 0.46$, $R^2 = 0.02$), suggesting time efficiency was achieved early, with case number explaining only 2% of time variability. There was only 1 (3.4%) mild adverse event related to the intervention (abdominal pain).

Conclusions In the hands of an endosonographer with 4 years of independent practice, the learning curve for EUS-guided PPG and LB was minimal, with consistent high performance observed across cases with technical success above 90%, rates of adequate LB above 90% and 80% reliable PPG. These findings suggest that combined EUS-guided LB and PPG measurement in the same session can be performed effectively with high success rates and very short learning curve.

Conflicts of Interest Amine Benmassaoud is a speaker for CookYen-I Chen is a consultant for Cook Medical and Boston Scientific

eP799 Thirty-day hospital admission following Outpatient ERCP: safety profile, predictive factors and real-world outcomes

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DOI 10.1055/s-0046-1822126

Aims Outpatient ERCP is increasingly being adopted and already recommended in selected patients to optimise resource allocation without compromising safety, yet unplanned hospital readmission remains a key concern, particularly when driven by post-procedure complications. This study evaluated 30-day readmission after outpatient ERCP in a medium-volume centre performing 200–300 ERCPs/year, aiming to characterise real-world safety outcomes and identify independent predictors of early unplanned admission [1–4].

Methods A retrospective analysis was conducted of all ERCPs performed between January 2021 and December 2024 ($n = 840$). Of these, 304 ERCPs were undertaken in the outpatient setting and were included in the primary analysis. The outcome was 30-day unplanned hospital readmission. Variables were grouped into patient, indication, findings, and procedure-related categories. Logistic regression was used for univariate analysis, and variables with $p < 0.15$ were included in a multivariate model (stepwise). A p -value < 0.05 was considered significant. Statistical analysis was done with SPSS v29.0 (► Table 1).

Results Among 304 outpatient ERCPs, the 30-day readmission rate was 9.5% (29/304). Readmissions were mainly complication-driven, most frequently due to post-ERCP pancreatitis in 1.6% (5/304), cholangitis in 3.3% (10/304), cholecystitis in 2.0% (6/304), perforation in 0.3% (1/304), and other complications in 2.3% (7/304). Overall cannulation success was high, at 289/298 (97.0%), including 154/161 (95.7%) in naïve papillae. In univariate analysis, several variables were significantly associated with 30-day readmission. Malignant obstruction as the index indication increased the odds of readmission (OR 3.23, CI 1.15–9.11), as did malignant obstruction confirmed during ERCP (OR 2.76, CI 1.25–6.11). Sphincterotomy was also associated with increased risk (OR 2.29, CI 1.05–4.99). Conversely, a previous ERCP status (with sphincterotomy) reduced the risk of hospital admission (OR 0.35, CI 0.14–0.85), as did suspected choledocholithiasis as the indication (OR 0.45, CI 0.21–0.97). Male sex also showed a near significant protective trend (OR 0.48, CI 0.20–1.12, $p = 0.09$). The multivariable model retained three variables. Previous sphincterotomy remained independently protective for readmission (OR 0.30, CI 0.11–0.83), suggesting that patients with an already-accessed papilla may have lower procedural complexity and fewer early adverse events. Male sex continued to show a near-significant protective effect (OR 0.43, CI 0.18–1.03, $p = 0.06$). Malignant obstruction as indication emerged as the strongest independent predictor of early readmission (OR 5.46, CI 2.07–14.42), consistent with more severe underlying disease and greater procedural complexity.

Conclusions In our medium-volume centre, outpatient ERCP was safe, with a low rate of early unplanned hospitalisation and high cannulation success. Malignant obstruction as the indication remained the primary driver of early readmission, highlighting the need for enhanced peri-procedural planning and post-procedural vigilance in this subgroup. Protective factors, including previous sphincterotomy and male sex, may help refine risk stratification. These findings contribute real-world data supporting the safety of ambulatory ERCP and offer practical insight into patient selection and identifying higher-risk patients who may benefit from tailored monitoring strategies and more selective outpatient scheduling.

► Table 1

Variable	Univariate OR (95 % CI)	p-value	Multivariate aOR (95 % CI)	p-value
Male sex	0.48 (0.20–1.12)	0.09	0.43 (0.18–1.03)	0.06
Previous sphincterotomy	0.39 (0.18–0.86)	0.02	0.30 (0.11–0.83)	0.02
Suspected choledocholithiasis	0.45 (0.21–0.97)	0.04	–	–
Malignant obstruction (indication)	3.23 (1.10–9.48)	0.03	5.46 (2.07–14.42)	0.02
Malignant obstruction confirmed (ERCP finding)	2.76 (1.25–6.11)	0.01	–	–
Sphincterotomy	2.29 (1.05–4.99)	0.03	–	–

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jeurnink SM, Poley JW, Steyerberg EW, Kuipers EJ, Siersema PD. ERCP as an outpatient treatment: a review. *Gastrointest Endosc* 2008; 68 (1): 118–123. doi:10.1016/j.gie.2007.11.035
- [2] Rábago L, Guerra I, Moran M, Quintanilla E, Collado D, Chico I, Olivares A, Castro JL, Gea F. Is outpatient ERCP suitable, feasible, and safe? The experience of a Spanish community hospital. *Surg Endosc*. 2010; 24 (7): 1701–6. doi:10.1007/s00464-009-0832-5 Epub 2010 Jan 1 PMID: 20044765
- [3] BSG ERCP EQIP Advisory GroupEverett SM, Ahmed W, Dobson C et al. British Society of Gastroenterology Endoscopic Retrograde Cholangiopancreatography (ERCP) Quality Improvement Programme: minimum service standards and good practice statementsFrontline. *Gastroenterology* 2024; 15: 445–471
- [4] Yachimski P, Zhang J, Coté GA et al. Thirty-day hospital admission following high-risk outpatient ERCP: incidence and analysis of risk factors based on a secondary analysis of the Stent Versus Indomethacin trial dataset. *Gastrointest Endosc* 2025; 102 (3): 375–381.e1. doi:10.1016/j.gie.2025.01.035

eP800 EUS-guided Gastroenterostomy for Malignant Gastric Outlet Obstruction: A Single-Center Retrospective Study of Outcomes and Reintervention Strategies

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DOI 10.1055/s-0046-1822127

Aims EUS-guided gastroenterostomy (EUS-GE) has been reported as a safe and effective treatment strategy for patients with malignant gastric outlet obstruction (GOO). The aim of this study was to report the technical/clinical outcomes and the re-intervention rate of EUS-GE in malignant GOO after the introduction of the technique in one center.

Methods This is a retrospective single-center study including patients who underwent EUS-GE for malignant GOO at our institution. All the procedure were performed by one operator using the Wireless Endoscopic Simplified Technique (WEST) after a period of supervised training. Patients with post-surgical anatomy were excluded. Patient characteristics, technical success, clinical success (post-procedure GOO Score ≥ 2), adverse events, and re-interventions were analyzed [1–5].

Results From August 2023 to October 2025, 27 patients underwent EUS-GE for malignant GOO. One patient with post-surgical anatomy was excluded; 26 were included in the analysis (15 females, 57.7 %; median age 71 years, range 42–95). Most patients had pancreatic cancer (20/26; 76.9 %). Overall technical success was 26/26 (100 %). One patient experienced intraprocedural stent misdeployment, which was successfully managed with placement of a new stent. Clinical success was achieved in 24/26 patients (92.3 %). In patients with clinical

failure, endoscopic re-intervention (LAMS balloon dilation and placement of a SEMS through the LAMS, respectively) resulted in clinical success. The adverse event rate was 1/27 (3.7 %; fever treated with antibiotics). Median follow-up was 58 days (range 19–311). One patient developed GE dysfunction secondary to food impaction after 249 days, which was successfully treated with endoscopic LAMS cleansing.

Conclusions EUS-GE shows excellent efficacy and safety in patients with malignant GOO. The endoscopic re-intervention rate is low, with high success both in cases of primary clinical failure and in patients with delayed dysfunction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanella G, Frigo F, Bronswijk M, van Wanrooij RLJ, Chen YI, Binmoeller KF et al. Standardizing Success and Troubleshooting in EUS-Guided Gastroenterostomy: An International Technical Review (With Videos). *J Clin Gastroenterol*. 2025;
- [2] Teoh AYB, Lakhtakia S, Tarantino I, Perez-Miranda M, Kunda R, Maluf-Filho F et al. Endoscopic ultrasonography-guided gastroenterostomy versus uncovered duodenal metal stenting for unresectable malignant gastric outlet obstruction (DRA-GOO): a multicentre randomised controlled trial. *Lancet Gastroenterol Hepatol* 2024; 9 (2): 124–32
- [3] van de Pavert YL, Kastelijns JB, Besselink MG, Booi DC, Boonstra JJ, Boot J et al. Endoscopic versus surgical gastroenterostomy for palliation of malignant gastric outlet obstruction (ENDURO): a randomised controlled trial. *Lancet Gastroenterol Hepatol* 2025; 10 (12): 1065–74
- [4] Bang JY, Puri R, Lakhtakia S, Thakkar S, Waxman I, Siddiqui I et al. Endoscopic or surgical gastroenterostomy for malignant gastric outlet obstruction: a randomised trial. *Gut*. 2025;
- [5] Giri S, Harindranath S, Mohan BP, Jearth V, Varghese J, Kozyk M et al. Adverse events with endoscopic ultrasound-guided gastroenterostomy for gastric outlet obstruction-A systematic review and meta-analysis. *United European Gastroenterol J* 2024; 12 (7): 879–90

eP801 Moderate Sedation For Same-Session EUS-ERCP And Therapeutic-EUS Is Feasible And Safe In Pancreaticobiliary Disease Management: Results From The Peti-Mida Prospective Observational Study

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DOI 10.1055/s-0046-1822128

Aims Same-session endoscopic ultrasound (EUS)-endoscopic retrograde cholangiopancreatography (ERCP) and therapeutic EUS (tEUS) are increasingly adopted for diagnosis and management of pancreaticobiliary diseases. While traditionally performed under deep sedation or general anaesthesia, evidence on moderate sedation strategies remains limited. Moreover, moderate sedoanalgesia may represent an opportunity for non-third-level centres lacking anaesthesiology support for endoscopic procedures. We prospectively evaluated the feasibility, safety, and patient-reported outcomes of performing combined EUS-ERCP and tEUS under moderate sedoanalgesia with intravenous midazolam and meperidine.

Methods The PETI-MIDA study is a prospective observational study conducted in a non-third-level hospital between April and November 2025. All consecutive adults undergoing same-session EUS-ERCP or tEUS under moderate sedoanalgesia with midazolam and meperidine were included. Primary outcomes were procedural completion, safety, and patient-reported experience assessed using a validated tool (PROSAS score). Patients and sedation characteristics, clinical parameters, and adverse events (AEs) were collected in a standardized Case Report Form (CRF). A multivariate logistic regression explored any correlation between clinical characteristics and patient-reported outcomes.

Results In total, 35 patients were enrolled, the median age was 75 years (IQR 63–83), and the median body mass index (BMI) was 26.1 kg/m² (IQR 22.9–30.0). Median Charlson Comorbidity Index was 4 (IQR 2–6), and median ASA score was 2 (IQR 1–3). Indications for endoscopy included choledocholithiasis (65.7%), malignant biliary obstruction (14.3%), and indeterminate biliary stricture (20%). EUS-guided fine-needle biopsy (FNB) was performed in 11 patients (31.4%), biliary stenting in 10 (28.6%), and 3 patients (8.6%) underwent EUS-guided gallbladder drainage (EUS-GBD). Mean midazolam dose administered was 5.6 mg ($\pm$ 2.1), while meperidine was 64.2 mg ($\pm$ 13.6). No procedure-related AEs occurred among the cases performed. Most of the patients (88.6%) were adequately cooperative and no procedures were interrupted due to lack of patients' cooperation. Sedation-related AEs included one (2.9%) oxygen desaturation, two (5.8%) tachycardia and one (2.9%) hypotension, all managed without the need for anaesthesiology support and without leading to an endoscopy interruption. In 29 cases (82.9%), patients reported satisfaction with the sedation level achieved. On a 0–10 numeric scale administered to assess intraprocedural discomfort (0 indicating no pain and 10 indicating severe pain), the median score was 1 (IQR 0–2). In the multivariate analysis, intraprocedural discomfort level was related to BMI (p -value = 0.03).

Conclusions Moderate sedoanalgesia is an appropriate sedation strategy for same-session EUS-ERCP and tEUS, demonstrating low complication rates and high patient tolerability.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP802 Predictors of 30-day mortality in upper gastrointestinal bleeding

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DOI 10.1055/s-0046-1822129

Aims Upper gastrointestinal bleeding (UGIB) is a heterogeneous condition with variceal (V), high-risk non-variceal (HRNV) and low-risk non-variceal (LRNV) subgroups. We aimed to identify clinical and laboratory parameters associated with 30-day mortality in these three subgroups in a tertiary care center.

Methods We retrospectively analyzed all patients undergoing emergency upper endoscopy for UGIB at the Department of Emergency Medicine, Semmelweis University, between 1 January 2022 and 31 December 2023. Within each subgroup we performed univariable tests and univariable and multivariable logistic regression. Associations with 30-day mortality were described using odds ratios (OR) and p -values.

Results The data of 654 patients ($V = 126$; $HRNV = 99$; $LRNV = 429$) were analyzed.

In the variceal group, non-survivors had lower albumin ($p < 0.0001$), higher creatinine and urea levels, lower GFR ($p < 0.0001$) and more frequently had cardiovascular disease ($p = 0.003$). Univariable analyses showed that GFR 30–60 and 15–30 ml/min markedly increased mortality risk ($OR = 10.8$ and 7.05), as did cardiovascular disease ($OR = 5.04$) and vasopressor requirement ($OR = 3.67$), whereas each 1 g/L increase in albumin reduced the odds of death by 22% ($OR = 0.78$). In multivariable models, liver disease ($OR = 2506$), lower albumin ($OR = 0.62$) and rising urea ($OR = 5.6$) remained independent predictors.

In the HRNV group, non-survivors presented with lower blood pressure (all components $p \leq 0.006$), older age and more frequent noradrenaline use ($p = 0.026$). Univariable analyses indicated that higher systolic/diastolic blood pressure and MAP were protective ($OR = 0.95$ – 0.96 per mmHg), whereas noradrenaline use ($OR = 3.75$) and elevated INR ($OR = 4.5$) were risk factors. In multivariable analysis, increasing urea remained an independent predictor ($OR = 1.47$).

In the LRNV group, non-survivors showed more severe hemodynamic instability ($p < 0.0001$), worse renal function (creatinine $p < 0.0001$), lower albumin ($p = 0.0010$) and more frequent chronic high-dose PPI use ($p = 0.0215$). Univariable analyses demonstrated that lower GFR values (CKD III–V stages; $OR = 5.7$ – 7.2) and rising urea values ($OR = 1.17$) increased, whereas albumin ($OR = 0.90$ per g/L) decreased the mortality risk. In multivariable models, albumin ($OR = 0.87$) and rising urea ($OR = 1.15$) remained independent predictors.

Conclusions Across all three etiologic subgroups, hemodynamic instability, hypoalbuminaemia and urea dynamics were closely linked to 30-day mortality and may serve as a basis for etiology-specific risk stratification in UGIB.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP803 Diagnostic Performance of Artificial Intelligence Versus Endoscopists in the Detection of Early Gastric Cancer: A Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1822130

Aims Gastric cancer remains a major cause of cancer-related mortality worldwide. Endoscopy is the most reliable modality for detecting early gastric cancer (EGC), yet the identification of subtle early lesions is often challenging. Artificial intelligence (AI) has emerged as a promising tool to support endoscopic diagnosis. This meta-analysis aimed to compare the diagnostic performance of AI systems with that of human endoscopists in detecting EGC.

Methods PubMed, Embase, Google Scholar, Cochrane, and Web of Science were searched for articles. Studies were eligible if they allowed extraction of TP, FP, TN, FN. Histopathology was the gold standard. Endoscopists were classified as experts or non-experts. Pooled sensitivity and specificity were estimated using random-effects models; an SROC curve was constructed, and AUC calculated [1–41].

Results Eight studies from Asia were included. A total of 3409 patients were analyzed, comprising 1444 with EGC and 1965 with non-neoplastic conditions. AI achieved a sensitivity of 92% (95% CI, 89–94%) and a specificity of 87% (95% CI, 84–90%). Expert endoscopists reached a sensitivity of 90% (95% CI, 86–

93 %) and specificity of 90 % (95 % CI, 80–95 %). Non-expert endoscopists showed sensitivity of 78 % (95 % CI, 72–83 %) and specificity of 78 % (95 % CI, 69–85 %). AI performance was comparable to that of experts and significantly superior to non-experts (sensitivity $p \leq 0.001$; specificity $p \leq 0.01$)

Conclusions AI-assisted endoscopy demonstrates high diagnostic accuracy for early gastric cancer. Its performance closely parallels that of expert endoscopists and substantially exceeds that of non-experts

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ferlay J, Ervik M, Lam F, Laversanne M, Colombet M, Mery L et al. Global cancer observatory: cancer today (version 1.1). . Lyon, France: International Agency for Research on Cancer.
- [2] Miller KD, Nogueira L, Devasia T, Mariotto AB, Yabrof KR, Jemal A, Kramer J, Siegel RL. Cancer treatment and survivorship statistics. *CA Cancer J Clin* 2022; 72 (5): 409–36
- [3] Zhang LM, Zhang Y, Wang L, Wang JY, Liu YL. Diagnosis of gastric lesions through a deep convolutional neural network. *Dig Endosc* 2021; 33 (5): 788–96
- [4] An P, Yang D, Wang J et al. A deep learning method for delineating early gastric cancer resection margin under chromoendoscopy and white light endoscopy. *Gastric Cancer* 2020; 23: 884–892
- [5] Hosny A, Parmar C, Quackenbush J et al. Artificial intelligence in radiology. *Nat Rev Cancer* 2018; 18: 500–10
- [6] Samuel AL. Some studies in machine learning using the game of checkers, II-recent progress. *Ibm J. Res. Dev* 1988; 11: 335–6
- [7] Dey A. Machine learning algorithms: a review. *IJCSIT* 2016; 7: 1174–9
- [8] Lecun Y et al. Gradient-based learning applied to document recognition. *Proc IEEE* 1998; 86: 2278–324
- [9] Schmidhuber J. Deep learning in neural networks: an overview. *Neural Netw* 2015; 61: 85–117
- [10] Castellino RA. Computer aided detection (CAD): an overview. *Cancer Imag* 2005; 5: 17–19
- [11] Chiarello MM, Fico V, Pepe G, Tropeano G, Adams NJ, Altieri G, Brisinda G. Early gastric cancer: A challenge in Western countries. *World J Gastroenterol* 2022; 28 (7): 693–703
- [12] Chartrand G, Cheng PM et al. Deep learning: a primer for radiologists. *Radiographics* 2017; 37: 2113–31
- [13] Higgins JPT, Thompson SG, Deeks JJ, Altman DG Measuring inconsistency in meta-analyses. *BMJ*. 2003; 327: 557–60. doi:10.1136/bmj.327.7414.557
- [14] Reitsma JB, Glas AS, Rutjes AW, Scholten RJ, Bossuyt PM, Zwinderman AH. Bivariate analysis of sensitivity and specificity produces informative summary measures in diagnostic reviews. *J Clin Epidemiol* 2005; 58: 982–90
- [15] Agarwal S et al. Evaluation of the use of convoluted neural network for detecting early gastric cancer and predicting its invasion depth: A systematic review and meta-analysis. *Dig Liver Dis*. 2025;
- [16] Wu L., Zhou W., Wan X., Zhang J., Shen L. et al. A deep neural network improves endoscopic detection of early gastric cancer without blind spots. *Endoscopy* 2019; 51 (6): 522–531. doi:10.1055/a-0855-3532
- [17] Ueyama H., Kato Y., Akazawa Y. et al. Application of artificial intelligence using a convolutional neural network for diagnosis of early gastric cancer based on magnifying endoscopy with narrow-band imaging. *Journal of Gastroenterology and Hepatology* 2021; 36 (2): 482–489. doi:10.1111/jgh.15190
- [18] Chang YH, Shin CM, Lee HD et al. 2024; Real-World Application of Artificial Intelligence for Detecting Pathologic Gastric Atypia and Neoplastic Lesions. *Journal of Gastric Cancer* 24 (3): 327–340
- [19] Lee H., Chung J.-W. et al. Validation of Artificial Intelligence Computer-Aided Detection on Gastric Neoplasm in Upper Gastrointestinal Endoscopy. *Diagnostics* 2024; 14 (23): 2706. doi:10.3390/diagnostics14232706
- [20] Tang D., Wang L. et al. Development and validation of a real-time artificial intelligence-assisted system for detecting early gastric cancer: A multicentre retrospective diagnostic study. *EBioMedicine* 2020; 62: 103146. doi:10.1016/j.ebiom.2020.103146
- [21] Horiuchi Y., Hirasawa T. et al. Performance of a computer-aided diagnosis system in diagnosing early gastric cancer using magnifying endoscopy videos with narrow-band imaging (with videos). *Gastrointestinal Endoscopy* 2020; 92 (4): 856–865. doi:10.1016/j.gie.2020.04.079
- [22] Hirasawa T. et al. Application of artificial intelligence using a convolutional neural network for detecting gastric cancer in endoscopic images. *Gastric Cancer* 2018; 21 (4): 653–660. doi:10.1007/s10120-018-0793-2
- [23] Ikenoyama Y. et al. Detecting early gastric cancer: Comparison between the diagnostic ability of convolutional neural networks and endoscopists. *Digestive Endoscopy* 2021; 33 (1): 141–150. doi:10.1111/den.13688
- [24] Hu H., Gong L., Dong D. et al. Identifying early gastric cancer under magnifying narrow-band images via deep learning: a multicenter study. *Gastrointestinal Endoscopy* 2021; 93 (6): 1333–1341. doi:10.1016/j.gie.2020.11.014
- [25] Kanesaka T. et al. Computer-aided diagnosis for identifying and delineating early gastric cancers in magnifying narrow-band images. *Gastrointestinal Endoscopy* 2018; 87 (5): 1339–1344. doi:10.1016/j.gie.2017.11.029
- [26] Zhou B., Rao X., Xing H., Ma Y., Wang F., Rong L. A convolutional neural network-based system for detecting early gastric cancer in white-light endoscopy. *Scandinavian Journal of Gastroenterology* 2022; 57 (11): 1309–1317. doi:10.1080/00365521.2022.2113427
- [27] Namikawa K., Hirasawa T. et al. Artificial intelligence-based diagnostic system classifying gastric cancers and ulcers: comparison between the original and newly developed systems. *Endoscopy* 2020; 52 (10): 877–883. doi:10.1055/a-1194-8771
- [28] Feng J., Yu S. et al. A system based on deep convolutional neural network improves the detection of early gastric cancer. *Frontiers in Oncology* 2022; 12:1021625. doi:10.3389/fonc.2022.1021625
- [29] Noda H., Kaise M., Higuchi K. et al. Convolutional neural network-based system for endocytoscopic diagnosis of early gastric cancer. *BMC Gastroenterology* 2022; 22: 237. doi:10.1186/s12876-022-02312-y
- [30] Li L., Chen Y., Shen Z. et al. Convolutional neural network for the diagnosis of early gastric cancer based on magnifying narrow band imaging. *Gastric Cancer* 2020; 23 (1): 126–132. doi:10.1007/s10120-019-00992-2
- [31] Li J., Zhu Y., Dong Z. et al. Development and validation of a feature extraction-based logical anthropomorphic diagnostic system for early gastric cancer: A case-control study. *eClinicalMedicine* 2022; 46: 101366. doi:10.1016/j.eclinm.2022.101366
- [32] Dong Z., Tao X., Du H. et al. Exploring the challenge of early gastric cancer diagnostic AI system face in multiple centers and its potential solutions. *Journal of Gastroenterology* 2023; 58 (10): 978–989. doi:10.1007/s00535-023-02025-3
- [33] Dong Z., Wang J., Li Y. et al. Explainable artificial intelligence incorporated with domain knowledge diagnosing early gastric neoplasms under white light endoscopy. *npj Digital Medicine* 2023; 6: 64. doi:10.1038/s41746-023-00813-y
- [34] Wu L., He X., Liu M., Xie H., An P., Zhang J., Zhang H., Ai Y. et al. Evaluation of the effects of an artificial intelligence system on endoscopy quality and preliminary testing of its performance in detecting early gastric cancer: a randomized controlled trial. *Endoscopy* 2021; 53 (11): 1199–1207. doi:10.1055/a-1350-5583
- [35] Wu L., Wang J. et al. Deep learning system compared with expert endoscopists in predicting early gastric cancer and its invasion depth and differentiation status (with videos). *Gastrointestinal Endoscopy* 2022; 95 (1): 92–104. doi:10.1016/j.gie.2021.06.033
- [36] He X., Wu L. et al. Real-time use of artificial intelligence for diagnosing early gastric cancer by magnifying image-enhanced endoscopy: a multicenter diagnostic study (with videos). *Gastrointestinal Endoscopy* 2022; 95 (4): 671–678. doi:10.1016/j.gie.2021.11.040
- [37] Deeks J.J. et al. The performance of tests of publication bias and other sample size effects in systematic reviews of diagnostic test accuracy was assessed. *Journal of Clinical Epidemiology* 2005; 58 (9): 882–893
- [38] Viechtbauer W. Conducting meta-analyses in R with the metafor package. *J Stat Softw* 2010; 36 (3): 1–48
- [39] Lee MCM, Parker CH, Liu LWC, Farahvash A, Jeyalingam T. Impact of study design on adenoma detection in the evaluation of artificial intelligence-aided colonoscopy: a systematic review and meta-analysis. *Gastrointestinal Endosc* 2024; 99 (5): 676–687.e16
- [40] Jiang K, Jiang X, Pan J, Wen Y, Huang Y et al. Current Evidence and Future Perspective of Accuracy of Artificial Intelligence Application for Early Gastric Cancer Diagnosis with Endoscopy: A Systematic and Meta-Analysis. *Front Med (Lausanne)* 2021; 8: 629080

[41] Chen PC et al. The Accuracy of Artificial Intelligence in the Endoscopic Diagnosis of Early Gastric Cancer: Pooled Analysis Study. *J Med Internet Res* 2022; 24 (5): e27694

eP804 Etiological Profile of Benign Esophageal Strictures

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DOI 10.1055/s-0046-1822131

Aims Benign esophageal strictures are defined as a narrowing of the esophageal lumen not directly related to neoplastic or functional pathology. They represent a frequent cause of dysphagia. Upper gastrointestinal endoscopy plays a central role, both diagnostically and therapeutically, through dilation techniques or stent placement. This study aimed to describe the etiological and therapeutic profile of benign esophageal strictures.

Methods This was a retrospective observational study. We reviewed all medical records of patients diagnosed with benign esophageal strictures over a 5-year period, from January 2020 to January 2025.

Results Among 48 patients presenting with dysphagia, 29 had benign esophageal strictures (60.4%). There was a slight female predominance (51.7%), with a median age of 49 years (range 5–81). Past medical history included gastroesophageal reflux disease in 55.2%, esogastric surgery in 34.5%, anemia in 24.1%, caustic ingestion in 24.1%, toxic habits in 24.1%, and a history of radiotherapy in 20.7%. Clinically, dysphagia was constant—most often distal (82.8%)—and was frequently associated with weight loss (58.6%), odynophagia (48.3%), and anemia (34.5%). Upper endoscopy revealed peptic strictures (27.6%), caustic strictures (24.1%), postoperative strictures (17.2%), Plummer–Vinson syndrome (13.8%), post-radiation strictures (6.9%), and two cases of epidermolysis bullosa with esophageal involvement and extrinsic compression (3.4% each). Management relied on balloon dilation (55.2%), bougie dilation (41.4%), and metallic stent placement (13.8%). Clinical evolution showed complete symptom resolution in 69% of cases. Immediate complications were rare. In the medium term, post-dilation gastroesophageal reflux occurred in 17.2%, and stricture recurrence in 55.2%.

Conclusions In our cohort, benign esophageal strictures were predominantly peptic and caustic, accounting for more than 51.7% of cases. Upper endoscopy remains essential for both etiological diagnosis and treatment through dilation or stenting. However, the high recurrence rate highlights the need for close and prolonged follow-up.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP805V Diving Deep – Making It Safer: Underwater ESD for Large Duodenal LST Polyp

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DOI 10.1055/s-0046-1822132

Abstract Text

A 61-year-old patient with a large duodenal laterally spreading tumor (LST-G 6.5 × 4 cm) below the papilla of Vater. Literature reports superficial non-ampullary duodenal tumor (SNADT) prevalence at 1.0–1.5% in retrospective series and 4.6% prospectively, with adenomas at 0.03–0.4%. In collaboration with a visiting expert, en bloc underwater endoscopic submucosal dissection (ESD) was accomplished without complications. Histopathology confirmed R0 resection of a tubular adenoma with low-grade dysplasia and focally high-grade dysplasia. The water immersion technique enhanced visualization, endoscope stability, and mucosal-submucosal separation, reducing risk of perforation in this delicate area. Our center's treatment alternative, Whipple surgery, highlights ESD as a safe, minimally invasive option for selected large duodenal polyps by skilled expert [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/68837fb5-cb9e-4583-8931-70de1bd36c06/Uploads/19978_underwater_ESD%20duodenum.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanbiervliet G et al. Endoscopic management of superficial nonampullary duodenal tumors: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2021; 53: 522–534. doi:10.1055/a-1442-2395
- [2] Furukawa M et al. Efficacy of Underwater Endoscopic Mucosal Resection for Superficial Non-Ampullary Duodenal Epithelial Tumor. *Clinical Endoscopy* 2021; 54 (3): 371–378. doi:10.5946/ce.2020.147 Published online: February 18, 2021

eP806V Over-the-wire EUS-directed Transduodenal ERCP in a Patient with Duodenal Stenosis and Hilar Cholangiocarcinoma: A Video Case

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DOI 10.1055/s-0046-1822133

Abstract Text

A 59-year-old female with hilar cholangiocarcinoma and indwelling biliary stents was admitted for cholangitis and gastric outlet obstruction. ERCP failed due to neoplastic duodenal stenosis. The patient underwent EUS-gastroenterostomy (GE) with a 20 mm LAMS, and EUS-directed transduodenal ERCP (EDDE) was attempted. However, access to the papillary region was not possible due to unfavorable angulation of the GE. A guidewire was passed through the duodenal stenosis in an antegrade manner toward the LAMS and then into the stomach through the LAMS. Using a rendezvous (RV) technique, the gastroscope was reintroduced alongside the guidewire, which was retrieved through the working channel. This maneuver allowed the gastroscope to advance efficiently through the LAMS up to the papillary region using double traction. ERCP was then successfully completed with placement of a new biliary stent [1–2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8e64c6b4-b7d5-4f34-967f-39b4c6e9d905/Uploads/19978_VH_1EDIT.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Khan R, Hosari R, Khashab MA, Chandrasekhara V, Storm AC, Han S et al. Outcomes of ERCP Performed Via a Lumen Apposing Gastroenterostomy Stent: A Multicenter Observational Study. *Gastrointest Endosc*. 2025;
- [2] Kesar V, Abel WF, Bapaye J, Wasserman RD, Rozenberg J, Garikipati S et al. EUS-directed transduodenal ERCP in concomitant gastric outlet and biliary obstruction. *Gastrointest Endosc* 2025; 101 (4): 885–9

eP807 Bowel preparation with split-dose vs single-dose polyethylene glycol: Preliminary results of a prospective study

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DOI 10.1055/s-0046-1822134

Aims Bowel preparation is essential for achieving high-quality colonoscopy outcomes. Common preparatory protocols include the conventional single-dose polyethylene glycol (PEG) regimen and the increasingly utilized split-dose regimen. Our study aims to compare the quality of colonoscopies obtained using different protocols, based on the Boston Bowel Preparation Scale (BBPS).

Methods This was a prospective, single-center study conducted in an endoscopy unit. All patients referred for diagnostic, screening, follow-up, or therapeutic colonoscopy were included.

All patients underwent bowel preparation along with a low-residue diet for one to three days. Participants were divided into two groups: Group 1 (standard single-dose preparation of 4L the day before colonoscopy) and Group 2 (split-dose preparation, with 3 subgroups: A = 3L the day before and 1L the morning of the examination, B = 2L the night before + 2L in the morning of the examination and C = 4L the day before and 2L the morning of the examination). Several parameters were studied: Tolerance of the preparation, adherence to the low-residue diet, BBPS, polyp detection rate (PDR), adenoma detection rate (ADR), mean number of polyps (MNP), and mean number of adenomas (MNA). Comparative statistical analysis of the different groups was performed using JAMOVI software.

Results 248 patients were included in the study, with a median age of 57 years and a male-to-female ratio of 113/135. The indications for colonoscopies were: 77 % diagnostic, 7.3 % screening, 13.3 % follow-up or surveillance, and 2.4 % therapeutic.

Comparison of groups 1 and 2 with respect to bowel preparation quality and the detection rate of polyps and adenomas did not reveal any statistically significant difference. However, within group 2, subgroup b (2L the evening before + 2L the morning of) showed a significant superiority compared to the other subgroups and group 1, with a significant p-value of 0.011.

Multivariate analysis using binomial regression confirmed the absence of a significant influence of age, sex, or indication on bowel preparation quality. The split-dose protocol, particularly subgroup b was better tolerated than the standard preparation, with a significant reduction in side effects (nausea, vomiting), and a p-value < 0.001.

Conclusions The split-dose preparation proved more effective than the standard preparation in achieving good bowel preparation quality, as it was better tolerated. Among the different split-dose protocols, the subgroup 2b regimen offered the best compromise between efficacy and tolerability. Conversely, the 6L dose did not demonstrate superiority and proved more burdensome for patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP808 Predictors of Infectious Complications following Biliary Drainage in Liver Transplant Recipients

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DOI 10.1055/s-0046-1822135

Aims Liver transplant (LT) recipients frequently require biliary interventions to manage post-transplant complications and remain at increased risk for infectious adverse events. This study aimed [1] to evaluate the prevalence of infectious complications following biliary drainage in LT recipients and to identify associated clinical and intraprocedural risk factors, and [2] to describe the biliary and intestinal microbiological profile, including bile culture results and rectal colonization patterns.

Methods We conducted a retrospective single-centre study including all adult patients who underwent LT at our institution between January 2017 and December 2022. Among these, we selected those who underwent Endoscopic Retrograde Cholangiopancreatography (ERCP), Double-Balloon Enteroscope-assisted ERCP (DBE-ERCP), or Percutaneous Transhepatic Cholangiography (PTC) within 24 months from transplantation. We collected clinical, microbiological and interventional data, including indication for biliary drainage, procedure type, endoscopic interventions (sphincterotomy, balloon dilation, stent placement or removal, endoscopic device configuration), bile culture and rectal swab results, and antimicrobial exposure. Clinically significant infectious events occurring within 30 days after the procedure including cholangitis, primary bloodstream infection, intra-abdominal infection, surgical site infection, liver abscess, and acute bacterial skin and skin structure infection, were recorded. Continuous variables were summarised as mean (SD) or median (IQR), and categorical variables as counts and percentages. Associations with infectious events were assessed by univariable logistic regression, reporting unadjusted odds ratios (OR) with 95 % confidence intervals, while group comparisons used chi-square or Fisher's exact tests as appropriate. A p-value < 0.05 was considered statistically significant. Analyses were performed using R (version 4.5.1).

Results Seventy-one LT recipients (mean age 55.5 ± 9.9 years, 74.6 % males) underwent 238 biliary procedures (81.5 % ERCP, 17.6 % PTC, 0.8 % DBE-ERCP). Indications included anastomotic strictures (58.8 %), stent removal (18.9 %), bile leakage (8.8 %), biliary fistula (6.3 %), bile duct stones (5.9 %), and procedures performed to treat active biliary infection (26.9 %). Bile cultures were obtained in 110 procedures (46.2 %) and showed a high diagnostic yield, with 81.8 % positivity. Enterobacterales accounted for the majority of isolates (85.6 %), followed by *Enterococcus faecium* (14.4 %). Multidrug-resistant organisms were identified in 22.2 % of positive cultures. Rectal swabs performed within 90 days before the procedure were available for 147 procedures (61.8 %) and were positive in 41.5 % of cases. Infections following biliary procedures were found in 44 out of 238 procedures (18.5 %), accounting for a total of 49 infectious episodes, as some patients developed more than one event during the follow-up period. Infectious events were significantly associated with LT for primary or secondary sclerosing cholangitis (OR 5.97, 95 %CI 1.72–21.7; p = 0.0046), with early biliary complications after LT such as leaks or strictures (OR 2.03, 95 %CI 1.05–3.96; p = 0.036), and with younger age at LT, assessed as a per-year decrease in age (OR 0.96, 95 %CI 0.93–0.99; p = 0.0347). On the contrary, a significantly lower risk of infectious was observed in case of biliary re-intervention leading to stent removal (OR 0.27; 95 %CI 0.06–0.77; p = 0.0329;) and when ERCP was conducted using duodenoscope equipped with a single-use tip (OR 0.35, 95 %CI 0.18–0.64, p = 0.002). The rate of infectious complications following biliary drainage was not affected by sphincterotomy or stent placement, as well by antibiotic exposure, either prophylactic or therapeutic [3,4].

Conclusions In LT recipients undergoing biliary procedures, primary or secondary sclerosing cholangitis at LT and early post-LT biliary complications are linked to a higher risk of clinically relevant infections after drainage. The protective effect of single-use duodenoscope tips and the high diagnostic yield of bile cultures for multidrug-resistant pathogens highlight the role of procedural optimization in preventing infections. These results support an integrated approach in which microbiological sampling and endoscopic or radiologic interventions guide personalized management. Prospective studies are needed to define optimal antimicrobial and biliary drainage strategies in high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wirth U., Jiang T., Schardey J., Kratz K., Li M., Schirren M., Andrassy J. 2023; The role of microbiota in liver transplantation and liver transplantation-related biliary complications. *International Journal of Molecular Sciences* 24 (5): 4841
- [2] Kühl N., Vollenberg R., Meier J.A., Ullerich H., Schulz M.S., Rennebaum F., Tepas P.R. 2024; Risk Factors for Infectious Complications following Endo-

scopic Retrograde Cholangiopancreatography in Liver Transplant Patients: A Single-Center Study. *Journal of Clinical Medicine* 13 (5): 1438

[3] Fasullo M., Patel M., Khanna L., Shah T. 2022; Post-transplant biliary complications: advances in pathophysiology, diagnosis, and treatment. *BMJ open gastroenterology* 9 (1):e000778

[4] Boeva I., Karagoyozov P.I., Tishkov I. 2021; Post-liver transplant biliary complications: current knowledge and therapeutic advances. *World Journal of Hepatology* 13 (1): 66

eP809 Safety of Precut Versus Standard Sphincterotomy in Outpatient ERCP for Naïve Papillae: A Comparative Analysis

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DOI 10.1055/s-0046-1822136

Aims Precut techniques remain a subject of debate in ERCP, traditionally viewed as higher-risk approaches for biliary access, particularly in naïve papillae. While contemporary evidence suggests that early precut may be safe when performed by experienced endoscopists, data from the outpatient setting are scarce, and few studies provide detailed statistical comparisons of complication rates, time-to-event outcomes, and readmissions. This study aimed to evaluate the safety of precut versus standard sphincterotomy in outpatient ERCP among patients with naïve papillae, with specific attention to statistically robust comparison of post-procedural complications and hospital admissions [1, 2].

Methods A retrospective cohort analysis was conducted using a prospectively maintained database of consecutive outpatient ERCPs. Only naïve papillae were included. Patients were stratified into a standard sphincterotomy group and a precut group. Primary endpoints were post-procedural complications: pancreatitis, cholangitis, perforation, cholecystitis and other clinically relevant events. Secondary endpoints included 30-day unplanned admission (all-cause and ERCP-related). Fisher's exact test was used for group comparisons, with significance defined as $p < 0.05$. Statistical analysis was made with SPSS v29.0 (► **Table 1**).

Results A total of 166 outpatient ERCPs performed in naïve papillae were included, comprising 121 standard sphincterotomy cases and 45 precut cases. Cannulation success was achieved in all standard sphincterotomy procedures (121/121, 100%) and in 84.4% of precut procedures (38/45). Overall post-procedural complication rates were low and comparable between groups ($p = 1.00$). No significant differences were observed across specific complication types: pancreatitis occurred in 3.3% vs 2.2% ($p = 1.00$), cholangitis in 3.3% vs 4.4% ($p = 0.663$), perforation in 0.8% vs 0% ($p = 1.00$), and cholecystitis in 5.0% vs 0% ($p = 0.192$) for standard versus precut, respectively. Thirty-day all-cause admission rates were nearly identical between standard sphincterotomy and precut groups (14.0% vs 13.3%, $p = 1.00$), and ERCP-related readmission rates showed no significant difference (9.1% vs 6.7%, $p = 1.00$).

Conclusions In this real-world outpatient cohort restricted to naïve papillae, precut techniques displayed a safety profile statistically indistinguishable from standard sphincterotomy, with no increase in post-procedural complications, delayed complication timing, or 30-day hospital readmission. These findings support the selective, expert-driven use of precut for biliary access in outpatient ERCP, demonstrating that precut is not an independent risk factor for adverse outcomes in this setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yachimski P, Zhang J, Coté GA et al. Thirty-day hospital admission following high-risk outpatient ERCP: incidence and analysis of risk factors based on a secondary analysis of the Stent Versus Indomethacin trial dataset. *Gastrointest Endosc* 2025; 102 (3): 375–381.e1. doi:10.1016/j.gie.2025.01.035
- [2] Jeurnink SM, Poley JW, Steyerberg EW, Kuipers EJ, Siersema PD. ERCP as an outpatient treatment: a review. *Gastrointest Endosc* 2008; 68 (1): 118–123. doi:10.1016/j.gie.2007.11.035

► **Table 1**

Variable	Overall (n = 166)	Standard Sphincterotomy (n = 121)	Precut Techniques (n = 45)	p-value
Baseline				
Age, median (IQR)	71 (23)	70 (27)	73 (14)	0.144
Sex, male n (%)	72 (43)	55 (45.5)	17 (37.8)	0.481
Suspected choledocholithiasis n (%)	109 (65.7)	86 (71.1)	23 (51.1)	0.027
Suspected malignant obstruction n (%)	52 (31.3)	33 (27.3)	19 (42.2)	0.089
Benign stricture n (%)	6 (3.6)	2 (1.7)	4 (8.9)	0.047
Complications and Outcomes				
Post-procedural complication n (%)	23 (13.9)	17 (14.0)	6 (13.3)	1.000
Pancreatitis n (%)	5 (3.0)	4 (3.3)	1 (2.2)	1.000
Cholangitis n (%)	6 (3.6)	4 (3.3)	2 (4.4)	0.663
Cholecystitis n (%)	6 (3.6)	6 (5.0)	0 (0.0)	0.192
Perforation n (%)	1 (0.6)	1 (0.8)	0 (0.0)	1.000
Other complication (%)	5 (3.0)	2 (1.7)	3 (6.7)	0.124
30-day admission	23 (13.9)	17 (14.0)	6 (13.3)	1.000

eP810V EUS guided management of "Carpeting" Gastric Varices

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DOI 10.1055/s-0046-1822137

Abstract Text

"Carpeting" of gastric varices is uncommon finding seen in patients of portal hypertension with dilated tortuous venous channels widespread across the gastric lumen. Typically, endoscopic management is not considered feasible for these patients due to multiple columns of varices.

Case # 1: 37-year-old male with chronic pancreatitis with left-sided portal hypertension with multiple episodes of melena secondary to multiple gastric varices carpeting the body and fundus. Case # 2: 38 year-old-male with extra-hepatic portal venous obstruction with hematemesis and melena with fundal varices and multiple columns of "carpeting" varices. Both patients underwent EUS-guided coil and glue injection successfully, with obliteration. Both had no adverse events and bleeding on 3-month follow-up evaluation. EUS guided management of carpeting gastric varices is a viable option.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/b0505929-2b56-4163-acf8-6ae6aeafa12c/Uploads/19978_EUS_glue%20coil%20with%20audio.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP811 The yield of fine needle biopsy during endoscopic ultrasound in the diagnosis of lymph nodes

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DOI 10.1055/s-0046-1822138

Aims The aim of our study was to evaluate the contribution of fine-needle biopsy (FNB) coupled with ultrasound endoscopy for the exploration and diagnosis of mediastinal and abdominal lymph nodes.

Methods This was a descriptive retrospective study over a period of 3 years from July 2021 to March 2024 within a hepatogastroenterology department at Ibn Sina University Hospital in Rabat, including all patients who underwent fine-needle biopsy (FNB) of lymphadenopathy under endoscopic ultrasound. Exclusion criteria included patients already diagnosed with granulomatosis, or with metastatic digestive cancer, and those with lymph nodes that are difficult to access to fine-needle biopsy under endoscopic ultrasound or less than one centimeter in size.

Results A total of 22 patients were included during the study period out of a total of 274 patients that underwent ultrasound endoscopy. Patients were 10 males and 12 females with a mean age of 53 years (range: 20-82).

The circumstances of discovery were as follows: in 45 % of cases (n = 10), there was cholestatic jaundice, associated with epigastric pain in 9 % of cases. Four patients presented with weight loss, three cases were incidentally discovered during exploration of a pancreatic mass, one case presented with hemorrhagic syndrome, one case with dyspnea and hemoptysis, and one case with algic syndrome.

Imaging was performed in all patients. Abdominal-pelvic CT scans were conducted in 85 % of patients, and MRCP in 20 % of patients. Imaging revealed in 41 % of cases a cluster of mediastinal lymphadenopathies, associated or not with abdominal lymphadenopathies, in 32 % of cases, the presence of a pancreatic lesion with lymph node involvement; and in 18 % of cases, thickening of the main bile duct. Two cases of gastric thickening were noted.

The site of fine-needle biopsy was abdominal in 64 % of cases (n = 14), abdominal and mediastinal in 14 % (n = 3), and mediastinal in 23 % (n = 5). For abdominal lymph nodes, 50 % were located at the hepatic hilum, 36 % at the celiac level, and 21 % at the perigastric level. For mediastinal lymph nodes, fine-needle

biopsy was performed at station 7 in 85 % of cases and at station 9 in 15 % of cases.

The average size of lymph nodes was 23mm [range: 10-45]. The needle gauge used was 20G in 55 % of cases and 22G in 45 % of cases. The number of passages ranged from 1 to 3 per biopsy with fanning technique.

The diagnosis was malignant in 36 % of cases: 5 cases of pancreatic adenocarcinoma, 1 case of lymphoma, 1 case of neuroendocrine carcinoma, and 1 case of undifferentiated carcinoma. In 18 % of cases, biopsy results favored granulomatosis in 4 patients: 2 cases of sarcoidosis and 2 cases of tuberculosis. Finally, reactive adenitis was found in 41 % of cases, and hemorrhagic content was observed in 5 % of cases.

It is noteworthy that no complications related to FNB during EUS were observed.

Conclusions Endoscopic ultrasound coupled with FNB is at the forefront for diagnosing deep lymph nodes, whether they are mediastinal or abdominal. In our study, the diagnostic yield was 95 % after initial histopathological analysis. This technique remains minimally invasive and effective. It allows not only to exclude metastatic lymph nodes but also the initiation of specific treatment once the pathology is documented.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP812 From Cholangitis to Hemorrhage: Complex Post-ERCP and Post-Surgical Complications in the Management of Malignant Pancreatic Tumors

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DOI 10.1055/s-0046-1822139

Introduction Upper gastrointestinal (UGI) bleeding in the setting of locally advanced pancreatic adenocarcinoma is a challenging clinical problem, often exacerbated by tumor invasion, altered postoperative anatomy, and friable mucosa. When standard endoscopic strategies are insufficient, a multimodal approach may be required to achieve durable hemostasis. This case-report describes the complex management of recurrent UGI hemorrhage arising after ERCP and palliative Roux-en-Y gastrojejunostomy in a patient with pancreatic cancer, highlighting the role of sequential endoscopic interventions and covered self-expandable metal stents (SEMS) [1, 2].

Case Presentation A 78 year-old patient with locally advanced pancreatic adenocarcinoma presented with acute cholangitis characterized by fever, jaundice, and elevated cholestatic markers. ERCP was performed promptly, achieving biliary decompression through successful cannulation and stent placement. Given symptoms of gastric outlet obstruction due to the tumor's mass effect, the patient subsequently underwent a palliative Roux-en-Y gastrojejunostomy. During the postoperative period, the patient developed melena accompanied by a significant hemoglobin drop. Urgent endoscopy revealed a bleeding ulcer at the gastro-enteral anastomosis. Hemostasis was initially achieved with norepinephrine injection, followed by thermal coagulation using a Coagrasper device, resulting in short-term stabilization. Over the following weeks, the patient experienced multiple hospital readmissions for recurrent UGI bleeding. Each episode required repeated endoscopic evaluations, but the distorted postoperative anatomy and presence of friable ulcerated tissue limited the effectiveness of conventional techniques.

Given persistent and recurrent hemorrhage, the multidisciplinary team opted for advanced endoscopic intervention. A fully covered SEMS was positioned across the gastro-enteral anastomosis to tamponade the ulcerated bleeding site. The patient initially improved, but another episode of bleeding occurred, prompting a second endoscopic procedure. A second covered SEMS was deployed to reinforce the area and extend the zone of mechanical hemostasis. Following this intervention, the bleeding resolved definitively.

Discussion and Conclusions This case illustrates the difficulty of managing recurrent anastomotic ulcer bleeding in patients with pancreatic malignancy and surgically altered anatomy. Multidisciplinary coordination is essential for successful outcomes in such complex postoperative bleeding scenarios. Standard endoscopic hemostatic techniques often fail when bleeding arises from unstable, tumor-influenced tissue. The use of covered SEMS, while more commonly applied for malignant obstruction, proved crucial in achieving sustained hemostasis by exerting tamponade on the ulcerated region and stabilizing the anastomotic site.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Aguilera Munoz L, de Mestier L, Lamallem H, Jaïs B, Maire F, Lévy P, Rebours V, Hammel P. Gastrointestinal bleeding in patients with pancreatic cancer: Causes and haemostatic treatments. *United European Gastroenterol J*. 2020; 8 (9): 1106–1114. doi:10.1177/2050640620939788. Epub 2020 Jul 2 PMID: 32615874 PMID: PMC7724548
- [2] D'Souza P.M., Sandha G.S., Teshima C.W. Refractory Bleeding from a Malignant Duodenal Ulcer Treated with Placement of a Fully-Covered Gastroduodenal Stent. *Dig Dis Sci* 58: 3359–3361 2013. doi:10.1007/s10620-013-2695-9

eP813 Pancreatic, hepatic and small bowel toxicity due to Immune Checkpoint Inhibitors: a case report

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DOI 10.1055/s-0046-1822140

Abstract Text

Immune-checkpoint inhibitors (ICIs) are an essential therapeutic option for many types of cancers; their mechanism of action involves the activation of cytotoxic T cells through targeting PD-1, PD-L1 and CTLA4. Gastrointestinal adverse events due to ICI toxicity can occur, ranging from mild diarrhoea to severe colitis mimicking inflammatory bowel disease [1, 2]; pancreas, liver and small bowel involvement, although possible, are less frequent [1, 3]. We present the case of a ICI-related acute pancreatitis, asymptomatic hepatitis and a steroid-refractory small bowel ulcerative and atrophic enteropathy.

A 57 years-old woman with history of triple-negative breast cancer treated with 6 months of neoadjuvant paclitaxel, carboplatin, doxorubicin, cyclophosphamide and pembrolizumab, followed by mastectomy and adjuvant pembrolizumab was referred to our department for chronic severe diarrhoea and weight loss in the last 4 months. She suffered from ICI-related mild acute oedematous pancreatitis 3 months before, which led to pembrolizumab discontinuation. Laboratory test showed normocytic anaemia (Hb 11.7 g/dL), asymptomatic elevation of liver enzymes (GGT 1085 U/L, total bilirubin 2.1 mg/dL, direct bilirubin 1.45 mg/dL) and high levels of faecal calprotectin (403 mg/kg) with negativity of coeliac serology, *C. difficile* serology, stool culture and stool parasites.

Colonoscopy revealed a mosaic pattern in the ileum and normal findings in all the colon, with histological evidence of focal cryptitis in the descending colon only. Gastroscopy showed a severe ulcerative duodenitis, with severe villous atrophy at the histopathological examination. Capsule endoscopy revealed multiple duodenal ulcerations and severe duodenal and ileal villous atrophy with only mild villous blunting in the jejunum.

Prednisone 1 mg/kg/day for 3 weeks was started, but without any improvement in symptoms or laboratory findings. Capsule endoscopy was repeated, showing healing of the duodenal ulcers but persistence of villous atrophy in the duodenum and ileum. Budesonide 9 mg daily and cholestyramine 4 g twice daily were added, but without any significant clinical improvement. The patient was therefore referred to a tertiary centre.

This case emphasises the necessity for clinicians to perform an exhaustive evaluation in patients undergoing ICIs therapy with clinical or endoscopic suspicion of gastrointestinal toxicity, in order to reduce diagnostic delay and the consequent risk of steroid inefficacy and related complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Schieppatti A, Premoli A, Maimaris S, Rizzo M, Marples M, Villani L, Scott N, Sottotetti F, Sanders DS, Biagi F, Donnellan C. Small bowel villous atrophy due to immune-checkpoint inhibitors: report of two cases and literature review. *Drugs Context*. 2022; 11: 2022-6-3. doi:10.7573/dic.2022-6-3 PMID: 36339292 PMID: PMC9616105
- [2] Bellaguarda E, Hanauer S. Checkpoint Inhibitor-Induced Colitis. *Am J Gastroenterol* 2020; 115 (2): 202–210. doi:10.14309/ajg.0000000000000497 PMID: 31922959
- [3] Dougan M, Wang Y, Rubio-Tapia A, Lim JK. AGA Clinical Practice Update on Diagnosis and Management of Immune Checkpoint Inhibitor Colitis and Hepatitis: Expert Review. *Gastroenterology*. 2021; 160 (4): 1384–1393. doi:10.1053/j.gastro.2020.08.063 Epub 2020 Oct 17 PMID: 33080231

eP815 Amoebic Colitis- a rare diagnosis from a Bowel Cancer Screening Colonoscopy

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DOI 10.1055/s-0046-1822142

Abstract Text

A 50-year-old female was referred for colonoscopy via the UK Bowel Cancer Screening Programme. Six months earlier, after travel to India, she developed lethargy, nausea, and severe bloody diarrhoea. Symptoms began two weeks after returning to the UK. She denied abdominal pain, weight loss or red-flag features. Past history included unilateral nephrectomy, no regular medications and no family history of IBD or GI malignancy [1–4].

Initial investigations included stool PCR, *Clostridioides difficile* testing, ova/cysts/parasites examination and blood cultures. She tested positive for *Giardia lamblia* and completed a 7-day course of metronidazole. Her systemic symptoms improved, but loose stools and rectal bleeding persisted. During this period, she completed the home FIT test, which was positive, prompting BCSP referral.

Colonoscopy revealed marked ulceration localised to the caecum. Biopsies were taken for histology and mycobacterial culture. Histopathology demonstrated trophozoites of *Entamoeba histolytica*, confirming amoebic colitis. The patient was treated with a 1-week course of paromomycin for luminal eradication, resulting in complete symptom resolution.

Amoebic colitis is uncommon in the UK but remains a significant differential diagnosis in patients with persistent gastrointestinal symptoms following travel to endemic regions. Surveillance data indicates approximately 100 laboratory-reported cases in the UK annually, the vast majority occurring in returning travellers from endemic regions¹. *E. histolytica* often mimics IBD or colorectal cancer, both clinically and endoscopically, with caecal involvement being most typical^{2,3}. Delayed or missed diagnosis is well documented, especially when co-infection with other parasites, such as *Giardia*, creates diagnostic anchoring bias.

Literature also emphasises that FIT positivity is not specific for neoplasia and can occur in a range of inflammatory and infectious conditions, including amoebiasis⁴. *E. histolytica* associated ulceration can produce bleeding significant enough to trigger FIT positivity, leading to endoscopic identification.

Inadequate treatment is a recognised pitfall: while nitroimidazoles, such as Metronidazole, treat invasive disease, luminal agents such as paromomycin are required to prevent relapse or chronic carriage. Partial treatment, or treatment directed only at co-infecting organisms, can result in persistent symptoms and late diagnosis.

Clinicians should consider amoebic colitis in returning travellers with ongoing gastrointestinal symptoms, even when an initial pathogen has been identified. It also demonstrates how FIT-based screening may reveal non-neoplastic but clinically significant pathology. Awareness of travel-related infectious mimics is essential to avoid misdiagnosis, ensure appropriate therapy and prevent complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Amitay EL, Cuk K, Niedermaier T, Weigl K, Brenner H. Factors associated with false-positive fecal immunochemical tests in a large German colorectal cancer screening study. *Int J Cancer* 2019; 144 (10): 2419–2427. doi:10.1002/ijc.31972 PMID: 30411799
- [2] Adeyemo MO, Taylor-Robinson AW, Afolabi BM. Unmasking Amoebiasis: An Unexpected Cause of Colitis in a Non-endemic Region. *Case Rep Med* 2012; 2012; 876819
- [3] Sinharay R, Kailasam M, Shanmugalingam VK, Thomas P. Caecal amoebic colitis mimicking a colorectal cancer. *J Surg Case Rep* 2011; 2011 (11):rjr 2282216
- [4] Public Health England. Interim Public Health Operational Guidelines for Amoebiasis (*Entamoeba histolytica*). London: PHE;; 2017

eP816 Endoscopic Suturing as a Rescue Tool for the Closure of Postoperative Gastric Dehiscence in Multivisceral Transplantation: Case Report

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DOI 10.1055/s-0046-1822143

Case Report: A 58-year-old woman underwent multivisceral transplantation (liver, pancreas, intestine, and stomach with gastro-gastric reconstruction) for ultrashort bowel syndrome due to intestinal ischemia following complications from resection of a symptomatic duodenal cyst, which led to multiple subsequent electrolyte and nutritional complications. Eight days after surgery, the patient developed fistulization of the gastric suture documented on CT, initially managed conservatively with complete bowel rest and percutaneous drainage. After 10 days without improvement and with radiologic confirmation of an approximately 5 cm gastro-gastric anastomotic dehiscence, endoscopic vacuum therapy with sponge placement (EVT) was initiated. Over 50 days, 13 sponge exchanges were performed, with an incomplete response and persistence of a fistulous tract up to 25 mm in maximal diameter. Given the patient's instability and severe post-transplant complications, surgical reintervention was deemed unfeasible. Therefore, endoscopic suturing was attempted to close the defect, first refreshing the fistulous edges with argon plasma coagulation (60 W, 1.2 L/min) to promote healing. The entire discontinuity was closed using a single 2-0 polypropylene suture in a continuous Z-pattern, supplemented by 2 hemostatic clips placed at one margin. Subsequent radiologic and endoscopic follow-up demonstrated complete closure of the dehiscence without complications, despite being closed two months after its onset — a factor typically associated with reduced efficacy.

Discussion: Anastomotic dehiscence is a common postoperative complication in gastro-gastric anastomoses. EVT is currently considered the first-line management for dehiscence at this level. However, failure rates of up to 20% have been reported when used as monotherapy, requiring access to alternative therapeutic options. Full-thickness endoscopic suturing systems enable the placement of transmural sutures that provide robust tissue approximation without requiring surgical intervention [1]. These systems are currently approved for bariatric procedures, as well as for postoperative defects closure, with early diagnosis being a key factor in improving clinical success [2]. Our case highlights the role of these systems as a rescue therapy even in chronic defects, particularly in poor surgical candidates. Limited number of targeted studies and requirement for specialized training remain barriers to their broader implementation in high-volume centers.

Conclusions: Endoscopic suturing shows promising outcomes for the closure of mural defects such as gastro-gastric anastomotic dehiscence and may be particularly useful in high volume units of complex surgical cases. Comparative studies against EVT, as well as specialized training programs, are needed to expand the reach and clinical adoption of this technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Muniraj T., Harry R. 2017; The use of OverStitch™ for the treatment of intestinal perforation, fistulas and leaks. *Gastrointestinal Intervention* 6 (3): 151–156
- [2] Masood M., Low D.E., Deal S.B., Kozarek R.A. 2024; Endoscopic Management of Post-Sleeve Gastrectomy Complications. *Journal of Clinical Medicine* 13 (7): 2011. doi:10.3390/jcm13072011

eP817 Generative artificial intelligence for patient education material on gastric cancer prevention

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DOI 10.1055/s-0046-1822144

Aims This study assesses the effectiveness of large language models (LLMs) in generating lay summaries for patient education on the management of pre-cancerous lesions and early neoplasia in the stomach.

Methods In this pilot study, we used a two-period, crossover, blinded design to compare two summary versions: a ChatGPT-4o summary and a summary from Digestive Cancers Europe (DiCE). Two panels participated in the ratings: an expert physician panel and a patient panel composed of members of the DiCE Patient Advisory Committee (PAC). Experts rated accuracy (6-point), completeness (5-point), comprehensibility (5-point), and satisfaction (5-point) across five sections of the summary. Patients rated overall summary completeness, comprehensibility, and satisfaction. The paired design allowed all raters to serve as their own control. Results are reported as medians with ranges and interquartile ranges (IQRs), and p values for the comparison between the two summaries were derived from the mixed-effects estimates. Objective readability score was calculated with Flesch–Kincaid Grade Level (FKGL) and SMOG Index.

Results Median expert ratings were similar between materials across metrics: For the overall summary, median (range; IQR) scores were: accuracy 5 (4–6; 0.75) for ChatGPT-4o vs 5 (3–6; 1) for DiCE with p = 0.102; completeness 4 (3–5; 1) vs 4 (2–5; 1) with p = 0.272; comprehensibility 4 (3–5; 1) vs 4 (2–5; 1), with p = 0.329; and satisfaction 4 (2–5; 1) vs 3 (1–5; 2) with p = 0.329. Patient ratings mirrored experts, with very similar results on completeness, comprehensibility, or satisfaction. Readability failed to meet guideline recommenda-

tions for both summaries with both FKGL and SMOG score; DiCE read lower than ChatGPT-4o (FKGL: 11.16 vs 12.92; SMOG: 12.96 vs 14.84).

Conclusions ChatGPT-4o produced patient materials comparable to DiCE, but both require readability optimization; a human-in-the-loop workflow and future tests across prompts and models are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP818V Maintaining lumen's patency after 360° duodenal adenoma resection

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DOI 10.1055/s-0046-1822145

Abstract Text

A 52-year-old male with prior right hemicolectomy for colorectal cancer underwent endoscopic resection of a large duodenal adenoma involving 95% of the luminal circumference in the third duodenal part. Circumferential (360°) resection of the lesion was followed by partial closure of mucosal defect using Mantis and TTS clips. Focal capillary bleeding was controlled with a hemostatic coagrasper and adjunctive hemostatic powder. A post procedural CT scan revealed a small volume of peri-duodenal air and fluid, which resolved spontaneously without the need for intervention. Scheduled surveillance endoscopies at 20, 30 and 40 days after resection were performed and included circumferential submucosal triamcinolone injection to prevent post-procedural stenosis. This was well tolerated and effectively prevented lumen narrowing, with maintained patency on follow-up.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/5cae689e-58dc-4e84-9931-d5d9602247e3/Uploads/19978_Maintaining_lumen's%20patency%20after%20a%20360%20duodenal%20adenoma%20resection.wmv

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP819 Beyond the Short Term: Three-Year Outcomes of EUS-Guided Gallbladder Drainage in a Large Patient Cohort

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DOI 10.1055/s-0046-1822146

Aims Endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) using lumen-apposing metal stents (LAMS) provides excellent technical and short-term clinical success. However, being a relatively recent technique, limited evidence is available regarding its long-term performance. The aim of this study was to evaluate long-term clinical outcomes and adverse events (AEs) following EUS-GBD with LAMS.

Methods All EUS-GBD procedures performed in our Digestive Endoscopy Unit between January 2022 and November 2025 were retrospectively reviewed. Patients who underwent LAMS placement and had at least 30 days of follow-up were included. Technical outcomes, long-term clinical outcomes (> 30 days), and long-term AEs (> 30 days) were collected and analysed.

Results A total of 99 patients were included (44.9% male; median age 84 years, range 64–97).

EUS-GBD was performed for acute cholecystitis (AC) in non-surgical candidates in 90.9% of cases and for failed ERCP in 9%. LAMS was deployed from the stomach in 38.4% of patients and from duodenal bulb in 61.6%. Technical success was achieved in 96/99 procedures (97%), and initial clinical success in 95/99 (96%).

Median follow-up was 922 days (range 30–1416). Long term clinical success was observed in 90.9% of patients. AEs occurred in 9 of 99 patients (9%); only one AE occurred within 30 days, while 88.8% occurred during long-term follow-up.

Late LAMS migration was reported in 3 patients (33.3% of long-term AEs). In all 3 cases the LAMS migrated in the gastrointestinal lumen and patients remained asymptomatic. Migration was incidentally detected during surveillance ultrasound and confirmed by CT imaging. The median time to migration was 474 days (range 358–523) from EUS-GBD.

Recurrent AC occurred in 6 patients (66.7% of long-term AEs). AC was caused by LAMS occlusion by food impaction in 5/6 cases and in all cases LAMS was deployed from the stomach. All LAMS occlusions were successfully treated endoscopically and the median hospitalisation for recurrent AC was 5 days.

Multivariate analysis showed no association between long-term outcomes and patient age, LAMS size or type, or EUS-GBD indication (AC vs. ERCP failure). However, transgastric LAMS placement was significantly associated with long-term AEs ($p < 0.005$).

LAMS removal was performed in 12 patients (12.1%). There was no statistical difference in long term AEs between patients with or without stent removal.

During follow-up, overall mortality was 47.5%, with no deaths attributable to EUS-GBD or related AEs. Median time to death was 347 days post-procedure.

Conclusions EUS-GBD with LAMS is a safe and effective procedure not only in the short term but also over extended follow-up. Long-term clinical efficacy remained high, and the incidence of late AEs was low, supporting the durability and safety of this intervention for patients unfit for surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP820 Central reading reveals high inter-rater variability in Boston Bowel Preparation Scale scoring: results from a prospective randomised trial

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DOI 10.1055/s-0046-1822147

Aims The Boston Bowel Preparation Scale (BBPS) is a widely used, validated tool to assess bowel cleanliness, but its reliability is limited by inter-observer variability among endoscopists. Central reading can reduce variability and improve the consistency in clinical trials.

Methods We prospectively included 494 patients scheduled for colonoscopy in UZ Leuven (Leuven, Belgium), to assess the impact of a low-fiber dinner the evening prior to colonoscopy. Participants were randomized (1:1) to either a standard regimen or a more lenient regime allowing a low-fiber dinner up to 2 hours before start of the bowel preparation procedure. In this analysis, we aim to compare the assessment of adequate (> 6) and optimal BBPS (8–9) by the endoscopist and an independent central reader who was not involved in the procedure. Comparison of BBPS scoring performance using Fisher's exact test, inter-observer agreement was calculated using weighted Cohen's k-statistics.

Results By endoscopists scoring, adequate BBPS scoring was achieved in 99.0% (489/494) and optimal bowel preparation was achieved in 98.0% (484/494) of the cases.

After central reading, both scorings for adequate and optimal bowel preparation decreased significantly to 86.4.0% (427/494) and 64.6% (319/494), respectively ($p < 0.00001$).

On the 494 BBPS scorings, 217 (43.9%) were agreed upon after central reading ($k = 0.154$, 95%CI 0.044-0.244). Based on endoscopist scoring 4 patients had right-sided BBPS 0-1 (1 control and 3 in the interventional group), but only 2 were equally scored after central reading (1 was total BBPS 2 and 1 total BBPS 3). Overall, central readers scored 6 patients with a right-sided BBPS 0-1 (1.2%), whereas by endoscopist's scoring only 2 were similarly scored (0.04%).

Conclusions Validated bowel preparation scoring systems like BBPS are well-integrated though prone to high-interrater disagreement, up to 56.1% in this study, potentially affecting clinical trial outcomes and quality assessment. Objective and continuous quantification by artificial intelligence may overcome this weakness and improve future practice and research.

Conflicts of Interest Consultancy fee Norgine NV

eP821V Lost in the Tunnel – Guided by the Emerald Green

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DOI 10.1055/s-0046-1822148

Problem to solve Submucosal tunneling endoscopic resection (STER) is effective for resecting gastric subepithelial lesions (SELs) but requires precise tunnel orientation. Misdirected tunneling is a common challenge, particularly for small lesions, in large or roomy organs such as the stomach, and in procedures performed by trainees. Loss of direction can significantly prolong procedure time and lead to complications including bleeding and / or mucosal breach, making safe closure difficult. Rescue techniques for regaining orientation in such situations have not been adequately described. We report the innovative use of indocyanine green (ICG) which appears emerald green under white-light endoscopy to localize a missed lesion and redirect a tunnel during STER.

Innovation A small proximal gastric body SEL on posterior wall was planned for STER. A mucosal incision was made below the gastroesophageal junction (GEJ) and tunneling was commenced. The tunnel deviated from the intended plane, resulting in loss of lesion orientation and a small mucosal breach, complicating closure. As a rescue strategy, 1.25 mg/mL ICG was injected around the lesion using a direct transluminal approach and retroflexion. STER was continued using white light endoscopy, relying on ICG's distinctive green color under white light.

Results On re-entering the tunnel, the emerald green ICG staining clearly delineated the correct trajectory, enabling precise redirection toward the SEL. The SEL was thus identified and resected en bloc. Mucosal closure was completed successfully, and the patient had an uneventful recovery.

Conclusions White-light ICG marking is a safe, easily available, non-allergenic adjunct for real-time localization during challenging STER cases. ICG dissipates naturally without leaving foreign material, and unlike India ink, it does not trigger inflammatory reactions, abscesses, or adhesions if minor leakage occurs into the peritoneum. Methylene blue has already stained the submucosa blue – ICG offers a different color which stands out over and above the blue. This technique therefore offers an effective rescue method to manage misdirected tunneling, reduce complications, procedure time and enhance procedural success representing a meaningful innovation in third-space endoscopy.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/435d6c81-6f52-412e-89bd-7dd4af1d79f4/Uploads/19990_Final_video%20%201-720p30.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP822 Evaluation of a Large Language Model for Decision Support in Colorectal Polyp Characterization and Resection Planning. A retrospective study

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DOI 10.1055/s-0046-1822149

Aims Early identification of malignant potential and appropriate endoscopic resection technique are essential to optimize curative resection and minimize complications in colorectal neoplasia. Although artificial intelligence (AI) systems have demonstrated high accuracy in real-time optical diagnosis, large language models (LLMs) have not been systematically assessed for their ability to integrate morphology, optical classifications and ability to predict histology and recommend resection strategy. This study evaluates the diagnostic performance of a widely used, commercially available LLM for predicting polyp histology and recommending an optimal resection strategy, aiming to determine whether it can function as a decision-support tool in advanced endoscopic resections such as ESD (► Table 1).

► Table 1

	Resection method informed			
	No	Yes	Total	p-value [†]
Resection method photos				<0.001
No	6	12	18	
Yes	0	44	44	
Total	6	56	62	

[†]Fisher's exact test

Methods Early identification of malignant potential and appropriate endoscopic resection technique are essential to optimize curative resection and minimize complications in colorectal neoplasia. Although artificial intelligence (AI) systems have demonstrated high accuracy in real-time optical diagnosis, large language models (LLMs) have not been systematically assessed for their ability to integrate morphology, optical classifications and ability to predict histology and recommend resection strategy. This study evaluates the diagnostic performance of a widely used, commercially available LLM for predicting polyp histology and recommending an optimal resection strategy, aiming to determine whether it can function as a decision-support tool in advanced endoscopic resections such as ESD.

Results The study included 62 colorectal lesions from 58 patients; 45% were females and ages ranged from 18-89 years (mean 66 years). Lesions were most commonly located in the sigmoid colon (29.03%), rectum (22.5%) and ascending colon (20.96%). Clinical information provided to the AI software in the informed condition included age, sex, relevant medical history (prior CRC, adjuvant therapy, surgery), lesion size and location and optical classifications (Paris/JNET/Kudo). For resection strategy selection, the LLM showed 70.96% agreement with expert's decisions in the photos only conditions ($\kappa = 0.59$), which increased to 90.32% in the informed condition ($\kappa = 0.751$). Direct comparison between outputs in the two conditions demonstrated that 12 cases improved to match the expert's recommendation when clinical and optical classification data were added ($\kappa = 0.415$, $p < 0.001$). For histology prediction, accuracy compared with final pathology was 72.72% in the photos only condition ($\kappa = 0.408$) and increased to 87.03% in the informed condition ($\kappa = 0.758$).

Comparison of the two conditions identified 7 lesions for which histology categorization improved with additional clinical and optical data ($\kappa = 0.624$, $p < 0.001$). Response time for each case remained under 45 seconds to support feasibility for real-time use.

Conclusions This study provides the first evaluation of a widely used LLM as a decision-support tool for colorectal lesion characterization, histology prediction and resection strategy selection especially in lesions requiring advanced resection techniques as ESD. Our data has shown that performance improved markedly when clinical and endoscopic information supplemented photos, highlighting the importance of multi-modal input. These findings suggest that general-purpose LLMs could complement existing AI systems and offer practical decision support in settings where advanced resection expertise is limited.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP823 Organ-Preserving Endoscopic enbloc Resection for Large GISTs in Difficult Anatomical Locations After Neoadjuvant Imatinib

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DOI 10.1055/s-0046-1822150

Aims Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the GI tract. While surgical resection remains standard for localized disease, the low risk of lymph node spread makes organ-preserving endoscopic resection a viable alternative. Neoadjuvant imatinib further enhances this approach by shrinking tumors, reducing bleeding risk, and enabling safe en-bloc endoscopic removal in anatomically challenging locations

Methods Retrospective analysis of prospectively maintained database of 5 patients with large GISTs undergoing neoadjuvant imatinib followed by endoscopic resection. Assessed for demographics, tumor characteristics, imatinib response, resection/closure techniques; outcomes including histology with chemotherapy related changes and residual viable tumor, margins, complications, length of stay and follow-up.

Results 5 patients with anatomically difficult location – 2 rectal (involving internal anal sphincter and abutting the external anal sphincter), 2 duodenal (1- D3, 1- D1-D2 junction), 1 – exophytic gastric lesion. Mean baseline tumor size (mm) – 38 [SD 9.30]. Layer of origin on EUS – all arising from muscularis propria (MP) and 1 involving the gastric serosa. Clinical presentation – G.I bleed – 3 (ulcerated lesions), abdominal pain – 1 and dyspepsia – 1. Tumor grade 4 – low grade (Mitotic index $< 2/50$ hpf), 1 – high grade ($> 5/50$ hpf).

Neoadjuvant imatinib (400-800 mg OD) for 13-24 weeks. 3 patients tolerated Imatinib well. 2- diarrhoea – managed symptomatically. None of the ulcerated lesions had bleeding episodes while on imatinib and achieved a mean size reduction- 54% i.e 20.6 mm(SD-4.66) on CECT.

Resection modalities EFTR-3, STER-1, ETSSD-1 (endoscopic tunneling and subserosal dissection). Primary closure techniques used: 2 – endoscopic suturing, 2 – endoclips and 1 – endoclips + intraluminal EVT.

Mean total procedure time – 191 min [SD30.33]. Enbloc resection achieved in all, no complications, with mean length of hospital stay 7 days. R0 resection with treatment related changes on HPE. Adjuvant Imatinib continued in all. Follow up PET scan at most recent follow up- negative for recurrence/metastasis. Rectal lesions resected – no stool incontinence on follow-up. Median follow up 22 months and maximum 38 months.

Conclusions Neoadjuvant imatinib substantially downsizes large non-metastatic GISTs and enhances tissue planes, enabling safe, effective, organ-preserving en-bloc endoscopic resection even in anatomically challenging locations where surgery would otherwise require morbid surgeries. This strategy achieves high R0 rates, preventing morbidity, suggesting that neoadjuvant imatinib may serve as a viable alternative to radical surgery for selected large

localised GISTs amenable to endoscopic resection. Prospective studies are needed to validate and expand its use beyond expert centers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP824 Learning Curve in Endoscopic Submucosal Dissection Training Using an Ex-Vivo Animal Model: Impact of a One-Week Intensive Course Within a Dedicated ESD Program

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Aims Endoscopic submucosal dissection (ESD) is a technically demanding procedure with a steep learning curve. The European Society of Gastrointestinal Endoscopy (ESGE), as most international societies, recommends training on animal models prior to performing ESD in humans, and guidelines emphasize the importance of structured programs to achieve competency.

In this context, we evaluated the feasibility of ex-vivo animal model training through unsupervised procedures, in addition to participation in such dedicated curriculum (SFED program, including both in-vivo and ex-vivo training).

Methods Performance was assessed over 14 unsupervised ex-vivo procedures before and 14 procedures after a one-week supervised intensive training course in a specialized facility, with the aim of determining whether there was a measurable improvement in outcomes.

Results The mean area of resected ex-vivo specimens prior to the course was 261 mm² (range 33–777), compared with 240 mm² (range 80–667) after the course, with no statistically significant difference between groups. The mean duration of the procedures was significantly reduced, from 31 minutes pre-course (range 17–54; SD 10.8) to 16.5 minutes post-course (range 12–24; SD 3.2). Six perforations occurred before the course, representing 43% of procedures (2 complete and 4 incomplete perforations), whereas no perforations were observed after the course. Two initial procedures were excluded from the analysis due to extensive perforations that made completion of the dissection impossible.

When dissection characteristics of the ex-vivo specimens were analyzed, the mean dissection speed increased from 8.7 mm²/min (range 1.3–15.3; SD 5.2) before the course to 14.2 mm²/min (range 3.9–44.5; SD 11.2) after the course, corresponding to a 62.6% improvement in speed. This improvement in efficiency was achieved without compromising specimen size and was associated with a marked reduction in perforation rate.

Conclusions A one-week intensive supervised training program significantly increased dissection speed on an ex-vivo animal model and markedly reduced the perforation rate during unsupervised ESD procedures. These findings support the value of structured, short-term intensive training within dedicated curricula to enhance both efficiency and safety in the early phase of ESD skill acquisition.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP825V Undersaline endoscopic submucosal dissection in high-risk colitis associated neoplasias

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DOI 10.1055/s-0046-1822152

Abstract Text

Patients with inflammatory bowel disease (IBD) carries an increased risk of colorectal cancer. High-risk colitis-associated neoplasia (HR-CAN) is a recently validated definition, which encompasses all non polypoid lesion > 20 mm or polypoid lesion with submucosal invasion stigmata independently from diameter, arising in an inflamed or mucosal healing segment.

These lesions are thought to carry higher neoplastic risk, so that they should be resected en bloc, preferably with endoscopic submucosal dissection (ESD), even though this approach is often markedly challenging, as a consequence of severe fibrosis [1].

We present a case where undersaline pocket method strategy allowed safe, quick and efficient en bloc resection of a descendent colon HR-CAN.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/15d27881-7c98-435c-8028-9e06888f5295/Uploads/19978_Video_ESD%20HR-CAN%20for%20submission.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Maselli R, de Sire R, Barbaro F, Cecinato P, Andrisani G, Rosa-Rizzotto E, Sferrazza S, Fiori G, Azzolini F, Pugliese F, Facciorusso A, Spadaccini M, Capogreco A, Massimi D, Alfaroni L, Chiappetta MF, Gubbiotti A, Menini M, Khalaf K, Sassatelli R, Di Matteo FM, Spada C, Hassan C, Repici A, Armuzzi A Endoscopic Resection Italian Network (ERIN) Group. Outcomes of endoscopic submucosal dissection for high-risk colorectal colitis-associated neoplasia in inflammatory bowel disease. *Endoscopy* 2025; 57 (6): 658–666. doi:10.1055/a-2524-3553. Epub 2025 Jan 23 PMID: 39848273

eP826 Mantle Cell Lymphoma with Extensive Gastrointestinal Infiltration: Diagnosis by Endoscopy and Capsule Endoscopy

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Introduction An 82-year-old woman who had been evaluated for iron-deficiency anemia and a positive fecal occult blood test. Gastroscopy and colonoscopy showed no abnormalities. She was lost to follow-up until 3 years later, when Primary Care requested a new colonoscopy due to altered bowel habits.

Endoscopy Colonoscopy revealed flat polyps (Paris 0-IIa) smaller than 5 mm in the rectum, which were biopsied, demonstrating infiltration by mantle cell lymphoma, classic variant. As part of the staging work-up, an upper endoscopy was performed, showing erythematous areas with loss of glandular pattern and irregular vessels in the gastric fundus; in addition, 3–5 mm eroded nodular lesions were seen in the duodenal bulb. Both sites were biopsied, with results consistent with infiltration by the same lymphoma.

A PET-CT scan demonstrated uptake in the gastric fundus, supra- and infradiaphragmatic lymph nodes, and intestinal involvement. Capsule endoscopy revealed multiple nodular lesions (3–5 mm) in the duodenal bulb, some of them eroded, compatible with mantle cell lymphoma. In the distal ileum, millimetric nodular lesions (2–3 mm), some eroded, were identified, highly suggestive of infiltration at this level.

Comments/Conclusions Gastrointestinal mantle cell lymphoma is uncommon, with the small intestine being its most typical site of involvement. Endoscopic diagnosis requires a high degree of clinical suspicion and targeted biopsies. This case illustrates multifocal involvement of the gastrointestinal tract, from the colon to the ileum, highlighting the key role of endoscopy and capsule endoscopy in diagnosis and staging. The patient is currently under Hematology follow-up and has initiated treatment with bendamustine and rituximab.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP827 Predictive factors of complications of endoscopic retrograde cholangiopancreatography in the treatment of biliary lithiasis

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DOI 10.1055/s-0046-1822154

Aims Endoscopic retrograde cholangiopancreatography (ERCP) remains a key procedure in the therapeutic management of biliary and pancreatic diseases, particularly lithiasis. Its complications are mainly dominated by acute pancreatitis. The aim of our study is to assess the frequency and predictive factors of ERCP-related complications.

Methods We retrospectively included all patients who underwent ERCP between September 2024 and September 2025 for lithiasic disease. Statistical analysis was performed using the Jamovi software. The associated factors studied were: age, sex, history of ERCP, use of NSAIDs before the procedure, cannulation of the pancreatic duct and the number of passages into the Wirsung duct, performance of a precut, and the total duration of the procedure.

Results A total of 31 patients were included. The mean age was 58.4 ± 15.3 years, with a sex ratio of 0.47. Four patients (12.9 %) had a history of ERCP. Twenty-four patients (80 %) received NSAIDs prior to the procedure. Sphincterotomy was performed in 30 patients (96.8 %), and a precut was required in 2 patients (6.7 %). Accidental cannulation of the Wirsung duct occurred in 13 patients. The stone extraction success rate was 80.6 %.

Regarding complications, 3 patients developed acute pancreatitis, and 1 patient experienced bleeding, which was controlled by pneumatic compression of the margins.

In univariate analysis, factors associated with the occurrence of complications were: the number of passages into the Wirsung duct, procedure duration, and NSAID use before the procedure. In multivariate analysis, only the number of passages into the Wirsung duct appeared to be associated with the occurrence of complications ($p = 0.04$; OR = 1.7; 95 % CI [0.9–2.3]).

Conclusions Only the number of passages into the Wirsung duct appears to be a predictive factor for the occurrence of complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP828 Three-Way Comparison of Stenting + Naso-Cavitary Drainage, EsoSponge EVT, and VACStent for Upper-GI Postsurgical Leaks

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DOI 10.1055/s-0046-1822155

Aims Upper-GI postsurgical leaks are a major complication after esophagectomy, gastrectomy or bariatric surgery. Endoscopic techniques for leak management have evolved — from simple stent-based sealing toward strategies combining luminal coverage with cavity drainage and negative-pressure therapy. Among these, three widely adopted methods are: (1) fully covered self-expanding metal stents (FCSEMS) combined with naso-cavitary drainage (NTCD), (2) endoscopic vacuum therapy (EVT) using sponge devices (e.g., EsoSponge), and (3) hybrid systems combining stent and vacuum therapy such as VACStent. A missing datum in the available literature is to establish a correct rationale in terms of selected ideal indications to understand their real efficacy and limitations [1, 2].

Methods A retrospective study to evaluate the efficacy related to predecided indications was performed and data on technical and clinical successes of our cohorts were compared to the ones available in the international literature. The pre-established indication were based on the morphology of the leak: FCSEMS + naso-cavitary drainage was used to treat dehiscence associated with not-drained cavity with or without fistulous tract, EsoSponge EVT was used in case of wide paraluminal cavity, and VACStent was used for early detected leaks without paraluminal collections or well-drained paraluminal collections. Data on the three groups were compared in terms of clinical success and timing to complete closure of the leak.

Results A total of 110 patients were included in the present study, 53 with gastric leaks and 57 with esophageal leaks, from 2018 to november 2025. 97 patients were treated with FCSEMS + NTCD, 5 with gastric leak and 92 with esophageal leak. This technique provides leak coverage while allowing drainage of the external collection. In 89 patients, an intrastent naso-luminal tube in continuous suction was placed. Reported clinical success (leak closure) rates range between 60–80%. Our technical success was 100% while clinical success was 90%. Mean time for closure was 21 days.

10 patients were treated by EVT, 2 with gastric leak, 8 with esophageal leaks. EVT exerts continuous negative-pressure therapy that promotes collapse of the leak cavity, granulation tissue formation, and closure. Several series report closure rates of 75–95%. Our technical success was 100% and clinical success was 100% in our case series. Mean time for closure was 32 days.

Remaning 3 patients were treated by VACStent. Two patients had esophageal leaks, 1 patient had gastric leak post-bariatric surgery. By combining a fully covered stent with an external vacuum sponge, VACStent offers internal drainage plus maintenance of luminal patency. Early clinical reports indicate closure rates around 80–90%. Our technical success was 100% but clinical success was 67% with significant lower time to closure than standard stenting (7 days vs 21 days).

From comparison of the three techniques, technical success was not different while clinical success was not statistically different between FCSEMS + NTCD ($p = 0,8$). However, clinical success of VAC stent was statistically lower than the other techniques ($p < 0,01$). This finding can be limited by small case series both in EVT and VACStent group.

On the other hand, the VACStent when successful, has the most rapid time to closure ($p < 0,05$). The other two techniques showed no statistically different time to closure ($p = 0,09$).

Conclusions Tailored endoscopic management of upper-GI postsurgical leaks can be effectively improved by the study of leak morphology, size of leak cavity, and patient condition. FCSEMS + NTCD remains an option for leaks with not well-drained collections; EVT is preferred when rapid cavity collapse and granulation of paraluminal cavities are required; and VACStent appears as a promising hybrid in case of early detected leaks. Prospective multicentric larger comparative studies are warranted to define standardized treatment algorithms and identify predictors of success and failure for each modality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Van Boeckel PGA, Sijbring A, Vleggaar FP, van der Peet DL. "Systematic review: efficacy and safety of endoscopic vacuum therapy for perforations and anastomotic leaks of the upper gastrointestinal tract." *Surgical Endoscopy* 2015; 29 (9): 2789–2798
- [2] Loske G, Schorsch T, Müller C, Brückner M. "Hybrid stent and endoscopic vacuum therapy for esophageal leaks: first clinical experience with the VAC-Stent." *Surgical Endoscopy*. 2021; 35 (6): 2383–2392

eP829V Novel approach to prevent adverse events after circumferential ESD of the ileocecal valve: emicircumferential clipping and contralateral PuraStat application

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DOI 10.1055/s-0046-1822156

Abstract Text

Endoscopic submucosal dissection (ESD) of the ileocecal valve (ICV) is technically demanding. We report a case of a laterally spreading tumor involving both lips of the ICV and extending 1 cm into the terminal ileum. After performing a circumferential underwater dissection with a colonoscope fitted with a conic hood, we adopted several strategies to prevent adverse events. These included intraprocedural coagulation of visible vessels and eversion of the ileal margin, which was then clipped to the distal colon to achieve a 180° closure. On the contralateral side, we applied a self-assembling peptide matrix. This approach avoided the creation of a circumferential defect and promoted optimal healing. No adverse events occurred, and at 1-year follow-up the ileocecal valve remained widely patent, with no evidence of stenosis.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/e7d98330-c712-4761-b134-53b7476edae9/Uploads/19978_valvola_esge.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP830 Ileal Pseudomelanosis: A Rare Endoscopic Finding with Clinical and Pathological Relevance

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DOI 10.1055/s-0046-1822157

Introduction Intestinal pseudomelanosis is an uncommon condition, more frequently observed in the colon, with a prevalence of 10–15% in patients receiving iron supplementation, activated charcoal, or with chronic metabolic diseases. It is characterized by the accumulation of iron- and lipofuscin-derived pigments within macrophages of the lamina propria. Although benign, its diagnosis is important to differentiate it from serious pigmented pathologies. It has been associated with comorbidities such as hypertension, chronic kidney disease, or iron supplementation. Histological confirmation is key to avoid inappropriate management.

Endoscopy A 78-year-old man with hypertension was referred from Primary Care for colorectal cancer screening due to a family history of polyposis. His last colonoscopy revealed a spastic colon and dolichocolon. Complete colonoscopy with cecal intubation and distal ileum visualization was performed, showing areas of edematous mucosa with patchy dark pigmentation and villous atrophy. Ileal biopsies were taken. Histopathology confirmed ileal pseudomelanosis. Melanosis coli was also observed throughout the explored colon.

Comments/Conclusions Ileal pseudomelanosis is very rare, and its endoscopic recognition may raise diagnostic doubts, especially due to its pigmented appearance, which can mimic serious conditions such as metastatic melanoma. Histology is essential for confirmation. Its association with melanosis coli and a history of chronic treatments supports its benign nature. No formal follow-up guidelines exist, but accurate identification allows avoidance of unnecessary tests or treatments, optimizing clinical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP831 Development of a synthetic AI-enhanced microwave-based colonoscopy training model

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DOI 10.1055/s-0046-1822158

Problem to solve Up to 22 % of polyps are missed during colonoscopy and current solutions rely on improving the endoscopic image or using AI.

Innovation Microwave-based colonoscopy (MWC) is a disruptive new solution that has proved to be safe and feasible in a human pilot study. MWC can differentiate polyps from normal tissue based on their different dielectric properties and consists on three elements: the acquirer (an add-on ring-shaped device provided with microwave antennas), the analyzer (external unit) and the software (embedded in the analyzer). The software analyses the signals received and provides with an output (sound). Unfortunately, there are no available microwave signal databases for colorectal polyps that can be used for training the algorithm and we need more representative examples to improve the performance. For this reason, we designed a dedicated phantom using an ex-vivo porcine colon that included six synthetic polyps selected from a set of models with different morphologies, including flat polyps 2 mm in height and 25, 10 or 7 mm in diameter, as well as polyps 10 mm in diameter and 5 or 10 mm in height. Performance metrics were evaluated after the explorations. We used the optical colonoscopy video as ground truth. The optical video from colonoscopy was examined and temporally segmented into sets of consecutive and homogeneous frames [1].

Results We performed a total of 24 colonoscopies with a total of 144 polyps and 32,441 frames. A convolutional neural network (CNN) was trained on these data, and each detection was labelled as TP, TN, FP and FN. The CNN was then validated using six new trajectories that included 36 flat polyps. The sensitivity and specificity for polyp detection were globally 80.5 % and 75.0 %, respectively. Sensitivity increased up to 93.3 % for flat polyps.

Conclusions MWC has the potential for detecting colon flat polyps and can be trained in dedicated synthetic phantoms.

Conflicts of Interest G.F.-E. and M.G. are shareholders of MiWendo Solutions

References

[1] Ortiz O, Sendino O, Rivadulla S, Garrido A, Neira LM, Sanahuja J, Sesé P, Guardiola M, Fernández-Esparrach G. New Concept of Colonoscopy Assisted by a Microwave-Based Accessory Device: First Clinical Experience. *Cancers* (Basel). 2025; 17 (7): 1073. doi:10.3390/cancers17071073 PMID: 40227570 PMID: PMC11988026

eP832V Beyond histologic healing: pCLE redefines remission in Eosinophilic Gastroenteritis by targeting gut barrier integrity

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DOI 10.1055/s-0046-1822159

Abstract Text

Eosinophilic gastroenteritis (EGE) is a rare immune-mediated disorder marked by gastrointestinal mucosal dysfunction and eosinophil inflammation. We evaluated mucosal dysfunction and intestinal permeability in two patients using endoscopy, histology, and probe-based confocal laser endomicroscopy (pCLE) at diagnosis and after five weeks of corticosteroid therapy. Baseline histology confirmed marked eosinophilic infiltration, while pCLE revealed interstitial leakage and increased epithelial permeability even in endoscopically and histologically normal mucosa. Treatment induced clinical, endoscopic and histologic remission but pCLE continued to detect subtle, persistent barrier defects in regions with normalized endoscopy and histology, suggesting residual sub-clinical disease. These findings suggest that achieving "functional healing" of the gut barrier may represent a critical, new therapeutic frontier [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/5a88464d-ea0f-4b82-8e2f-103648b4e214/Uploads/19978_ESGE_2026_EGE_Video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] *Sci Rep* 2025; 15 (1): 25600. doi:10.1038/s41598-025-09680-x
[2] *Gastroenterology*. 2025; S0016-5085(25): 06042-1

eP833 Efficacy and Safety of Endoscopic Ultrasound-Guided Radiofrequency Ablation in Small Pancreatic Neuroendocrine Tumors: A Single-Center Study

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DOI 10.1055/s-0046-1822160

Aims Endoscopic ultrasound-guided radiofrequency ablation (EUS-RFA) is an emerging and minimally invasive modality that may offer a therapeutic alternative to surgery in selected patients with pancreatic neuroendocrine tumors (pNETs). This study reports a single-center experience with EUS-RFA for pNETs ≤ 2 cm, with emphasis on its safety and efficacy.

Methods A total of 62 patients with 65 histologically proven G1 pNETs underwent EUS-RFA and were included in this retrospective analysis. Surveillance was performed using EUS and/or contrast enhanced computed tomography (CT). Adverse events were classified according to the AGREE criteria.

Results Sixty two patients (25 males; mean age 53 years) with 65 lesions (mean lesion size 12.1 mm; range 7-25) were treated with EUS-RFA (mean total ablation time for lesion 39.9 ± 33s; range 5-168s; mean session number 1.52; range 1-5). The cohort comprised 57 non-functioning pNETs (88 %) and 8 insulinomas (12 %). All patients with insulinomas remained asymptomatic during follow-up. Overall, 78 % of patients achieved complete regression, defined as no contrast enhancement in CT or/and EUS, while 22 % demonstrated partial response (mean follow-up 18.7 ± 15.3 months; range 3-56 months). Regarding safety, most patients (88 %) presented no adverse events. Three patients (5 %) developed Grade I AEs, four (6 %) Grade II AEs and one (1.5 %) Grade IIIA AE.

Conclusions EUS-RFA appears to be an effective and safe treatment option for small pNETs. Prospective studies with longer follow-up are warranted to better define long-term outcomes and recurrence rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP834 ChatGPT 5 vs Expert Endoscopists: A Comparative Evaluation of Adherence to the ESGE STAR Project

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DOI 10.1055/s-0046-1822161

Aims The ESGE STAR Project provides a 55-item standardized framework for upper GI endoscopy reporting, based on expert consensus due to the absence of high-quality evidence. The ability of artificial intelligence (AI) systems to apply these structured criteria remains unknown. This study compares the adherence of ChatGPT-Audio, using voice-dictation input, to that of expert endoscopists when both are instructed to follow the STAR recommendations.

Methods A total of 104 EGD reports were analyzed: 52 generated by ChatGPT 5.1 and 52 written by expert endoscopists, all under explicit instruction to follow the 55-item ESGE STAR checklist. Two blinded senior reviewers independently evaluated each report for item-level compliance across pre-, intra- and post-procedural domains. Primary outcome: overall compliance rate. Secondary outcomes: domain-specific compliance, number of missing items, inter-rater reliability (κ), and ROC analysis.

Results Overall compliance was $87.6\% \pm 4.8$ for ChatGPT-Audio and $93.1\% \pm 3.5$ for experts ($p = 0.002$). ChatGPT-Audio missed 6.8 ± 3.2 items per report compared with 3.7 ± 2.1 for experts. Domain-specific compliance was: • Pre-procedural: 81% vs 94% • Intra-procedural: 92% vs 95% • Classification usage (LA, Prague, Forrest, Paris): 89% vs 94% • Post-procedural: 76% vs 90% Inter-rater agreement was excellent ($\kappa = 0.84$). ROC analysis identified a threshold of $\geq 90\%$ compliance (AUC = 0.86).

Conclusions When explicitly instructed to apply the ESGE STAR criteria, ChatGPT-Audio produced highly structured and guideline-conformant EGD reports, approaching expert performance. Human endoscopists nonetheless demonstrated superior compliance, particularly regarding pre- and post-procedural elements. This study provides the first controlled assessment of an AI voice-dictation system's ability to apply the ESGE STAR reporting standard and supports its potential role in advancing standardized endoscopy documentation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP835 Clinical Impact of Red Dichromatic Imaging on Bleeding Visibility and Hemostasis Performance: A Meta-analysis

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DOI 10.1055/s-0046-1822162

Aims Red Dichromatic Imaging (RDI) is a novel image-enhancement modality designed to highlight bleeding points more clearly during endoscopic procedures. Although early studies suggest improved visualization, its overall clinical impact across different bleeding scenarios has not been quantified. This study aimed to evaluate the effect of RDI compared with White Light Imaging (WLI) on bleeding visibility and hemostasis performance.

Methods Comparative studies assessing RDI versus WLI during active gastrointestinal bleeding or bleeding-related interventions were systematically reviewed. Random-effects meta-analyses were performed for visibility scores (standardized mean difference, SMD) and for hemostasis or treatment time (mean difference, MD). Three studies reported visibility outcomes ($n = 175$ observations) and two studies provided procedural time data ($n = 2,064$ hemostatic actions).

Results RDI significantly improved bleeding visibility compared with WLI (SMD 0.79; 95% CI 0.56–1.02; $p < 0.00001$; $I^2 = 7\%$). Overall hemostasis/treatment time was not significantly different be-

tween modalities (MD –0.13 min; 95% CI –10.55 to 10.30; $p = 0.98$; $I^2 = 83\%$). However, in variceal EIS/EISL procedures RDI markedly shortened treatment time (MD –4.67 min), while ESD-related hemostasis times were comparable.

Conclusions RDI provides a consistent and clinically meaningful improvement in bleeding visibility. Although overall hemostasis time was not reduced, RDI substantially accelerates variceal therapy. These findings support RDI as an emerging tool for enhancing real-time endoscopic bleeding management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP836 Severe Delayed Post-POEM Hemorrhage: When Less Is More

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DOI 10.1055/s-0046-1822163

Abstract Text

A 62-year-old man, with no comorbidities or regular medication, underwent POEM for symptomatic type I achalasia (Eckardt score 7). The procedure was uneventful, using an anterior approach with partial full-thickness myotomy, and mucosal integrity was confirmed at the end of the procedure [1–3].

Twelve hours later, he developed shock with hypotension and prostration, associated with a hemoglobin drop to 8 g/dL. CT imaging showed the stomach filled with blood and a small esophagogastric wall hematoma (3×5 cm), without signs of active bleeding. Endoscopy revealed an intact mucosotomy closure and a small bulge compatible with an intramural hematoma extending from the distal esophagus to the gastric body. The stomach contained abundant fresh and clotted blood. After aspiration and repositioning, a 10-mm mucosal laceration was identified in the proximal gastric body with adherent clots, consistent with the rupture point on the gastric side of the tunnel. As there was no active bleeding or significant intra-tunnel hematoma, a conservative approach with close monitoring was chosen.

The patient remained hospitalized for five days under pantoprazole and antibiotics, requiring two units of packed red blood cells. He progressed favorably without recurrent bleeding and remained asymptomatic at one-year follow-up. This case highlights a rare but clinically significant delayed post-POEM hemorrhage. Although many reports advocate re-entry into the tunnel for clot evacuation and hemostasis, this case demonstrates that conservative management may be appropriate in selected patients, depending on the specific characteristics of the lesion and clinical stability. Iconography and video are provided.

The authors present a rare but potentially severe delayed complication of POEM, occurring in 0.2 to 0.7% of procedures. Due to its rarity, optimal management is not well established, with many reports describing re-entry into the tunnel, clot clearance and identification and coagulation of visible vessels. This case illustrates successful conservative management of severe post-POEM hemorrhage, guided by specific patient characteristics. Iconography is provided.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bechara R, Onimar M, Ikeda H et al. Per-oral endoscopic myotomy, 1000 cases later: pearls, pitfalls, and practical considerations. *GIE* 2016; Volume 84 (Issue 2): p 330–338
- [2] Marrelli M, Biasutto D, Benedetto N et al. Conservative Management of Delayed Submucosal Bleeding after Per-Oral Endoscopic Myotomy: A Case Report. *Acta Med Litu* 2024; 31 (2): 388–393
- [3] Bhagat V, Alkhairi R, Kahaleh M. The light at the end of the tunnel: tunnel bleeding following per-oral endoscopic myotomy. *Endoscopy* 2021; 53: E464–E465. doi:10.1055/a-1346-7802

eP837V Bouveret syndrome (BS): a rare cause of gallstone ileus, resolved endoscopically by electrohydraulic (EHL), laser and mechanical lithotripsy

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DOI 10.1055/s-0046-1822164

Introduction Bouveret syndrome is a rare form of gallstone ileus in which a stone passes through a fistula and becomes impacted in the duodenum. Although surgery is the standard treatment, we present a case resolved endoscopically.

Clinical Case An 87-year-old woman referred to our centre due to obstruction from a 4 cm stone impacted in the duodenum after passing through a cholecystoduodenal fistula. Surgery was dismissed, so endoscopic therapy was used in three sessions. Initial EHL and polypectomy-snare attempts failed. Holmium laser lithotripsy (HLS) enabled partial fragmentation, and further fragmentation was achieved with a loop-shaped guidewire. Total fragmentation required HLS and EHL. The fragments were moved to the stomach, mechanically broken, and removed.

Discussion Endoscopic management can be effective in BS when surgery is contraindicated.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/845c8562-3938-4c37-848e-3626923b881a/Uploads/19978_Bouveret_ESGE.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP838 Feasibility, usability and validity assessment of a novel plug-and-play virtual endoscopy simulator

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Aims The use of simulator training offers new avenues for high-quality education in endoscopy. Nevertheless, even with the availability of various simulators, their validation and impact on training remain marginalized. Therefore, we evaluated the novel "Endonix" simulator, a 3D-printed simulator comprising an endoscope handle connected to a computer that does not require cumbersome technical setup ("plug-and-play"), allowing easy training access. The aim of this study was to prospectively evaluate the simulator's validity, feasibility and usability in novices, beginners and experienced endoscopists as well as to assess participants' perception of the simulator and simulation training in general.

Methods Delegates at two international conferences (DGVS and ENDOCLUB-NORD, both 2024 in Germany) were invited to participate in this study. Study participants were asked to complete a pre-testing questionnaire requesting their perception of endoscopy simulation training. Afterwards, two exercises were performed, covering line markings and ESD markings in a virtual environment. Following the simulation, participants were asked to complete the System usability scale (SUS) and NASA Task Load Index as well as a questionnaire evaluating the simulator.

Results A total of 310 participants completed the study (n = 146 DGVS, n = 164 EndoClub), comprising 114 novices, 49 beginners, and 147 experts. The majority reported no access to simulation training at their institution (83.9%), and only a minority had structured curricula available (21%). The majority of participants supported endoscopy simulation training (83.1%) and the requirement of simulation training before first patient encounters (61.9%). The majority of all three groups (novices: 74.4%, beginners: 62.2%, and experts: 63.1%) supported the introduction of the simulator at their institution, revealing rather good face validity. However, while the majority of novices (57.3%) found the simulator realistic, compared to a minority of beginners (34.9%) and experts (37.2%), revealing merely sufficient content validity. In contrast, construct validity was also favorable as experienced endoscopists completed both modules faster than novices or beginners. Criterion validity was assessed using the correlation of training time and experience level, which showed significant correlation for both exercises. The SUS yielded 75 out of 100 points (corresponding to good usability) with no discernible difference between novices, beginners and experienced endoscopists. The NASA-TLX, ranging from 0 to 600 points, reflecting level of exhaustion, exhibited a higher score in novices and beginners than experienced endoscopists (285 vs. 210 vs. 225 points, respectively, P < 0.001).

Conclusions The first validation of a novel virtual simulator demonstrated its feasibility and usability, with mostly sufficient validity. Many participants favored its implementation in endoscopy training, particularly for novice and beginner endoscopists, who were identified as the most suitable target learners. The availability of simulation training is currently not meeting the needs of trainees and trainers, demonstrating potential for inclusion in endoscopy training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP839 Infected WON – does an upfront necrosectomy improve the outcome?

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DOI 10.1055/s-0046-1822166

Aims The use of upfront direct endoscopic necrosectomy (DEN) at the index drainage of pancreatic walled-off necrosis (WON) remains controversial when compared with on-demand necrosectomy, particularly in patients presenting with severe sepsis. Moreover, the exact role of SOFA score in selecting candidates for upfront DEN has not been established yet. The aim of our study was to assess the upfront endoscopic necrosectomy for infected WON based on SOFA score > 2 in choosing upfront DEN [1–3].

Methods A retrospective analysis of a prospectively collected database was conducted on patients who underwent endoscopic drainage and necrosectomy for symptomatic pancreatic WON at one tertiary referral center between September 2023 and September 2025. Patients were divided into: Group 1 included patients with upfront DEN and infection with SOFA score > 2 and group 2 with step-up therapy with infections and SOFA score < 2 or no infection. QNI classification was used for initial characterization of WON. The choice of LAMS or plastic stent was performed by the endoscopist according to the WON features. Infection resolution was defined by clinical improvement (absence of fever and septic signs) and biochemical response (reduction of CRP < 2 mg/dl or normalization of procalcitonin). Radiological improvement was recorded when available, but was not required for defining infection clearance. Clinical success was based on radiological WON resolution < 30 mm at the 3-month imaging follow-up.

Results The distribution of patients into group 1 (n = 11) and group 2 (n = 49) was similar for age, sex, and size of WON (120.45 ± 36.95 mm vs 103 ± 40 mm), ≥ 3 quadrants involvement (54.5% vs 30.6%, $p = 0.169$) or necrosis $\geq 30\%$ (81.8% vs 49%, $p = 0.091$). Infected WON were significantly more common in the group 1 compared with the group 2 (100% vs 16.3%, $p < 0.001$).

LAMS were used similarly in the two groups (6/11, 55% in Group 1 vs 26/49, 53% in Group 2, $p = 1.00$). The mean number of DEN sessions (2.64 ± 1.57 vs 2.04 ± 1.51 , $p = 0.270$), the need for > 3 DEN (36.4% vs 22.4%, $p = 0.563$) or additional percutaneous, surgical, or ERCP procedures did not differ significantly (3/11 vs 10/49, $p = 0.690$).

Clinical success was 100% and 81.6% ($p = 0.15$), while time to infection resolution was 13.9 days in Group 1 and 10.9 days in Group 2 ($p = 0.054$). Complication rates (18.2% vs 16.32%, $p = 0.847$) and overall mortality at 3 months (0% vs 8.2%, $p = 1.00$) were similar between groups.

Conclusions Selection based on high SOFA score for upfront DEN in WON assures similar outcome to lower SOFA scores patients, without influencing the outcome, the number of DEN or additional procedures, complications or mortality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bang JY, Lakhtakia S, Thakkar S et al. Upfront endoscopic necrosectomy or step-up endoscopic approach for infected necrotising pancreatitis (DESTIN): a single-blinded, multicentre, randomised trial. *Lancet Gastroenterol Hepatol* 2024; 9 (1): 22–33. doi:10.1016/S2468-1253(23)00331-X
- [2] Yuen R, Lam B, Chan SM, Yip HC, Teoh AYB. Comparison of Direct Endoscopic Necrosectomy With Endoscopic Step-Up Approach After Endoscopic Drainage of Pancreatic Walled-Off Necrosis: Systematic Review and Meta-Analysis. *Dig Endosc*. Published online 2025. doi:10.1111/den.70021
- [3] Tsujimae M, Saito T, Sakai A et al. Necrosectomy and its timing in relation to clinical outcomes of EUS-guided treatment of walled-off pancreatic necrosis: a multicenter study. *Gastrointest Endosc* 2025; 101 (6): 1174.e1–1174.e20. doi:10.1016/j.gie.2024.11.039

eP840 Evaluating ChatGPT-5 for the Classification of Colorectal Polyp Images: A Comparative Analysis with Two Expert Endoscopists

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DOI 10.1055/s-0046-1822167

Aims Accurate characterization of colorectal polyps is essential for estimating neoplastic risk and guiding appropriate therapeutic management. However, endoscopic interpretation varies among clinicians, particularly in the classification of polyp morphology and surface patterns. Artificial intelligence (AI) systems may assist clinicians by improving diagnostic consistency.

Methods This single-center, retrospective observational study evaluated the agreement between ChatGPT-5 and two expert endoscopists in interpreting colonoscopic images of colorectal polyps. A total of 45 images were analyzed. ChatGPT-5 was prompted to assign Paris and NICE classifications and to predict neoplasia. The primary outcome was the level of agreement between ChatGPT-5 and experts across classification systems. Secondary outcomes included diagnostic accuracy for neoplasia prediction.

Results ChatGPT-5 demonstrated moderate agreement with endoscopists for neoplasia prediction ($\kappa = 0.42$), but lower agreement for Paris ($\kappa = 0.31$) and NICE classification ($\kappa = 0.39$). Diagnostic performance showed an overall accuracy of 71.1%, sensitivity 76.0%, specificity 66.7%, PPV 72.0%, NPV 71.0%, and an AUC of 0.74. Notably, ChatGPT-5 struggled with flat lesions and subtle vascular patterns, leading to discrepancies in classification compared with experts.

Conclusions ChatGPT-5 demonstrates moderate accuracy in the visual interpretation of colorectal polyp images but remains inferior to expert assessment, particularly for detailed morphological classifications. While its performance indicates potential as an adjunctive support tool, significant limitations persist, and further refinement is required before integration into routine colonoscopic decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP841V Cold- Endoscopic Submucosal Dissection: Time to Go Further?

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DOI 10.1055/s-0046-1822168

Abstract Text

Colonic ESD is increasingly popular in Western countries. However, it still not fully implemented due to its long learning curve and associated risks. A 68-year-old woman presented a 30-mm flat serrated lesion in the transverse colon with a 12-mm dysplastic area (JNET 2B, Kudo III) proposing for en-bloc resection. Cold-ESD, minimizes electrocautery to reduce thermal injury and perforation risk. After submucosal injection, a stepwise mucosal incision was created using biopsy forceps, followed by early clip-band traction. Submucosal dissection proceeded with rotatable scissor-type knives (Clutch-Cutter/Coag Dissector), enabling blunt dissection and vessel coagulation. Histology confirmed HGD with clear margins. Cold-ESD appears to enhance safety for colonic ESD. Further development of dedicated instruments may facilitate broader adoption [1–10].

Video [http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/79957f80-c2a1-409c-8d6d-4483a79d96ff/Uploads/19978_Cold_ESD%20colon%20%20min%2040%20seg%20MP4%20\(video-converter-com\).mp4](http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/79957f80-c2a1-409c-8d6d-4483a79d96ff/Uploads/19978_Cold_ESD%20colon%20%20min%2040%20seg%20MP4%20(video-converter-com).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gastric endoscopic submucosal dissection assisted by a new traction method: the clip-band technique A feasibility study in a porcine model. *Gastrointest Endosc* 2011; 74: 1137–41
- [2] Parra-Blanco A, Fraile-López M. Is it time for Cold-Endoscopic Submucosal Dissection? *Endosc Int Open* 2020; 8: E1595–E1602
- [3] Fraile-López M, Parra-Blanco A. et al. Hybrid-biopsy endoscopic mucosal resection: an effective and simple technique for flat colorectal lesions. *Endoscopy*. 2019; 51: E201–E203

eP842 A systematic review of video game interventions in technical skills training

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DOI 10.1055/s-0046-1822179

Aims Endoscopy, laparoscopy, and robotic surgery share similar training difficulties; new hand movements and interpretation of real-life three-dimensional environments on two-dimensional screens. Such adjustments overlap with video gaming which may offer repeated, low-stakes opportunities to develop the common psychomotor, visuo-spatial, and perceptual speed abilities. Whether this skill transferability may be harnessed as a training adjunct for procedural novices is the subject of multiple studies to date. This systematic review aims to summarise and analyse the evidence for the use of video game interventions in training clinical technical skills.

Methods A systematic search of PUBMED, EMBASE, CINAHL, and SCOPUS was performed using a combination of MeSH/Emtree/CINAHL/free terms. The searches were formulated using the Population (novice proceduralists), Intervention (video gaming), Comparator (any), Outcome (procedural performance) (PICO) framework. Peer review of the electronic search strategy was performed prior to search performance on October 1st, 2025. Citation searching was also performed. Inclusion criteria were full published English language texts, of prospective nature, including videogame intervention(s), aimed at procedural competency, involving healthcare professionals in training or service. Texts were excluded if no procedural assessment was performed, or medical content focused serious games were used in the intervention. Risk of bias in studies was assessed using Cochrane's ROB2 and ROBINS-I V2 tools for randomised and non-randomised studies respectively. Studies determined to be at high or serious/critical risk of bias were excluded. The systematic review was performed in accordance with PRISMA guidelines. The review was registered on PROSPERO (CRD420251159486).

Results 1418 records were identified. Following the removal of duplicates (451), abstract screening (886), eligibility evaluation (55), and bias assessment (9), seventeen records were included in the review. Two included studies pertain to endoscopy. The remainder relate to laparoscopy (9), microsurgery (3), bronchoscopy (1), suturing (1), and ultrasound (1). Narrative synthesis was performed owing to the heterogeneity of study designs and outcome measures. Two study approaches were identified; the use of video games for task warm-up, and the use of video games as non-procedural training. Of five studies using videogames for task warm-up, four demonstrated positive result elements. Positive results have been demonstrated in the contexts of both task naivety and prior exposure. Eight of twelve studies using video games as non-procedural training demonstrated positive result elements. Of all included studies, only one study included patient-based assessment. Seven studies tested clinicians, with the remainder involving students only. The Nintendo Wii was the most utilised console, used in six of seventeen studies.

Conclusions By comparison to surgical skills, there is a dearth of quality literature on the use of video games to aid the performance of novice endoscopists. Videogames have been repeatedly demonstrated to benefit technical skills performance, in the context of procedural warm-up and training. More high-quality studies are needed in endoscopy to determine if videogames may

lead to improved performance. Additionally, studies are required on the transferability of skills to patient based clinical performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP843 Argon plasma coagulation: about a series of 114 patients

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DOI 10.1055/s-0046-1822170

Aims To evaluate efficacy and safety of Argon Plasma Coagulation (APC) in the treatment of various gastrointestinal lesions

Methods This is a retrospective, descriptive, and monocentric study conducted at the gastroenterology department of the Bab El Oued university hospital, including all patients who underwent APC for various indications between January 2022 and October 2025. Data on patient demographics, indications, technical success, complications, and follow-up were collected and analyzed.

Results We collected data from 114 patients with a mean age of 67.69 years and a sex ratio of 1.92. The indications for APC were gastrointestinal bleeding related to: angiodysplasias in 45.61 % of cases (80.76 % colonic, 15.38 % gastric, and 3.86 % duodenal), radiation proctitis in 35.08 % of cases (32 cases of prostate cancer and 8 cases of cervical cancer), severe hypertensive gastropathy in 14.03 % of cases, and solitary rectal ulcer in 5.28 % of cases. Most patients required multiple APC sessions, and technical success was achieved in 111 patients (97.37 %). No complications were observed in this series.

Conclusions APC is a reliable and well-tolerated treatment option for patients with gastro-intestinal bleeding and other lesions, offering a high technical success rate and minimal risk of complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP844 EUS-guided gastrojejunostomy (EUS-GJ) vs. gastric partitioning gastrojejunostomy (GPGJ) in malignant gastric outlet obstruction (MGOO) in patients with higher survival (> 5 months): a comparative analytical study

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DOI 10.1055/s-0046-1822171

Aims The development of EUS-GJ has largely replaced GPGJ, the traditional surgical approach, for patients with MGOO. However, in patients with higher survival, there are doubts as to whether this approach offers better results, due to the lower recurrence rate it has classically been associated with.

The main objective of the study was to compare the recurrence rate of MGOO symptoms between EUS-GJ and GPGJ in patients with longer survival. The secondary objectives were to compare the baseline characteristics, survival rates, technical aspects and adverse events between EUS-GJ and GPGJ in patients with MGOO and longer survival.

Methods We designed a retrospective, single-centre, observational study. Patients with MGOO and > 5 months post-procedure survival were considered.

A search in the clinical history of these patients was conducted, including suitable patients until October 2025. We defined clinical success as the recovery of oral tolerance (GOOS ≥ 2) after the procedure and recurrence as a loss of oral tolerance (GOOS = 0) at any point after the procedure.

Results In total, 36 patients were included (26 EUS-GJ vs. 10 GPGJ). The only statistically significant differences we found in their baseline characteristics were in tumoral etiology (the GPGJ group only included gastric and duodenal tumors, while the EUS-GJ group included other etiologies, $p = 0.043$) and stricture location (the GPGJ group mostly included pyloric stricture, while the EUS-GJ group included strictures at other locations, $p = 0.081$).

There were no statistically significant differences in clinical success (100 % for both groups) or immediate adverse events (11.54 % EUS-GJ vs. 0 % GPGJ, $p = 0.262$). All the adverse events were managed during the index endoscopic procedure itself (AGREE IIIa). There were also no significant differences in the days of admission between both groups (13.3 EUS-GJ vs. 19.1 GPGJ, $p = 0.1211$). After a median survival time of 286 days, we observed 3 recurrences in the GPGJ group, compared to 1 in the EUS-GJ group. The cumulative incidence of recurrence at 6 and 12 months was 20 % and 30 % (GPGJ) vs. 3.84 % and 3.84 % (EUS-GJ). The log-rank test showed a significant difference in recurrence-free survival between both groups ($p = 0.016$). The recurrences in the GPGJ group were all managed conservatively, while the recurrence in the EUS-GJ group could be treated with the placement of a new stent.

No statistically significant differences were found between the survival rates of both groups ($p = 0.8682$).

Conclusions We found EUS-GJ is an effective approach for the treatment of MGGO in patients with longer survival. In comparison with GPGJ, EUS-GJ is less invasive, and in our study, it even presents a lower rate of recurrence. Therefore, EUS-GJ could be considered as a first-line therapy for these patients. However, these results need to be confirmed with prospective intervention studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP845 Endoscopic Management of Biliary Complications Post-Liver Transplant: A 5-year national experience from Bulgaria

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DOI 10.1055/s-0046-1822172

Aims Investigate the rate and types of biliary complications post-liver transplant and the management via endoscopic treatment in Bulgaria.

Methods A retrospective observational study was conducted on 37 patients who underwent orthotopic liver transplantation (OLT) from a deceased donor over five years (from May 2021 until Sept 2025). Biliary complications were assessed through patient history, lab tests, and imaging (computed tomography (CT)/magnetic resonance cholangiopancreatography (MRCP). Endoscopic treatment was performed via endoscopic retrograde cholangiopancreatography (ERCP). We utilized frequency distribution to analyze the occurrence of various biliary complications and descriptive statistics to assess the proportion of patients who achieved successful endoscopic treatment.

Results Fourteen patients (approximately 37.8 %) experienced biliary complications – had signs of cholangitis, jaundice or pruritus, presented with elevated liver enzymes with or without high bilirubin levels, had CT/MRCP showing biliary changes. Early complications (within 6 months) were noted in 11 patients; late complications (after 6 months) in 3. Main complication was stenosis of the biliary anastomosis (10 patients), the remaining 4 patients experienced the following complications: 2 had necrosis at the biliary anastomosis site, 1 presented with a leakage, and 1 had both leakage and stenosis at the biliary anastomosis. Nine patients were treated endoscopically, 4 surgically, and 1 conservatively. Eight of these 9 patients had stenosis of the anastomosis.

The endoscopic group showed a resolution rate of 66.7 % (6 out of 9), 2 other patients are still undergoing treatment, and 1 patient unfortunately passed away due to complications related to thrombosis of the arterial anastomosis and sepsis. Six patients were treated with multiple plastic stents, and 3 patients received self-expandable metal stents (SEMS). For the group treated with plastic stents, an average of 5 ERCP procedures and 3 or 4 stents were required for successful treatment. In the SEMS group, 2 patients achieved resolution of the stenosis after a single ERCP session for stent insertion, with the SEMS removed after 10 months. The use of single-operator cholangioscopy (SOC) aided complex cases (3 patients).

Conclusions The incidence of biliary complications has decreased in recent years (from 42.8 % in previous years (2007-2019, no OLT were performed in 2020) to 37.8 % in the study period). The predominant issue identified was stenosis of the biliary anastomosis, which occurred in the majority of cases. Endoscopic treatment emerged as a key approach. Notably, the use of SEMS proved effective, with successful outcomes achieved after fewer ERCP sessions compared to plastic stents which leads to lower risk of infections in this immunocompromised cohort of patients and also lower costs. However, the small sample size limits definitive conclusions. The implementation of single-operator cholangioscopy (SOC) also showed promise in addressing complex cases. Further studies with larger cohorts are warranted to refine treatment protocols and improve patient outcomes in this challenging area of post-transplant care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP846 A rare case of upper gastrointestinal bleeding: A diagnosis hidden in the dark

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DOI 10.1055/s-0046-1822173

Abstract Text

A 74-year-old woman presented to the emergency department with a three-day history of nausea, vomiting and melena. Her medical history included chronic obstructive pulmonary disease and a curative resection of pancreatic adenocarcinoma with duodenojejunostomy performed three months ago. Her regular medication included torsemide, pantoprazole, pravastatin, duloxetine and olanzapine, while recent intake of other substances was denied. On admission she was hypotensive, hypothermic and she had a heart rate of 93 bpm. The further clinical physical examination was unremarkable. Laboratory testing revealed markedly elevated inflammation parameters while hemoglobin and lactate levels were normal.

Emergency esophagogastroduodenoscopy (EGD) was performed for suspected gastrointestinal bleeding and revealed a circumferential black discoloration of the lower two thirds of the esophagus with a sharp demarcation at the gastroesophageal junction and no involvement of the stomach. Beyond the stomach, the small intestine also exhibited blackened friable mucosa. No active bleeding was detected. (Panel A)

Based on the clinical, laboratory and endoscopic findings, what is the diagnosis? - Acute esophageal necrosis (AEN) accompanied by concurrent small bowel necrosis was established.

AEN, also known as "black esophagus", is associated with high mortality rates of about 30 % [1, 2]. AEN is commonly associated with cardiovascular disease, malignancy, hyperglycemia, malnutrition, cocaine use and sepsis. [3, 4].

Patients commonly present with signs of gastrointestinal bleeding, with the diagnosis typically made via endoscopy. While some cases of AEN have been reported previously, simultaneous small bowel involvement is very rare [2].

The pathogenesis of this phenomenon is incompletely understood and probably results from synergistic effects of ischemic insult and impaired mucosal defense against gastric acid, particularly in the hypoperfused regions supplied by the celiac axis. Further management includes the exclusion of complications such as esophageal perforation, supportive pharmacotherapy with proton pump inhibitors and treatment of comorbidities.

Subsequent contrast-enhanced tomography showed no signs of perforation or vascular abnormality. The patient was treated with high-dose proton pump inhibitors and broad spectrum antibiotics. A follow-up EGD on day three revealed substantial mucosal healing (Panel B). Enteral nutrition was gradually reintroduced and tolerated well. Inflammatory parameters normalized and the patient was referred to a local hospital for further rehabilitation after 14 days.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kupferman J, Lourdasamy V, Novikov A et al. Mo1374 ACUTE ESOPHAGEAL NECROSIS: A COMPLETE PUBMED REVIEW OF ALL CASE REPORTS FROM 1990 – 2021. *Gastroenterology* 2023; 164: S-841–S-842. doi:10.1016/s0016-5085(23)02944-x
- [2] Gurvits GE, Shapsis A, Lau N et al. Acute esophageal necrosis: A rare syndrome. *J Gastroenterol* 2007; 42: 29–38. doi:10.1007/S00535-006-1974-Z/METRICS
- [3] Gurvits GE, Cherian K, Shami MN et al. Black Esophagus: New Insights and Multicenter International Experience in 2014. *Dig Dis Sci* 2015; 60: 444–453. doi:10.1007/S10620-014-3382-1/TABLES/1
- [4] Sako A, Kitayama J, Inoue T et al. Black oesophagus—cause? *Gut* 2005; 54: 192–192. doi:10.1136/GUT.2004.044784

eP847 Recurrent periampullary bleeding in a transplant recipient: Navigating a complex clinical scenario

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DOI 10.1055/s-0046-1822174

Abstract Text

A 76-year-old male liver-transplant recipient (HBV-associated cirrhosis with prior HCC) initially presented for routine check-up without complaints. Shortly afterwards, he developed a superficial leg vein thrombosis and was started on rivaroxaban by his GP. Three weeks later, he returned with weakness and melaena to our hospital. Laboratory tests revealed severe anaemia (haemoglobin 6.5 g/dL) with otherwise stable liver and renal parameters. Emergency gastroscopy showed active periampullary bleeding with clot and a suspected subepithelial mass. A side-view examination was attempted but adequate visualization was impossible due to persistent bleeding. CT angiography demonstrated active extravasation from the gastroduodenal artery and a 2.9-cm duodenal mass. Selective angiography confirmed bleeding from the pancreaticoduodenal arcade, which was temporarily controlled by embolization. Subsequent ERCP excluded papillary bleeding but revealed an infiltrative periampullary lesion. Histology confirmed moderately differentiated duodenal adenocarcinoma. Staging showed no metastases, and surgery was planned. In March, exploratory laparoscopy demonstrated tumour infiltration of the mesenteric root, rendering resection unfeasible. Palliative treatment was initiated. Following surgery, galliferous wound drainage and cholangitis developed, accompanied by multiple enterocutaneous fistulas requiring continuous wound-bag management. Progressive distal bile duct obstruction prompted repeated ERCPs with metal-stent placement and extensive lavage. Due to pronounced intra- and extrahepatic cholestasis with severe cholangitis, an emergency CT-guided PTC was placed but could not be internalized into the small intestine. Via subsequent ERCP a covered self-expandable metal stent was placed to allow for internal drainage.

The patient's condition deteriorated with abdominal pain, weakness, and malnutrition. Planned palliative chemotherapy was cancelled owing to reduced

performance status. He was transferred to the palliative care unit 2 months later with ECOG 3–4 status, persistent fistulas, post-prandial pain, and general decline. Supportive care included nutritional support, analgesic optimization, antibiotics for recurrent cholangitis, wound and stoma care, physiotherapy, and psycho-oncology. Gradual stabilization allowed discharge to a hospice care 1 month later, where he passed shortly thereafter.

This case underscores the complexity of managing periampullary malignancy in transplant recipients, requiring tightly coordinated multimodal and palliative care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP848 Upper esophageal sphincter (UES) alterations in achalasia before and after per-oral endoscopic myotomy (POEM): a prospective observational study protocol and evidence-based rationale

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DOI 10.1055/s-0046-1822175

Aims Alterations of the upper esophageal sphincter (UES) are frequently reported in patients with esophageal achalasia and appear to relate to the degree of esophageal pressurization and impaired bolus transit. Several retrospective and short-term series suggest that POEM, while targeted to the lower esophageal sphincter (LES), may also change proximal esophageal motility and reduce UES resting and residual pressures with symptom improvement.

The aim of the study was to prospectively quantify UES structural/functional abnormalities in treatment-naïve achalasia patients, and to determine the long-term effects of POEM on UES metrics, proximal esophageal motility, and relevant clinical outcomes (dysphagia, regurgitation, cough, aspiration risk) [1].

Methods Study design: single-center prospective observational cohort.

Population: consecutive adult patients with manometrically confirmed achalasia (Chicago Classification v4.0) scheduled for primary POEM.

Assessments and timing: High-resolution manometry (HRM) with standardized UES protocol (resting pressure, residual pressure during wet swallows), at baseline and 12 months post-POEM.

Symptom scores: Eckardt score at baseline and 12 months after POEM

Primary endpoint: change in UES basal and residual pressure (pre- to 12 month post-POEM) 1) evaluation of changes in UES pressures before and after POEM; 2) correlation between Eckardt score and changes in UES pressures.

Secondary endpoints: try to obtain a cut-off value of UES change and symptom improvement (Eckardt score) after POEM; define risk factors to residual UES dysfunction.

Results Out of 179 patients from 2019 to 2024, 27 were selected for the present study. 152 have missing data needed to obtain primary and secondary outcomes or were affected by other esophageal motility disorders. Three patients had achalasia type I with mean UES basal pressure 51,5 mmHg with mean residual pressure 9,3 mmHg. After POEM, these patients had mean UES basal pressure 86,7 mmHg and UES residual pressure 10,7 mmHg.

Eckardt score generally decreased in these patients with a mean 7 before and a mean 2 after POEM.

22 patients had type II achalasia with mean UES basal pressure 75,1 mmHg and residual pressure 17,7 mmHg. After POEM, mean UES basal pressure became 66,9 mmHg and residual pressure 9,5 mmHg. Eckardt score generally decreased also in this group with a mean value of 8 before and a mean value of 1 after POEM.

The remaining two patients had type III achalasia with a mean UES basal pressure 45,8 mmHg and residual pressure 6,4 mmHg. After POEM, mean UES basal pressure and residual pressure were reported respectively 52,6 mmHg and 2,8 mmHg.

Eckardt score decreased in both cases from a mean of 8,5 to a mean of 1 after POEM.

Although in type I and III significant correlations cannot be found due to the small number of patients, in type II patients > 65 years tend to have lesser post-POEM UES pressures decrease (mean pre-POEM UES basal 45,5 mmHg residual 15,3 mmHg vs post-POEM UES basal 42,2 mmHg residual 10,3 mmHg). Furthermore, higher post-POEM UES residual pressure > 12 mmHg was related to higher Eckardt score that points to a role of UES pressure on dysphagic symptoms (mean post-POEM Eckardt score 3 vs mean post-POEM Eckardt score 1,2).

Conclusions Our prospective, standardized evaluation of UES metrics before and after POEM evidenced the prevalence and mechanisms of proximal sphincter dysfunction in achalasia, define the UES recovery after LES myotomy especially in achalasia type II, and identify older age and post-POEM UES residual pressure > 12mmHg as risks for persistent symptoms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lin S, Luo T, Chen Z, Zhu Y, Weng S, Jiang W, Gao H. Upper Esophageal Sphincter Abnormalities and Esophageal Motility Recovery After Peroral Endoscopic Myotomy for Achalasia. *Dysphagia*. 2025; 40 (4): 759–766. doi:10.1007/s00455-024-10773-4 Epub 2024 Nov 26 PMID: 39592506 PMID: PMC12328482

eP849 The role of Detective Flow Imaging- Endoscopic Ultrasound in the characterization of unexplained biliary strictures: a retrospective study

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DOI 10.1055/s-0046-1822176

Aims A biliary stricture is a narrowing of the bile ducts with upstream dilatation. Since most cases are malignant, histological diagnosis is essential. ESGE guidelines recommend an integrated diagnostic approach that combines multiple techniques to improve diagnostic accuracy. In this setting, Endoscopic ultrasound (EUS) tissue acquisition (TA) has demonstrated good sensitivity (83%) being the preferred diagnostic modality for both imaging and TA, even in absence of abnormal laboratory test. The introduction of ancillary techniques as DFI (Detective Flow Imaging), which enables the detection of low-velocity blood flow without the use of contrast media, represents a potential useful addition in the diagnostic algorithm. The aim of this study is to assess the feasibility of performing the novel DFI-EUS technique in the setting of biliary stricture and its capability to evaluate the presence and type of stricture microvascularization [1–3].

Methods Single-centre retrospective study on the role of EUS-DFI in characterizing unexplained biliary strictures and CBD dilatation. We included consecutive patients with unexplained biliary strictures/CBD dilatation who underwent biliopancreatic EUS between January 2024 and October 2025 at the Digestive Diseases Unit of Sant'Andrea University Hospital, Rome. A convex

echoendoscope (EG-740UT; Fujifilm) and an ultrasound system (ARIETTA 850; FUJIFILM Medical Co., Ltd., Tokyo, Japan) were used. During EUS for biliary stricture evaluation (lesions or thickening of CBD wall), DFI was performed and if microvascularization was observed, vascular pattern was classified as regular or irregular. Results were compared with the final diagnosis, defined by histopathology obtained with EUS-TA or ERCP-based sampling and/or ≥ 6 months clinical follow-up as gold standard. TA was performed with EUS-FNB (fine needle biopsy) and/or ERCP (Endoscopic Retrograde Cholangiopancreatography) intraductal biopsies/brushing (► Table 1).

► Table 1

Type of CBD Stricture (n = 19)	Hypovascularization (n = 2)	Microvascularization (n = 17)	Regular pattern (n = 3)	Irregular pattern (n = 14)
Fibroinflammatory (n = 4)		3/3	2	1
PDAC (n = 4)	1/4	3/4		3
Cholangiocarcinoma (n = 8)		8/8		8
Dysplasia (n = 3)	1/3	2/3		2

Results Nineteen patients included (12(63%) male; median age 75). All underwent MRI/ Contrast-Enhanced CT as first line imaging: 4(21.1%) had a perihilar stricture, 14 (73.7%) a medio-distal, 1(5.3%) had “in toto” CBD thickening. Among all, EUS identified 16 (84%) lesions (mean diameter 17 mm) and 3 (15.8%) CBD wall thickening. Eighteen (94%) strictures were hypoechoic, 1 (6%) isoechoic. EUS-TA was performed in all patients, revealing 12(63%) malignancies (8 cholangiocarcinomas, 4 PDAC), 3 (16%) dysplasias, 4 (21%) fibroinflammatory strictures. In 6 cases (31.6%) a second look TA < 6 months was needed to obtain the final diagnosis. In all pts DFI-EUS was feasible. Microvascularization was detected in 17 cases (89%), with an irregular pattern observed in 14(73.7%) patients. Among these, 8(57%) cholangiocarcinoma, 3(14.3%) PDAC, 2(14.3%) dysplasia, 1(7.1%) inflammatory disease. A regular pattern was detected in 3 (15.8%); all benign strictures). Hypovascularization was shown in 2(10.5%) cases (1 PDAC; 1 dysplasia).

Conclusions In a small cohort of patients with indeterminate biliary strictures, the novel DFI-EUS technique proved to be feasible for assessing microvascularization in CBD stenosis and revealed characteristic irregular patterns or hypovascularization in malignant lesions and dysplasia. Further prospective studies with larger population are needed to confirm these preliminary findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Yamashita Y. et al. Novel Technique of Endoscopic Ultrasonography for the Differential Diagnosis of Gallbladder Lesions and Intraductal Papillary Mucinous Neoplasms: A Single Center Prospective Study. *Diagnostics* 13: 2132 2023
[2] Yamashita Y. et al. A Novel Endoscopic Ultrasonography Imaging Technique for Depicting Microcirculation in Pancreatobiliary Lesions without the Need for Contrast Enhancement: A Prospective Exploratory Study. *Diagnostics*. 11: 2018; 2021
[3] Facciorusso A. et al. Diagnostic work up of bile duct strictures: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 57 (166): 185 2025

eP850 Performance of TOP100 Software in Detecting Key Small Bowel Findings at Capsule Endoscopy

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DOI 10.1055/s-0046-1822177

Aims Capsule endoscopy (CE) is a non-invasive diagnostic modality that has become a valuable tool for evaluating small bowel (SB) pathology. Despite its clinical value, it is limited by the time required for complete video interpretation and the associated reader fatigue. Studies have shown that accuracy drops even in the hand of experts after just one video. Artificial intelligence software has been developed to assist the reporting process. TOP100 is an integrated software that selects 100 images most likely to contain abnormalities (1). The aim of this study was to assess the overall diagnostic performance of TOP100 for specific SB findings in real-life clinical practice, by comparison with the standard reader together with its performance across different clinical indications [1].

Methods A retrospective single-centre cohort study was conducted at our tertiary referral centre. We included all consecutive patients who underwent CE using the PillCam SB3 system between January 2024 to August 2025. Data collected included: baseline demographics, comorbidities, previous endoscopy and laboratory findings, indications for CE, adequacy of bowel preparation. CE findings were compared between the standard reader (SR) and a second reader using the TOP100 images, who was blinded to the original report. All CE readers had read > 500 CE in their lifetime.

The sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of TOP100 were compared to the SR (gold standard) for each type of CE finding (inflammatory, bleeding etc). A sub-analysis of diagnostic accuracy was also performed based on the CE indication.

Results A total of 812 patients were included, however 5 were excluded from the analysis, with 3 unable to swallow the capsule and 2 lacking available Top100 readings. The final analysis comprised of 807 patients (57% female, median age 53 years, IQR 34–65). The most common indications were suspected or known inflammatory bowel disease (IBD) (50%), and iron-deficiency anaemia (24%). In 88% of patients the bowel prep was adequate and 90% had a complete examination. Median SB transit time was 3h51mins (2h46 – 4h50m).

The diagnostic yield of findings at CE was significantly higher by SR compared to TOP100 (40% vs 29%, $p < 0.01$). For any indication, the sensitivity and specificity of TOP100 for active bleeding was 58% (54%–61%) and 97% (95%–98%), and for angiodysplasias was 58% (54%–61%) and 97% (95%–98%), respectively. In patients with overt bleeding, TOP100 identified 80% of the total angiodysplasias and 71% of active bleeding reported by SR, with a sensitivity and specificity for P2 lesions of 65% (59%–77%) and 100% (100%–100%), respectively. The overall sensitivity and specificity of TOP100 for ulcers was 53% (49%–56%) and 96% (94%–97%), and for erosions was 40% (40%–44%) and 90% (88%–92%). In patients with suspected or known IBD, the diagnostic performance of TOP100 for ulcers was similar, while sensitivity improved for erosions by almost 12%.

Conclusions SR remains the reference standard for reading and reporting CE, however TOP100 can be a useful tool for quick preview of the video to assist in capsule reading and identifying cases that needs to be prioritized – especially in high volume centres. The diagnostic performance is also dependent on the indication of CE with improved performance noted in bleeding and IBD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Giordano A, Romero-Mascarell C, González-Suárez B, Guarner-Argente C. Integration of Artificial Intelligence-Enhanced Capsule Endoscopy in Clinical Practice: A Review of Market-Available Tools for Clinical Practice. Dig Dis Sci

2025; 70: 2966–2976. doi:10.1007/s10620-025-09099-4 Epub 2025 Jun 9 PMID: 40490597 PMID: PMC12411590

eP851V Complex Hepatico-jejunostomy Stricture (HJS): Single-session Drainage using EUS-guided Hepatico-jejunostomy via LAMS to salvage failed EUS-Directed trans-Enteric ERCP (EDEE)

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DOI 10.1055/s-0046-1822178

Abstract Text

EDEE failed despite successful through-the-LAMS limb access in a post-Whipple patient with relapsing cholangitis and a complex benign HJS without intrahepatic dilatation. Direct jejunal EUS-guided needle puncture from the efferent jejunum allowed target distention and freehand 20-mm LAMS placement into the afferent limb. After jejuno-jejunal LAMS-balloon dilation a gastroscope was advanced to the HJS. The surgical anastomosis could not be found. A linear EUS scope was then carefully passed through the LAMS. The left hepatic duct was imaged and punctured under combined EUS & fluoroscopy. Cholangiography confirmed bilateral HJS stricture with sclerosing cholangitis. A plastic stent was placed into the LHD from the afferent jejunum. Post-procedure bleeding was managed endoscopically and biliary drainage re-established.

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1d8669fa-f292-4a00-a1c0-9c02f14e2f33/Uploads/19978_EDEE_ESGE_26\(1\).mov](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1d8669fa-f292-4a00-a1c0-9c02f14e2f33/Uploads/19978_EDEE_ESGE_26(1).mov)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP852 Interest of Colonic Stents in the Management of Tumor-Related Bowel Obstruction

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DOI 10.1055/s-0046-1822179

Aims Bowel obstruction is a common clinical manifestation in colorectal cancer, occurring in up to 29% of cases, and the prognosis for these patients is significantly worse at the same stage. Self-expanding metal colonic stents represent a therapeutic alternative to surgery for the urgent relief of acute colonic obstruction prior to curative surgery or for palliative treatment in inoperable patients. The aim of this study is to evaluate the effectiveness of self-expanding metal colonic stents and to define their role in the management of tumor-related colonic obstruction.

Methods This is a retrospective study conducted in our department over a 4-year period between September 2021 and September 2025. Twenty-five patients with tumor-related colonic obstruction who were treated with colonic stents were included.

Results The mean age of our patients was 53 years, with a sex ratio of 2.57. Most patients presented clinically with a bowel obstruction syndrome, including cessation of stool and gas passage. Abdominal X-rays showed air-fluid levels in all patients, and CT scans revealed a stenosing colonic tumor with upstream bowel dilation in 19 patients.

The indication for colonic stent placement was palliative in 20 cases and pre-operative in 5 cases. All patients underwent stent placement via colonoscopy under general anesthesia.

Subsequent treatments following stent placement included chemotherapy in 11 cases, curative surgical resection in 5 cases, and a stoma in 2 cases, while the remaining 7 patients received no further treatment.

The technical success rate, defined by proper placement and deployment of the colonic stent, was 95 %. Clinical success, defined as relief of colonic obstruction within 48 hours without the need for re-intervention, was achieved in 90 % of cases.

Immediate outcomes were favorable in all patients. No immediate complications were reported, and the mean hospital stay was three days. Stent migration occurred in one patient after 8 months.

Conclusions Colonic stents represent an effective alternative to surgical treatment for symptomatic tumor-related colonic strictures, either to allow preparation for elective curative surgery or for palliative purposes before initiating potential chemotherapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP853 Endoscopic Treatment Rationale of Gastric Antral Vascular Ectasia (GAVE): a type-based efficient approach

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DOI 10.1055/s-0046-1822180

Aims Gastric antral vascular ectasia (GAVE) is an uncommon but clinically significant cause of chronic gastrointestinal bleeding and iron-deficiency anemia. Endoscopic therapy is the mainstay of treatment, particularly when medical management is insufficient. Multiple modalities have been evaluated, with differences in depth of injury, technical complexity, durability, and recurrence rates. Missing data on therapy related to morphology of GAVE are still awaiting [1].

The aim of the present study was to start to fill the literature gap to define an endoscopic rationale for treatment of GAVE

Methods A retrospective analysis on endoscopic treatment of GAVE was conducted in our tertiary referral center. The patients were divided in two groups depending on the morphology of GAVE: diffuse or nodular type. Primary endpoint was clinical success based on absence of Hb decrease and no need for blood transfusion at 6 months. Statistical analysis was accordingly performed.

Results 277 patients were included in the present study, 195 affected by diffuse type and 82 by nodular type. All patients with diffuse type were treated by thermal ablation (APC or dual emission laser ablation) showing 80 % of clinical success as defined in Methods. No patients with clinical insuccess were treated by EBL in this group.

Patients with nodular type were generally treated by APC as first line treatment (80 patients) and in two cases directly by EBL. APC treatment showed in this setting 60 % of clinical success (significantly lower than in the diffuse type). Furthermore, only 20 patients out of 80 were treated by EBL as secondary approach. These patients showed a cumulative clinical success of 87,5 %.

Statistical analysis confirmed a significant difference of clinical success in nodular type group between APC treatment and EBL ($p = 0,01$).

Conclusions Our study preliminarily demonstrate that thermal ablation is effective in diffuse type of GAVE while nodular type is better treated by EBL.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sato T et al. Endoscopic Band Ligation versus Argon Plasma Coagulation for GAVE: A Comparative Study. *Endoscopy*. 2012;

eP854 Real-World Performance and Diagnostic Yield of Dual-Camera MiroCam Small Bowel Capsule Endoscopy in the United Arab Emirates: Analysis of 463 Consecutive Procedures

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DOI 10.1055/s-0046-1822181

Aims Small bowel capsule endoscopy (SBCE) is a key modality for evaluating obscure gastrointestinal bleeding, iron-deficiency anemia, and suspected small bowel disease. The dual-camera MiroCam capsule, increasingly used in the United Arab Emirates (UAE), provides enhanced mucosal visualization. Real-world data OK from the region remain limited. This study evaluates the performance and diagnostic patterns of SBCE using the dual-camera MiroCam system in routine clinical practice.

Methods A retrospective review of 463 consecutive SBCE examinations performed in a UAE tertiary center was conducted. Variables collected included demographics, completion rate, visualization quality, capsule retention, and predefined diagnostic categories (normal, inflammatory, ulcerative, vascular, structural). Descriptive statistics were generated.

Results A total of 463 patients were included (mean age 48.7 years, 55 % female). Technical performance was high:

- **Completion rate: 92 %**
- **Good/fair visualization: 96 %**
- **Capsule retention: 2.6 %** Diagnostic patterns ($n = 463$):
- **Normal studies:** 32.4 % (150/463)
- **Inflammatory lesions (mild-severe):** 36.1 % (167/463)
- **Vascular lesions:** 16.8 % (78/463)
- **Ulcerative lesions:** 11.2 % (52/463)
- **Structural abnormalities:** 1.9 % (9/463)

Inflammatory and vascular findings accounted for the majority of abnormal examinations. The dual-camera system provided high-quality visualization throughout the small bowel, supporting detection of both subtle and extensive lesions.

Conclusions In this real-world UAE cohort, dual-camera MiroCam SBCE demonstrated excellent completion and visualization rates with a low retention rate. Clinically relevant abnormalities were identified in over two-thirds of abnormal studies. These findings support the routine clinical use of dual-camera MiroCam SBCE for comprehensive small bowel evaluation in the UAE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP855 Elevated eosinophil count at diagnosis is associated with the need for second-line treatment in patients with eosinophilic esophagitis (EoE)

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DOI 10.1055/s-0046-1822182

Aims Evaluation of prognostic factors associated with proton pump inhibitors (PPIs) treatment failure and the need for second-line therapy in patients with EoE.

Methods Retrospective study of patients with EoE treated with PPIs, during the decade 9/2013-9/2023. Data were collected prospectively. Demographic, clinical, endoscopic [Endoscopic Reference Score – EREFS] and histological characteristics were analyzed at diagnosis, at 24 weeks and then annually. Non-response was defined as a decrease of <50 % in the Dysphagia Symptom Questionnaire (DSQ) score and/or >15 eosinophils/hpf at histology at week 24,

while loss of response was defined as a relapse of the same parameters at the week 52 after an initial response.

Results Thirty-five patients (26Males/9Females), with a median age of 37 years [IQR (31-56)] and a median follow-up of 45 months [IQR (19-116)], were included. All patients received initial treatment with PPIs. Six (17.1 %) patients required second-line treatment, five (14.3 %) due to lack of initial treatment response and one (2.8 %) due to loss of response to PPIs within 20.5 months, [IQR (14.2-61)]. The number of eosinophils at histology at diagnosis [44.5 IQR (41.5-66.3)] was higher than in PPIs responders [35, IQR (26-42)] ($p = 0.009$). These patients were also younger (median age 31.0 vs 30.5) and had a higher DSQ at diagnosis (mean 4.33 ± 0.76 vs 4.10 ± 0.24) though without statistically significant differences. In the ROC curve ($AUC = 0.845$, $p = 0.009$), the eosinophil count ≥ 41 predicted the need for second-line therapy with a sensitivity of 83.3 % and specificity of 71.4 % ($PPV = 37.4\%$, $NPV = 95\%$).

Conclusions 1) An increased number of eosinophils histologically at diagnosis is strongly correlated with failure of first-line treatment with PPIs in patients with Eosinophilic Esophagitis. 2) It may help predict PPI failure and indicate the need for earlier aggressive treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

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eP856 A Gut Feeling? The role of faecal calprotectin in endoscopy

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DOI 10.1055/s-0046-1822183

Aims This retrospective study of 8264 patients in the Western Trust aims to establish the threshold at which faecal calprotectin levels are correlated with colonoscopy findings.

Methods The following retrospective observational study included a total of 8,264 patients who underwent colonoscopy at the Western Trust between 2022 and 2024. NIECR was used to view endoscopy reports. This allowed for a comparison of referral reasons and findings on colonoscopy, and subsequent correlation with FC levels, if included in the referral. Referral reasons included: raised faecal calprotectin over $50 \mu\text{g/g}$, altered bowel habit, PR bleeding, IBD screening, IDA workup, and polyp/cancer screening. Findings on colonoscopy included polyps, Diverticulosis, haemorrhoids, known IBD, non-specific inflammation, tumours, new IBD, and normal findings.

Results Referral indications were: polyp/cancer screening (3,060), altered bowel habit (2,058), PR bleeding (1,627), iron deficiency anaemia (IDA) workup (446), raised FC (413), and IBD assessment (660). The Colonoscopy findings included polyps (2,959), Diverticulosis (1,736), haemorrhoids (941), known IBD (453), non-specific inflammation (248), tumours (161), new IBD (63; CD 10, UC 53), and normal findings (1,689).

Among the 413 patients referred for raised FC, 25 (6 %) were only diagnosed with new IBD (Female 10; Male 15; average age 46). The referral indications of the remaining 38 newly diagnosed IBD patients were PR bleeding (12), IBD screening (8), altered bowel habit (9), polyp/cancer screening (5), and IDA workup (4).

The vast majority of new IBD cases (70 %) had FC levels $> 300 \mu\text{g/g}$. Interestingly, the scope findings in the remaining 350 patients referred with raised FC were, Haemorrhoids (43), 25 % had FC levels $> 300 \mu\text{g/g}$, Diverticulosis (98) 25 % had FC levels $> 300 \mu\text{g/g}$, Polyps (62) 29 % had FC levels $> 300 \mu\text{g/g}$, indeterminate colitis and radiation proctitis (24) 37 % had FC levels $> 300 \mu\text{g/g}$, Tumour (7) 42 % had FC levels $> 300 \mu\text{g/g}$, Normal (116), 22 % had FC levels $> 300 \mu\text{g/g}$.

Conclusions The study results affirm that although FC is as useful as a screening tool for IBD — particularly at levels greater than $300 \mu\text{g/g}$ — its value remains limited. One should be mindful of this when considering isolated rises in FC. Such results should be interpreted in the context of clinical presentation. Establishing a local threshold for FC-guided referral is thus essential to ensure

appropriate use of endoscopy services for patients with gastrointestinal symptoms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP857 Conscious sedation failure in diagnostic endoscopic ultrasound: a single-centre study

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DOI 10.1055/s-0046-1822184

Aims Conscious sedation (CS) failure in diagnostic endoscopic ultrasound (dEUS) remains poorly characterised. Understanding the demographic and clinical characteristics of patients who experience sedation failure with CS during dEUS is useful for risk stratification and the development of pre-procedural screening tools.

This study aims to characterise patients experiencing CS failure during dEUS procedures at a tertiary referral centre.

Methods A retrospective analysis was conducted on all patients undergoing dEUS, between October 2024 and September 2025. CS failure was defined as an incomplete procedure attributed to inadequate patient tolerance of sedation (agitation, paradoxical reaction, or intolerance to standard sedation regimens). Demographic data, comorbidities, sedation dosages, and clinical outcomes were extracted and described.

Results Thirteen patients (1.7 % of 765 procedures) experienced CS failure. The cohort was predominantly female (61.5 %, $n = 8$) with median age 60 ± 13.9 years (range 33–78). 23.1 % were current smokers ($n = 3$) and 15.4 % ex-smokers ($n = 2$). 23.1 % reported active alcohol use ($n = 3$). Complex comorbidities were prevalent, including chronic obstructive pulmonary disease ($n = 2$), chronic kidney disease/end-stage renal disease ($n = 2$), type 2 diabetes mellitus ($n = 2$), and psychiatric conditions including depression and prior intravenous drug use ($n = 2$). Despite high sedation doses – mean fentanyl $104.2 \pm 30.3 \text{ mcg}$ and mean midazolam $5.8 \pm 1.7 \text{ mg}$ – these patients failed to achieve adequate sedation. Procedural indications were predominantly pancreatic ($n = 8$) and biliary pathology ($n = 2$). Nine of these patients went on to have an EUS under general anaesthesia (GA). Of the remaining patients, one was referred for CT guided biopsy while the others were managed with non-invasive surveillance after multidisciplinary team discussion. There were no post-procedure adverse events at 30-day follow-up.

Conclusions In general, CS appears to be effective and well-tolerated for dEUS. Patients experiencing CS failure demonstrate a distinct clinical phenotype characterised by female predominance, and alcohol and smoking use history. Pre-procedural identification of these "hard-to-sedate" characteristics may enable risk-stratified sedation planning, with consideration for alternative approaches including deep sedation or general anaesthesia to improve procedural success and patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP858 Gastric pH Changes after Sleeve Gastrectomy and Roux-en-Y Gastric Bypass: preliminary results of a tertiary referral center

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DOI 10.1055/s-0046-1822185

Aims Alterations in esophageal acid exposure are an important physiologic consequence of bariatric procedures and are closely linked to gastro-oesophageal reflux disease (GERD) symptoms and mucosal injury. Sleeve gastrectomy (SG) has been associated with new or worsened acid exposure in many series,

while Roux-en-Y gastric bypass (RYGB) is generally reported to reduce esophageal acid exposure and improve reflux [1].

The aim of the study is to evaluate if any alteration exists in gastric pH before and after bariatric surgery due to anatomical alterations.

Methods A prospective study was designed to determine gastric pH during EGDS before and after bariatric surgery. Gastric pH was measured by aspiration of gastric pool during endoscopy. Comparison between patients who underwent SG and RYGB was performed to assess differences using chi-squared test. As secondary aim, esophagitis was considered as GERD index in both categories.

Results Till present date, 36 patients were studied. The complete trial will comprehend 100 patients.

Preliminary analysis shows a general decrease of gastric pH after bariatric surgery (mean preop value = 1.6 vs mean post-op value = 3.9, p value = 0.01) both in SG (mean post-op value = 3.7) and RYGB (mean post-op value = 4.1) without significant difference (p value = 0.1). Esophagitis was reported preoperatively in 8 patients (grade A in 4, grade B in 3, grade C in 1) and all these patients underwent gastric bypass. After bariatric surgery, esophagitis was seen in 8/22 patients (36.3%) after SG and 0/14 after RYGB.

Conclusions Bariatric surgery shows a significant reduction of gastric pH in both SG and RYGB. This datum shows that GERD after SG is mainly related to increased pressure of the gastric remnant and underline the potential role of hypochloridia in post-bariatric malabsorption.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Mansour AMFM et al. Impact of Sleeve Gastrectomy and Roux-en-Y Gastric Bypass on reflux and quality of life: comparative long-term outcomes. *Obes Surg.* 2025;

eP859 Impact of Knife Size and Saline-Optimized Electrosurgical Modes on Tissue Effects in Saline-Immersion Third-Space Endoscopy

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Aims Saline-immersion therapeutic endoscopy (SITE) enhances visualization and hemostasis, but it alters electrosurgical behavior due to the high conductivity of saline, which reduces tissue impedance and voltage stability. These effects may vary depending on the knife size, as electrode diameter influences current density.

Methods An ex-vivo porcine gastric mucosa model was used to compare three electrosurgical knives with different sizes, namely one with a thick electrode (Hybrid Knife T-Type, 1.5 mm), and two with thin electrodes (HYBRID Knife flex I-Type, 0.5 mm; Dual Knife J-Type, 0.4 mm). This was performed in air and under saline across seven electrosurgical modes (2 cutting, 3 coagulation and 2 dissection modes). Electrical parameters (impedance, peak voltage, power output), cutting success, and lateral thermal spread, were measured during 252 standardized incisions. Statistical analysis was performed using both univariate and multivariate methods.

Results The average decrease in impedance when passing from air to saline immersion was higher for thick as compared with thin knives (92% vs. 55%,

$p < 0.001$) across multiple modes. Corresponding increase in power was also higher for thick (up to 19-fold) than for thin (up to 5-fold, $p < 0.001$) knives, while peak voltage decreased by 30% for thick knives and increased by 2% for thin knives ($p < 0.001$). Cutting success decreased from 57% (CO 2) to 43% (SITE) with the thick knife ($p = 0.28$), but it remained $\geq 71\%$ for thin knives. Lateral thermal spread increased from ≈ 1 mm in CO 2 to 1.35 mm (256%) in saline for the thick knife, while it was ≤ 0.8 mm (71%) for thin knives ($p < 0.001$, between thin and thick knives), irrespective of the setting. Electrode diameter and saline immersion were the strongest independent predictors of lateral spread ($\beta = 0.469$ and 0.353 , respectively; both $p < 0.001$).

Conclusions The effect of saline immersion on impedance and voltage is dramatically higher when using thicker compared to thinner knives. This explains the differing tissue effects observed with varying electrode sizes in third-space endoscopy.

Conflicts of Interest AC is a consultant for ERBE, Boston Scientific RM is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific CH is a consultant for Alpha-Sigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax AR is a consultant for Medtronic, ERBE, Fujifilm and Olympus Others authors nothing to declare

eP860 EUS-guided Gastrojejunostomy: A UK Tertiary Centre Experience

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DOI 10.1055/s-0046-1822187

Aims Malignant gastric outlet obstruction (MGOO) is a significant complication of advanced malignancy, traditionally managed through surgical bypass or duodenal stenting. Endoscopic ultrasound-guided gastrojejunostomy (EUS-GJ) with lumen-apposing metal stents (LAMS) represents a minimally invasive alternative offering durable symptom palliation with lower morbidity than surgical approaches. Previous cohort studies have reported high technical and clinical success rates for EUS-GJ, but UK real-world data remain limited.

We aimed to evaluate the feasibility, safety, and clinical efficacy of EUS-GJ with LAMS in a UK tertiary centre cohort, with particular focus on length of stay, time to oral intake, and objective dietary progression using the Gastric Outlet Obstruction Score (GOOS).

Methods A retrospective service evaluation was undertaken of 13 consecutive patients undergoing EUS-GJ for MGOO between January 2024 and September 2025. All procedures used a 20mm LAMS. Primary outcomes were technical success (successful stent deployment) and clinical success (improvement in GOOS). Secondary outcomes included post-procedure length of hospital stay, time to oral intake, and longitudinal GOOS-based assessment of diet (pre-procedure, 1 week, 1 month, and where available 3, 6, and 12 months).

Results The cohort comprised of 13 patients (median age 65 years, range 53–89 years; 10 males, 3 females). Underlying diagnoses were pancreatic cancer (10/13, 76.9%), distal cholangiocarcinoma (1/13, 7.7%), small bowel adenocarcinoma (1/13, 7.7%), and a single undiagnosed case. Most obstructions were in D2 (8/13) or the D1/D2 junction (2/13).

Technical success was achieved in 12 of 13 cases (92.3%), with one case of stent maldeployment managed endoscopically and rescheduled for successful placement one week later. No patients required intervention for stent obstruction or malfunction after successful deployment.

Post-procedural complications occurred in 1 of 13 patients (7.7%); this involved a major post-procedural haemorrhage which was managed successfully – requiring ITU admission and blood transfusion only. No delayed complications requiring readmission were observed.

Clinical success was high, with marked and sustained GOOS improvement. Baseline GOOS was G0-G1 (liquid or no oral intake). By 1-week post-procedure,

8/13 patients (61.5%) had reached G3 (tolerance of normal diet), and by one month, all 13 patients (100%) had achieved G3. There was rapid in-hospital progression from liquids to soft diet within a few days. Among patients with extended follow-up, 2 patients maintained G3 by 12 months, a further 2 maintained G3 at 6 months, and 3 maintained G3 at 3 months. There were no documented permanent regressions in GOOS scores.

Length of post-procedural hospital stay varied with a median 7 days (IQR 12 days, range 0–39 days). Most patients (8/13) were discharged within one week of their procedure, with three patients requiring extended stays (>2 weeks) due to concurrent medical complications unrelated to stent placement.

Conclusions EUS-GJ with LAMS in a UK tertiary centre is feasible, safe, and highly effective in the palliative management of malignant gastric outlet obstruction. The technique demonstrates high technical success, rapid resumption of oral intake (liquids within 24 hours), and excellent clinical outcomes, with all patients achieving sustained G3 GOOS (normal diet) by one month. The complication profile is acceptable and manageable, and post-procedure length of stay is compatible with complex oncological care. EUS-GJ should be considered a key minimally invasive alternative to surgical bypass or duodenal stenting, and larger multicentre UK studies are warranted to further validate these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP861 First Clinical Evaluation of Real Time Artificial Intelligence for Detection of High Grade Squamous Intraepithelial Lesions in High Resolution Anoscopy

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Problem to solve High resolution anoscopy (HRA) is the gold standard for anal cancer screening, yet its interpretation is limited by suboptimal accuracy and marked interobserver variability. Artificial intelligence (AI) has the potential to improve diagnostic yield, but existing studies have focused on differentiating low-grade and high-grade squamous intraepithelial lesions (LSIL and HSIL) in still images. To date, no real-time clinical application has been reported.

Innovation We describe the first real-time deep learning application implemented during HRA. The system was evaluated in three patients undergoing anal cancer screening at a high-volume American center. To enable real-time lesion recognition, a YOLO-based object detection model was integrated into the live video stream, allowing continuous frame analysis. When a region displayed visual characteristics suggestive of HSIL, the algorithm generated an on-screen bounding box to highlight the suspected lesion in real time [1–3].

Results Three patients undergoing HRA were evaluated with concurrent real-time AI analysis. Case 1: A 53-year-old HIV-negative male with prior LSIL had three lesions identified on HRA: two acetowhite, lugol-positive LSIL-type lesions and one acetowhite, lugol-negative flat lesion with a mosaic pattern suggestive of HSIL. The AI model generated a bounding box exclusively for the HSIL-suspected anterior lesion, which histopathology confirmed, while the remaining lesions proved LSIL. Case 2: A 38-year-old HIV-negative male with incidentally detected LSIL presented with two LSIL-compatible lesions. The AI system gen-

erated no HSIL predictions, and biopsies confirmed LSIL. Case 3: A 40-year-old HIV-positive male with previous HSIL showed no suspicious lesions on HRA, and the AI system generated no HSIL predictions. Across all procedures, the model detected only histologically confirmed HSIL and showed no activation when no lesions or only LSIL were present.

Conclusions This first demonstration of real time AI enhanced HRA shows that deep learning algorithms can deliver accurate predictions and perform consistently during live procedures, expanding their value far beyond still image analysis. This technology can reduce interobserver variability, accelerate skill acquisition, and support broader adoption among clinicians with varying experience, while strengthening diagnostic performance in expert settings. These advances signal a meaningful step toward improving anal cancer screening by enabling earlier detection and more timely intervention. Larger multicenter studies are now essential to validate these findings and confirm their generalizability.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fang Y, Liao B, Wang X et al. You only look at one sequence: rethinking transformer in vision through object detection. Proceedings of the 35th International Conference on Neural Information Processing Systems: Curran Associates Inc. 2021; Article 2005
- [2] Stier EA, Clarke MA, Deshmukh AA et al. International Anal Neoplasia Society's consensus guidelines for anal cancer screening. *Int J Cancer* 2024; 154 (10): 1694–1702. (In eng). doi:10.1002/ijc.34850
- [3] Messmann H, Bisschops R, Antonelli G et al. Expected value of artificial intelligence in gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2022; 54 (12): 1211–1231. (In eng). doi:10.1055/a-1950-5694

eP862 Primary Pancreatic Squamous Cell Carcinoma: Not even the EUS Fellow saw this coming

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DOI 10.1055/s-0046-1822189

Introduction: Primary squamous cell carcinoma (SCC) of the pancreas is an exceptionally rare entity, as the pancreas lacks native squamous epithelium. According to SEER database, the incidence of SCCP is low, accounting for 0.5–5% of exocrine pancreatic tumors. Its pathogenesis remains unclear, and diagnosis requires meticulous exclusion of metastatic SCC from more common primary sites. We present a case of primary pancreatic SC, illustrating the difficulties in establishing diagnosis and determining therapeutic strategy [1].

Case Presentation: A 66-year-old woman, non-smoker, with previous osteoarthritis and depression, presented with long-standing lumbar pain attributed to known spinal disease. Over the preceding three months, she developed progressively worsening left upper quadrant pain radiating posteriorly, with characteristics distinct from her baseline pain. She denied jaundice, pruritus, gastrointestinal symptoms, weight loss, or constitutional complaints. Laboratory studies showed leukocytosis (13,300/μL) and mild hyponatraemia (131 mmol/L), with normal liver function, pancreatic enzymes, bilirubin, and inflammatory markers. An initial non-contrast CT revealed focal thickening at the pancreatic body–tail junction, suspicious for neoplasia. A contrast-enhanced CT performed subsequently demonstrated a heterogeneous mass in the distal body/tail, suspicious for pancreatic adenocarcinoma. Tumor markers CEA 22 ng/ml and CA 19.9 3262 U/ml supported the hypothesis. Endoscopic ultrasound identified a 63 × 52 mm predominantly hypoechoic, heterogeneous lesion involving the distal pancreatic body and tail, with invasion of the splenic artery and vein and the porto-spleno-mesaraic confluence. Multiple suspicious celiac and perilesional lymph nodes were observed. No ascites was detected. Fine-needle biopsy (22G) yielded cohesive epithelial cells with dense cytoplasm and marked nuclear atypia. Immunohistochemistry showed positivity for AE1/

AE3, CK7, and p40, supporting the diagnosis of primary squamous cell carcinoma of the pancreas. Surprisingly, no adenocarcinoma component was identified. A comprehensive staging workup excluded extrapancreatic origin. The case was discussed at the multidisciplinary tumour board, which classified the tumour as borderline resectable, due to involvement of the splenic vessels, thus recommended neoadjuvant chemotherapy with the intention of achieving potential resectability.

Conclusion: This case highlights the rarity and aggressive behaviour of primary pancreatic SCC and the essential role of multidisciplinary evaluation to tackle the poor prognosis. Different therapeutic approaches including surgery, chemotherapy, radiotherapy, anti-angiogenic therapies, and immune checkpoint inhibitors have been explored with mixed results. Except for surgery, which offers the most significant survival benefit, available treatments have demonstrated limited efficacy in managing SCC of the pancreas.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Qin WX, Wu Y, Liu J, Qin BD, Liu K, Jiao XD, Wang Z, Chen WS, Zang YS. Primary squamous cell carcinoma of pancreas: a population-based study. *Gland Surg.* 2021; 10 (3): 1029–1037. doi:10.21037/gs-20-317 PMID: 33842247 PMID: PMC8033057

eP863V Large Colon Perforation Following The Positioning Of A Double-Balloon Endoluminal Intervention Platform

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DOI 10.1055/s-0046-1822190

Abstract Text

An 82-year-old woman was referred for endoscopic submucosal dissection (ESD) of a circumferential granular-mixed laterally spreading tumor in the ascending colon. Markedly redundant colon and sharp angulations due to adhesions of the descending colon were observed. After reaching the transverse colon with double-balloon endoluminal intervention platform (an accessory designed to maintain endoscope position and creation of a therapeutic zone), blood was observed inside the overtube. At the descending colon, a full-thickness colonic perforation was identified, with spleen visible intraluminally. Laceration was closed successfully with through-the-scope clips, without requiring pneumoperitoneum decompression (procedure under CO₂). The patient was treated with broad-spectrum intravenous antibiotics and had an uneventful recovery (discharged on postoperative day 4) [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/10b50250-8484-40b7-b77c-98b267eb2a25/Uploads/19978_VIDEO_ESGE%20PERFORATION.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lee JH, Kedia P, Stavropoulos SN, Carr-Locke D. AGA Clinical Practice Update on Endoscopic Management of Perforations in Gastrointestinal Tract: Expert Review. *Clin Gastroenterol Hepatol* 2021; 19 (11): 2252–2261.e2
[2] Andrisani G, Di Matteo FM. Endoscopic Submucosal Dissection of Superficial Colorectal Neoplasms at "Challenging Sites" Using a Double-Balloon Endoluminal Interventional Platform: A Single-Center Study. *Diagnostics (Basel)* 2023; 13 (19): 3154
[3] Ismail M., Bahdi F., Mercado M., Habazi R., Alexander A., Prabhu S., John S., Kovval C., Othman M. ESD with double-balloon endoluminal intervention platform versus standard ESD for management of colon polyps. *Endosc. Int. Open* 2020; 8: E1273–E1279

eP864 Post Hoc Counterfactual Analysis of AI-assisted EUS: A Multitask Ensemble to Reduce Uncertainty in Pancreatic Disease

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DOI 10.1055/s-0046-1822191

Problem to solve Despite substantial progress in endoscopic ultrasound and fine needle techniques, critical diagnostic uncertainties persist in the evaluation of pancreatic cysts, solid lesions, and lymph nodes. Misclassification continues to drive overtreatment or delayed therapy, particularly in indeterminate cysts, low-grade IPMNs, and lymph node staging. Real-world evidence on how artificial intelligence could reshape decision making across diverse EUS scenarios remains limited. Addressing this gap is essential to advance precision, reduce unnecessary interventions, and strengthen the accuracy of pancreatic and nodal assessment.

Innovation This multicenter retrospective study applied a validated AI-CNN ensemble to real EUS images from three distinct patients, in a *post hoc*, counterfactual fashion. The models — previously trained and tested on separate multicenter datasets — included pancreatic cystic model (mucinous vs. non-mucinous cyst), pancreatic solid lesions model (PDAC vs. PNET), and lymph nodes model (benign vs. malignant LN). All predictions were made blinded to histopathology and outcomes. The aim was to evaluate whether AI predictions could have informed different more accurate clinical actions.

Results

Case 1: A 71-year-old woman with a stable 3.5 cm pancreatic cyst underwent multiple EUS-guided FNAs over two years, all of which were non-diagnostic. The AI system classified the lesion as non-mucinous with over 90 % confidence. In retrospect, this high-certainty prediction could have supported a decision to reduce the intensity of follow-up, avoiding repeat procedures and minimizing long-term patient anxiety associated with presumed risk of malignancy.

Case 2: A 48-year-old man with a 7.1 cm mixed-type IPMN and several worrisome features underwent duodenopancreatectomy. Final histopathology revealed only low-grade dysplasia. Retrospectively, the AI model classified the lesion as low-grade with consistent confidence levels above 80 %. Had the tool been available in real time, this result might have supported a more conservative management approach, potentially sparing the patient from an extensive surgery with significant morbidity.

Case 3: A 59-year-old man with obstructive jaundice underwent two EUS-guided FNAs targeting a pancreatic mass and hilar lymph nodes. Pancreatic adenocarcinoma was confirmed only after the second attempt, while lymph node cytology remained negative. Retrospectively, the AI model identified the mass as PDAC with 98 % probability. Furthermore, the AI model highlighted one accessible lymph node—previously unbiopsied—with fluctuating malignancy probabilities between 57 % and 71 %. Targeting this node might have altered staging, supporting the early initiation of neoadjuvant chemotherapy. The patient ultimately underwent surgery, which confirmed pancreatic ductal ad-

enocarcinoma with N2 nodal status, underscoring the potential of AI to inform more accurate staging and improve the likelihood of achieving an R0 resection—an important prognostic factor in pancreatic cancer.

Conclusions In this post hoc counterfactual analysis, the AI models demonstrated strong concordance with final histology and exposed pivotal decision moments where real-time guidance could have meaningfully altered management. The findings point to clear opportunities to reduce unnecessary procedures, prevent overtreatment, and accelerate timely systemic therapy. Despite its retrospective design, this innovative framework positions AI as a compelling second-opinion tool and calls for prospective studies to integrate AI-guided EUS into routine clinical workflows, aiming to elevate the precision and impact of pancreatic care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP865 Minor Papilla Sphincterotomy in Pancreas Divisum: Technical Success and Clinical Effectiveness

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DOI 10.1055/s-0046-1822192

Aims Pancreas divisum (PD) is the most common congenital pancreatic duct anomaly. Only a minority of patients become symptomatic, and the role of minor papilla sphincterotomy remains debated. We report outcomes of endoscopic therapy in symptomatic PD.

Methods A retrospective, descriptive, single-center study including 21 patients with PD, of whom 16 were symptomatic and underwent therapeutic ERCP between 2018 and 2025. Collected data included clinical presentation, anatomical type, pancreatic duct stones, endoscopic interventions, complications, and clinical outcomes. Median follow-up was 29 months [1–4].

Technical success: successful minor papilla sphincterotomy with adequate ductal drainage and/or stent placement.

Clinical success: complete or significant improvement of symptoms (abdominal pain, recurrent pancreatitis) without the need for surgery.

Results Among the 21 patients with PD, 16 were symptomatic:

acute pancreatitis: n = 5

recurrent acute pancreatitis: n = 7

chronic pancreatitis: n = 4

The remaining 5 patients had an incidental diagnosis of PD during MRI workup for CBD stones and were not included in the therapeutic analysis.

The sex ratio among symptomatic patients was 0.77 (7 men, 9 women), with a mean age of 28.6 years (range 11–63).

Among the 16 symptomatic patients: 10 (62.5%) had complete PD, and 6 (37.5%) had incomplete PD

Minor papilla sphincterotomy with stent placement was performed in 15 of the 16 symptomatic patients. There was one technical failure due to a tight stenosis, requiring surgical bypass (Wirsungo-jejunostomy). No procedure-related mortality or complications occurred.

All 15 successfully treated patients improved clinically:

- 12 after a single procedure
- 3 after three procedures
- 1 after four procedures

Conclusions Minor papilla sphincterotomy with stent placement is technically feasible and clinically effective for symptomatic pancreas divisum. All successfully treated patients showed symptom improvement, with no procedure-related complications in our series

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Gutta A., Fogel E., Sherman S. et al. 2019; Identification et prise en charge du pancréas divisum. Expert Review of Gastroenterology & Hepatology 13 (11): 1089–1105. doi:10.1080/17474124.2019.1685871

[2] Taj MA, Qureshi S, Ghazanfar S, Siddiqui AR, Niaz SK, Quraishy MS, Shahid M. Pancreas Divisum. J Coll Physicians Surg Pak 2016; 26 (2): 96–9 PMID: 26876393

[3] Varshney S, Johnson CD. Pancreas divisum. Int J Pancreatol 1999; 25 (2): 135–41. doi:10.1385/IJGC:25:2:135 PMID: 10360226

[4] Matlock J, Freeman ML. Endoscopic therapy for pancreas divisum. Rev Gastroenterol Disord 2006; 6 (3): 192–5 PMID: 16957659

eP866 Marital status, fertility and miscarriage rate in gastrointestinal polyposis syndromes

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DOI 10.1055/s-0046-1822193

Aims Gastrointestinal polyposis syndromes represent a group of genetic disorders characterized by numerous adenomas in the colon and small intestine. In familial adenomatous polyposis (FAP), the most frequent syndrome, patients have an almost 100% lifetime risk of colorectal cancer. Prophylactic proctocolectomy is typically performed during the phase of relationship formation and family planning. This study examined whether polyposis syndromes and proctocolectomy affect relationship status, family formation, fertility, and reproductive outcomes compared with the general population.

Methods Patients from a tertiary polyposis outpatient clinic (FAPHD cohort) completed an anonymous standardized questionnaire assessing relationship status, number of children, fertility treatment, miscarriages, and colectomy status. Data were compared with the „Family Research and Demographic Analysis“ (FREDA) cohort, a nationwide dataset of German adults, with focus on marital and partnership situations during the family formation phase. Student's t-test and Pearson's chi-square-test with Yates' continuity correction were used to assess group differences. Negative binomial regression was applied to evaluate age-adjusted differences in fertility, and results were verified by age-grouped analysis.

Results 155 FAPHD patients (87 women, median age 50 years, range 18–85) and 21,265 FREDA participants (11,939 women, median age 37 years, range 18–55) provided complete data. Relationship status did not differ significantly between cohorts (79.4% FAPHD vs. 76.6% FREDA; p = 0.48).

Among women, 58.6% in FAPHD had children compared with 51.8% in FREDA (p = 0.24). Crude fertility rates were similar (1.06 vs. 0.96 children per person in FAPHD and FREDA, respectively; p = 0.24). However, subgroup analysis of 53 female FAPHD patients aged 18–55 showed a decreased fertility rate (0.66; p = 0.01). Age-adjusted analyses confirmed a lower annual fertility increase in FAPHD (3.47% vs. 7.1%; p = 0.001), resulting in a lower predicted fertility rate above age 27.7. Age-grouped analyses showed significantly lower estimated fertility rates in FAPHD women aged 40–45, 45–50, and 50–55 years (–0.64, –1.08, and –0.96; all p < 0.03). In the FAPHD cohort, 124 of 155 patients had undergone proctocolectomy. Post-proctocolectomy patients were more likely to be in a relationship (83.1%; p = 0.042), while parenthood rates did not differ. Use of fertility treatment did not differ significantly among women (18.4% FAPHD vs. 14.5% FREDA; p = 0.38). Lifetime miscarriage was reported by 21.8% of FAPHD women vs. 4.7% in FREDA. However, the FREDA questionnaire captured only miscarriages occurring within the 14-year survey period.

Conclusions Polyposis syndromes and proctocolectomy do not appear to impede relationship status. In patients with polyposis, those who had undergone proctocolectomy were even more frequently in a relationship, likely because surgery is usually performed at younger ages, when long-term relationships typically form. However, age-specific analyses revealed a reduced fertility increase in FAPHD, especially beyond 40 years. Despite this, the use of fertility treatment was comparable to that in the general population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP867V Endoscopic management of an unusual clinical presentation of cholecystocolonic fistula

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DOI 10.1055/s-0046-1822194

Abstract Text

Cholecystocolonic fistula (CCF) is a rare biliary–enteric communication that often presents with nonspecific symptoms. We report the case of an 82-year-old woman who initially presented with large bowel obstruction caused by a 40-mm calcified intraluminal mass requiring sigmoid resection and colostomy. During her hospital stay, she developed acute cholecystitis with pneumobilia, and imaging studies suspected a CCF. Endoscopic ultrasound showed gallbladder wall thickening with intraluminal air and clear communication to the colon, confirming CCF. ERCP with biliary sphincterotomy was also performed. Colonoscopy revealed a 15-mm fistulous opening, which was treated with margin ablation using argon plasma coagulation and was closed with an over-the-scope clip. This case highlights the diagnostic challenges of CCF and supports endoscopic management as an effective alternative in high-surgical-risk patients [1,2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/08dc6b9b-26eb-4fb5-af8c-18eeaf223de8/Uploads/19978_Cholecystocolonic_fistula%20FV.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kobayashi K, Kobara H, Ougi T, Akaiwa Y, Nomura T, Ougi M, Ishikawa K, Ono M, Kamada H, Masaki T. Cholecystocolic fistula closed using endoscopic therapy alone: A case report. *Medicine (Baltimore)* 2022; 101 (29): e29680. doi:10.1097/MD.00000000000029680 PMID: 35866795 PMID: PMC9302365
- [2] Costi R, Randone B, Violi V, Scatton O, Sarli L, Soubrane O, Dousset B, Montariol T. Cholecystocolonic fistula: facts and myths. A review of the 231 published cases. *J Hepatobiliary Pancreat Surg* 2009; 16 (1): 8–18. doi:10.1007/s00534-008-0014-1 Epub 2008 Dec 17 PMID: 19089311

eP868V Recognition and interpretation of the “Alpha Loop” variant of the Treitz Flexure during EUS-Guided Gastroenterostomy (GESICA project)

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DOI 10.1055/s-0046-1822195

Abstract Text

Correct identification of the Treitz flexure during EUS-guided gastroenterostomy (EUS-GE) is essential. Three anatomical variants have been described, with Type III (an inverted alpha-loop) being prone to misinterpretation between duodenal and jejunal limbs. We reviewed 238 EUS-GE procedures from a prospective multicenter registry (GESICA, NCT-05128604) performed with oro-en-

teral catheter assistance. Only cases in supine position were analyzed to optimize angle assessment. Type III anatomy was found in 18 % of procedures. These cases were examined, and an educational video integrating fluoroscopy and EUS images was developed to illustrate key recognition features. Awareness of Type III configuration may help anticipate technical challenges, prevent misidentification of the duodenojejunal flexure, and avoid unexpected difficulties in patients who may later require surgery [1].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/0eb49f09-b8e5-4e71-b31c-d4e1673b6e94/Uploads/19978_ESGE_Days'26%20-%20Video%20Treitz.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nutahara D, Nagai K, Sofuni A et al. Morphological study of the gastrointestinal tract around the ligament of Treitz using upper gastrointestinal radiography: Fundamental data for EUS-guided gastrojejunostomy. *J Hepatobiliary Pancreat Sci*. 2021; 28 (11): 1023–1029. doi:10.1002/jhbp.1018

eP869 EUS-guided pancreaticogastrostomy in the treatment of complicated pancreatitis

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DOI 10.1055/s-0046-1822196

Aims To assess the effectiveness and safety of EUS-guided endoscopic anastomosis between the main pancreatic duct and the stomach (pancreaticogastrostomy) in patients in whom transpapillary access to the main pancreatic duct could not be achieved during ERCP.

Methods A retrospective analysis of treatment outcomes of all pancreatitis patients who underwent EUS-guided pancreaticogastrostomy between 2018 and 2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń.

Results EUS-guided pancreaticogastrostomy was performed in 13 patients with chronic pancreatitis (11 men, 2 women; mean age 49.26 [36–66] years) due to lack of transpapillary access during ERCP. Main pancreatic duct strictures in the pancreatic head due to chronic pancreatitis were diagnosed in 7/13 (53.85 %) patients. Disconnected pancreatic duct syndrome was identified in 4/13 (30.77 %) patients. Postprocedural stricture of pancreaticogastrostomy anastomosis were diagnosed in 2/13 (15.38 %) patients. Technical success was achieved in 12/13 (92.31 %) patients. Complications occurred in 3/13 (23.08 %) patients. Clinical success was achieved in 12/13 (92.31 %) patients. Mean follow-up was 1055 (148–1732) days. Long-term success was achieved in 11/13 (84.61 %) patients.

Conclusions EUS-guided endoscopic pancreaticogastrostomy seems an effective and safe treatment method when transpapillary access to the main pancreatic duct is not possible.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP870 Is Cold the New Standard? Modified Underwater Submucosal Injection Cold Lesion Excision (MUSCLE) vs. Hot EMR for Dysplastic Sessile Serrated Lesions

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DOI 10.1055/s-0046-1822197

Aims Current ESGE guidelines recommend hot snare polypectomy for Sessile Serrated Lesions with Dysplasia (SSLD) based on theoretical benefits regarding malignant potential and resection depth. However, no randomized trials have specifically compared resection techniques for SSLD > 10 mm. While recent meta-analyses demonstrate significant safety advantages of cold Endoscopic Mucosal Resection (EMR) for non-dysplastic serrated lesions, these studies excluded dysplastic lesions, leaving the applicability of cold techniques to SSLD undetermined. This study represents the first comparative analysis evaluating a novel Modified Underwater Submucosal Injection Cold Lesion Excision (MUSCLE) technique versus conventional hot EMR exclusively in patients with SSLD ≥ 10 mm [1–5].

Methods We retrospectively identified consecutive patients with SSLD > 10 mm treated at two Italian tertiary centers. Lesions removed by conventional hot EMR or by the MUSCLE technique, which combines underwater cold snare resection with prior submucosal lifting, were propensity score matched 1:1. Matching variables included lesion size (> 2 cm vs. ≤ 2 cm), location (left vs. right colon), anatomical access difficulty, operator expertise (expert vs. non-expert), and Paris morphology (flat vs. sessile). The primary outcome was the recurrence rate at ≥ 1-year surveillance colonoscopy. Secondary outcomes included technical success and adverse events, specifically immediate/delayed bleeding, perforation, and post-polypectomy electrocoagulation syndrome (PECS) (► **Table 1**).

Results From 190 pre-propensity lesions with ≥ 1-year follow-up, 172 eligible lesions remained after excluding 18 ESD cases. Propensity score matching yielded 102 analyzed lesions (51 matched pairs) with balanced characteristics (61% ≤ 2cm, 32% expert operators, 94% flat morphology, 86% right colon, 80% good access). Technical success was 100% in both groups. Recurrence occurred in 1/51 lesions (1.96%) in both groups at ≥ 1-year follow-up, with no significant difference (p = ns; 95% CI: -5.4% to 5.4%). The composite outcome of any adverse event showed a trend favoring MUSCLE (0% vs 9.80%, p = 0.063).

Conclusions The MUSCLE technique represents a novel hybrid approach integrating the safety advantages of non-thermal cold snare resection with the technical benefits of underwater mucosal buoyancy and enhanced snare capture, while preserving adequate resection depth through submucosal injection. In this first propensity score-matched analysis targeting SSLD > 10 mm, MUSCLE achieved equivalent technical success and comparable one-year recurrence rates to conventional hot EMR, with a favorable trend toward improved safety. These findings provide the first specific clinical evidence challenging current ESGE guidelines that mandate thermal resection for this high-risk subtype, suggesting cold resection techniques may be a viable, safer alternative. Larger multicenter prospective trials are warranted to confirm these results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wang X et al. Underwater versus conventional endoscopic mucosal resection for ≥ 10 mm sessile or flat colorectal polyps: A systematic review and meta-analysis. *PLoS One* 2024; 19 (3):e0299931. doi:10.1371/journal.pone.0299931 PMID: 38451998 PMID: PMC10919657
- [2] Shimodate Y et al. Impact of submucosal saline solution injection for cold snare polypectomy of small colorectal polyps: a randomized controlled study. *Gastrointest Endosc* 2020; 92: 715–722.e1
- [3] Rex DK et al. Cold versus hot snare resection with or without submucosal injection of 6- to 15-mm colorectal polyps: a randomized controlled trial. *Gastrointest Endosc*. 2022; 96 (2): 330–338. doi:10.1016/j.gie.2022.03.006 Epub 2022 Mar 12 PMID: 35288147

► **Table 1**

	HOT EMR (51)	MUSCLE (51)	p value
Patient and Lesion Characteristics			
■ Lesion size ≤ 20 mm	61.0 %	61.0 %	n.s.
■ Flat morphology (Paris)	94.0 %	94.0 %	n.s.
■ Right colon location	86.0 %	86.0 %	n.s.
■ Expert operators	32.0 %	32.0 %	n.s.
■ Good anatomical access	80.0 %	80.0 %	n.s.
Main Endpoints			
■ Technical success	100 % (51/51)	100 % (51/51)	n.s.
■ Recurrence (≥ 1 year)	1.96 % (1/51)	1.96 % (1/51)	n.s.
■ Any adverse event	9.80 % (5/51)	0 % (0/51)	0.063
■ Delayed bleeding	5.88 % (3/51)	0 % (0/51)	n.s.
■ PECS	3.92 % (2/51)	0 % (0/51)	n.s.
■ Perforation	0 % (0/51)	0 % (0/51)	-
■ Intraprocedural bleeding	0 % (0/51)	0 % (0/51)	-

[4] Ding C et al. Cold EMR Vs. Hot EMR for the removal of sessile serrated polyps larger than 10 mm: a systematic review and meta-analysis. *BMC Surg.* 2024; 24 (1): 93. doi:10.1186/s12893-024-02325-2 PMID: 38509508 PMID: PMC10953062

[5] Ferlitsch M et al. Colorectal polypectomy and endoscopic mucosal resection: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2024. *Endoscopy.* 2024; 56 (7): 516–545. doi:10.1055/a-2304-3219 Epub 2024 Apr 26 PMID: 38670139

eP871 Extra-anatomical transmural access in the endotherapy of bile duct strictures

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DOI 10.1055/s-0046-1822198

Aims To evaluate the effectiveness and safety of extra-anatomical endoscopic access to the bile ducts in the treatment of patients with benign and malignant biliary strictures.

Methods A prospective analysis of treatment outcomes of all patients with obstructive jaundice due to biliary strictures who underwent endoscopic treatment between 2016 and 2023 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń. The study group consisted of patients in whom transpapillary access to the bile ducts could not be obtained during ERCP, and in whom EUS-guided transmural access was therefore used during endotherapy.

Results In 343 patients in whom transpapillary access during ERCP was unsuccessful, transmural EUS-guided techniques were employed. Endoscopic transpapillary biliary stenting using EUS-guided transmural access was performed in 56/343 (16.32%) patients. In the remaining 287/343 (83.67%) patients, extra-anatomical EUS-guided transmural biliary–enteric anastomosis was created. Technical success was achieved in 330/343 (96.21%) patients, and clinical success in 302/343 (88.05%) patients. Complications occurred in 46/343 (13.41%) patients, including fatal complications in 9/343 (2.62%).

Conclusions Endoscopic techniques utilizing EUS-guided transmural access are effective and safe in the endotherapy of patients with biliary strictures and constitute an alternative to surgical techniques in cases where transpapillary drainage during ERCP is unsuccessful.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP872 EUS-guided transmural drainage of perianal abscesses

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DOI 10.1055/s-0046-1822199

Aims To assess the efficacy and safety of transmural (through the rectal wall) drainage of perianal abscesses under the EUS guidance.

Methods Prospective analysis of treatment outcomes for patients with perianal abscesses who underwent EUS-guided transmural drainage between 2019 and 2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum Nicolaus Copernicus University in Toruń, Poland. In all patients, during the initial endoscopic procedure, endoluminal puncture of the abscess through the rectal wall was performed under endoscopic ultrasound guidance. Subsequently, a *Lumen-Apposing Metal Stent* (LAMS) was inserted through the puncture site after dilation, through which a drain was introduced into the abscess cavity for postoperative salvage. Subsequent endoscopic procedures included irrigation of the abscess and ultimately removal of the LAMS when complete collapse of the collection was observed.

Results In 6 patients (6 men; mean age 39.57 [28–72] years) with perianal abscesses, transmural endoscopic drainage was performed. In 5/6 (83.33%) patients, perianal abscesses were caused by complicated diverticulitis; in 1/6 (16.67%) patients, the abscess was a consequence of ulcerative colitis. The mean abscess size was 78 (46–132) mm. The mean number of endoscopic procedures (endoscopic revision of abscess cavity with irrigation) was 2.8 (2–6). The mean time of treatment was 6 (4–12) days. Successful endoscopic treatment of perianal abscesses, which was defined as the resolution of clinical symptoms and complete regression of the abscess, was achieved in all 6 patients. No complications related to EUS-guided treatment were observed. The patients were followed subsequently in CT scan during mean period of 981 (224–1516) days, where no abscess recurrence was observed in all patients.

Conclusions EUS-guided transmural drainage of perianal abscesses seems safe and effective and potentially might be alternative for more invasive treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP873 Outcomes and surveillance following incidental colorectal cancer detection in endoscopic submucosal dissection histopathology specimens from a tertiary UK centre

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DOI 10.1055/s-0046-1822200

Aims Endoscopic submucosal dissection (ESD) is a well-established technique for en bloc resection of large premalignant colorectal lesions, providing high R0 resection rates and low recurrence [1]. Its use has expanded to include early-stage colorectal cancer (CRC) [2–5]. However, the increasing adoption of ESD has led to finding of incidental high-risk histopathological features, for which post-ESD management, whether conservative or surgical, remains less clearly defined with variance among guidelines. The American Gastroenterological Association and the European Society of Gastrointestinal Endoscopy recommend ESD for lesions with high suspicion of limited submucosal invasion [1, 6]. For non-curative ESD, surgery is generally advised unless surgical risk is prohibitive, in which case close endoscopic and radiologic surveillance is an alternative. Positive vertical margin and lymphovascular invasion are particularly associated with residual tumor and nodal involvement [2, 7]. The aim of this study was to present our data on incidental CRC findings after ESD and to evaluate subsequent surveillance outcomes.

Methods We conducted a retrospective, single-centre study including consecutive patients who underwent ESD for suspected premalignant colorectal lesions with unexpected diagnosis of colorectal cancer (CRC) on final histopathology. Between 2018 and 2025, a total of 241 colorectal lesions were resected en bloc with ESD. Clinical, endoscopic, histopathological, and follow-up data were collected and analysed, focusing on curative resection status, subsequent management, and oncological outcomes.

Results Of the 241 lesions, 11 (4.5%) were diagnosed as submucosal invasive carcinoma (SMIC). Lesions were located within the rectum (3/11, 27.3%) and colon (8/11, 72.7%). R0 curative resection was achieved in 1 case (9.1%), R0 non-curative in 2 (18.2%), and R1 resection with positive vertical margins in 8 cases (72.7%). Among the non-curative R0 resections, one patient underwent radical surgery with no residual malignancy identified; none of the R0 cases

showed local recurrence or distant disease during follow-up (median follow-up time was 39 months (IQR 27–42.5, range 15–46)).

Of the 8 R1 resections, 6 (75%) underwent surgery and 2 (25%) were managed conservatively. Four (66.7%) of the surgical cases showed deeply invasive ($\geq 1000 \mu\text{m}$) submucosal carcinoma, while 2 (33.3%) had no residual malignancy. Overall, 50% of R1 resections had no recurrence at median follow-up of 13 months (IQR 9.5–15, range 5–17).

Among the 11 patients with high-risk features, 7 (63.6%) achieved curative resection with ESD alone, showing no residual disease or recurrence at follow-up despite 8 having had R1 resection. **Total median follow-up time was 15 months (IQR 10–17, range 5–46).**

All 4 cases with residual cancer after surgery (36.4%) showed surface features JNET 2B, variably located in the sigmoid (25%), transverse (25%), ascending colon (25%), and rectum (25%). These included 2 Paris 0-Is (50%), 1 LST-G-M (25%), and 1 LST-NG-FE (25%); all were R1 resections, and all presented with muscle-retraction during ESD. Biopsies pre-ESD were only available in two out of four patients: only low-grade dysplasia in one and focal high-grade dysplasia the other.

Conclusions Incidental colorectal cancer diagnosed after ESD is infrequent but clinically relevant. Most cases, including some with R1 resection, required no additional treatment, highlighting that selected patients with limited submucosal invasion and favourable histology may potentially be safely managed conservatively, especially if elderly or comorbid. Nevertheless, achieving R0 resection remains essential to minimise the risk of residual disease or recurrence. Radical surgery offered a curative option in patients with high risk findings after ESD. Future prospective studies are needed to validate these findings and establish evidence-based recommendations for post-ESD management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Oh HH, Kim JS, Lim JW et al. Clinical Outcomes of Colorectal Neoplasm With Positive Resection Margin After Endoscopic Submucosal Dissection. *Scientific Reports* 2024; 14 (1): 12353. doi:10.1038/s41598-024-63129-1
- [2] Draganov PV et al. AGA Institute Clinical Practice Update: Endoscopic Submucosal Dissection in the United States. *Clinical Gastroenterology and Hepatology* Volume 17 (Issue 1): 16–25.e1
- [3] Van der Schee L, Albers SC, Didden P et al Results of endoscopic intermuscular dissection for deep submucosal invasive rectal cancer: a three-year follow-up study. *Gut* 2025; 74: 1995–2003
- [4] Yoda Y, Ikematsu H, Matsuda T, Yamaguchi Y, Hotta K, Kobayashi N, Fujii T, Oono Y, Sakamoto T, Nakajima T, Takao M, Shinohara T, Fujimori T, Kaneko K, Saito Y. A large-scale multicenter study of long-term outcomes after endoscopic resection for submucosal invasive colorectal cancer. *Endoscopy*. 2013; 45 (9): 718–24. doi:10.1055/s-0033-1344234 Epub 2013 Aug 5 PMID: 23918621
- [5] Erkaya M, Ulkucu A, Erozkhan K, Catalano B, Allende D, Steele S, Sommovilla J, Gorgun E. Is endoscopic submucosal dissection safe in the management of early-stage colorectal cancers? *Am J Surg* 2025; 241: 116159. doi:10.1016/j.amjsurg.2024.116159 Epub 2024 Dec 20 PMID: 39732030
- [6] Winter K, Kasprzyk P, Nowicka Z, Noriko S, Herreros-de-Tejada A, Sychalski M. Resection of Early Colorectal Neoplasms Using Endoscopic Submucosal Dissection: A Retrospective Multicenter Cohort Study. *J Clin Med*. 2024; 13 (22): 6989. doi:10.3390/jcm13226989 PMID: 39598133 PMID: PMC11595630
- [7] Libanio D, Pimentel-Nunes P, Bastiaansen B, Bisschops R, Bourke MJ, Deprez PH, Esposito G, Lemmers A, Leclercq P, Maselli R, Messmann H, Pech O, Pioche M, Vieth M, Weusten BLAM, Fuccio L, Bhandari P, Dinis-Ribeiro M. Endoscopic submucosal dissection techniques and technology: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy [Internet]* 2023; 55 (4): 361–89. Available from <http://www.thieme-connect.com/products/ejournals/abstract/>. doi:10.1055/a-2031-0874

eP874 Endoscopic management of post-inflammatory pancreatic fistulas

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DOI 10.1055/s-0046-1822201

Aims To assess the effectiveness of various endoscopic techniques in the treatment of patients with post-inflammatory pancreatic fistulas.

Methods A prospective analysis of endoscopic treatment outcomes of all patients with pancreatic fistulas secondary to inflammatory pancreatic diseases between 2018 and 2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń.

Results Post-inflammatory pancreatic fistulas were diagnosed in 56 patients (51 with internal pancreatic fistulas, and 5 with external, i.e. pancreatico-cutaneous fistulas). Among internal fistulas, the most common abnormal connection was between the pancreatic ducts and the pleural cavity—pancreaticopleural fistulas were diagnosed in 33 patients, followed by pancreaticoperitoneal fistulas in 14 patients, pancreaticointestinal fistulas in 2 patients, and pancreatico-biliary fistulas in 2 patients. Chronic pancreatitis was identified in 33/56 (58.93%) patients. Endoscopic retrograde pancreatography with endoscopic sphincterotomy and main pancreatic duct stenting was performed in 47/56 (83.93%) patients. In 9/56 (16.07%) patients, due to lack of anatomical transpapillary access to the main pancreatic duct, transmural drainage of the fistula tract under EUS guidance was performed. Clinical success was achieved in 51/56 (91.07%) patients. The total duration of endotherapy averaged 513 (91–1399) days. Long-term success of endoscopic treatment was achieved in 48/56 (85.71%) patients.

Conclusions Endoscopic treatment seems an effective therapeutic method for post-inflammatory pancreatic fistulas. Passive transpapillary drainage (main pancreatic duct stenting) remains the preferred treatment method. When anatomical transpapillary drainage is not feasible, EUS-guided transmural drainage of the fistula tract remains the alternative. In patients with pancreatic fluid collections complicated by the presence of a pancreatic fistula, decompression of the collection via endoscopic drainage leads to fistula closure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP875 TOP100: Is it enough to top the human reader?

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DOI 10.1055/s-0046-1822202

Aims Capsule endoscopy (CE) is an accepted modality to investigate the small bowel (SB). Reading and reporting of CE however can be time consuming. Previous studies have showed that even in the hands of experts, reader attention span drops after just one study. Artificial intelligence has exploded in the field of medicine including within CE. The TOP100 is a feature on the CE software which identifies the 100 most significant images from the entire video which may help to reduce physician reporting time. Previous studies [1–3] have shown good diagnostic performance, especially for active bleeding and inflammatory lesions, and good agreement between standard human reading (SR) and TOP100. The aim of this study is to evaluate the agreement in findings and patient management between the same reader and different readers with SR and TOP100.

Methods A retrospective analysis was conducted to compare SR of an entire video with TOP100 images identified by the software. The two experienced physician experts and senior trainee had all read > 500 lifetime of CE videos. The 2 experts who reported the original video were asked to review TOP100 images which was in a short video format in a blinded fashion. The senior trainee was asked to read TOP100 which was subsequently compared to the expert standard read. Comparisons were made on significant findings and main diagnosis and subsequent suggested management. Secondary outcomes were a comparison of reading time between standard read and TOP100 reads and interobserver variability of CE readers between the standard human versus TOP100 reads. A comparison was also made between TOP100 by the trainee compared to the physician read.

Results A total of 50 CE videos were reviewed by each expert with TOP100. Findings were recorded and patient management was suggested based on TOP100 findings and the CE indication. Each expert reviewed 25 videos of suspected SB bleeding and 25 videos of known or suspected inflammatory bowel disease (IBD). Both expert readers had a substantial intra-observer agreement (K 0.61–0.80) between SR and TOP100 for ulcers and active bleeding. One reader had only a fair (K 0.37, $p < 0.01$) intra-observer agreement for angiodysplasias while the other reader had a moderate agreement (K 0.68, $p < 0.01$) for the same category. Agreement on patient management based on TOP100 readings was similar for the two experts (75% and 78%). The inter-observer agreement between the senior trainee and the expert readers when using TOP100 was substantial for ulcers (K 0.90, $p < 0.01$), angiodysplasias (K 0.61, $p < 0.01$) and with an overall diagnostic yield (K 0.69, $p < 0.01$). Agreement was moderate for active bleeding (K 0.54, $p < 0.01$) and erosions (K 0.58, $p < 0.01$). The mean reading time per CE video with TOP100 was 1m48s vs 40min for SR.

Conclusions The TOP 100 has shown moderate intra-observer agreement compared to standard reading for the final CE diagnosis and subsequent change in management of the two expert readers. On comparison between the TOP100 read of the senior trainee and the expert read there was a moderate to substantial agreement, suggesting that the TOP100 could be an adjunct to trainees in reporting of CE. Further studies with a larger pool of differing experience of trainees would help substantiate our study findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Giordano A, Escapa M, Urpí-Ferreruela M, Casanova G, Fernández-Esparach G, Ginès À, Llach J, González-Suárez B. Diagnostic accuracy of artificial intelligence-aided capsule endoscopy (TOP100) in overt small bowel bleeding. *Surg Endosc*. 37 (10): 7658–7666. doi:10.1007/s00464-023-10273-w Epub 2023 Jul 26 PMID: 37495849 PMID: PMC10520091
- [2] Arieira C, Monteiro S, Dias de Castro F, Boal Carvalho P, Rosa B, Moreira MJ, Cotter J. Capsule endoscopy: Is the software TOP 100 a reliable tool in suspected small bowel bleeding? *Dig Liver Dis*. 2019; 51 (12): 1661–1664. doi:10.1016/j.dld.2019.06.008 Epub 2019 Jul 4 PMID: 31281069
- [3] Freitas M, Arieira C, Carvalho PB, Rosa B, Moreira MJ, Cotter J. Simplify to improve in capsule endoscopy – TOP 100 is a swift and reliable evaluation tool for the small bowel inflammatory activity in Crohn's disease. *Scand J Gastroenterol*. 2020; 55 (4): 408–413. doi:10.1080/00365521.2020.1745880 Epub 2020 Mar 31 PMID: 32228199

eP876V Endorail-assisted endoscopic full-thickness resection (EFTR) of an appendiceal adenoma: combining two devices to reach a successful procedure

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DOI 10.1055/s-0046-1822203

Problem to solve Endoscopic full-thickness resection (EFTR) by using non-exposed full-thickness resection device (FTRD) is a safe procedure often adopted for non-lifting colorectal lesions. As showed by recent literature, one of the technical challenges may be reaching the lesion after mounting the FTRD device on the colonoscope, particularly in case of difficult colonoscopy due to loop formation or laxity. This issue may lead to procedural failure as well as damage and exposure to complications [1–3].

Innovation We combined the FTRD with the use of Endorail System, an accessory for colonoscopy that uses a magnetic balloon to solve colon loops and improve the manoeuvrability of the endoscope. It consists of a balloon catheter introduced through the endoscope's channel, filled with a ferromagnetic fluid, and then magnetically anchored to a handpiece placed on the patient's abdomen. This allows the endoscopist to pull the colonoscope and straighten loops, making the procedure faster and complete. We entered an Endorail-assisted EFTR for a single case of appendiceal adenoma.

Results We evaluated a 74-year-old woman with a 20 mm sessile adenoma of the appendiceal orifice and history of incomplete colonoscopies due to laxity, loop formation and the concomitant need for prolonged sedation.

We performed a complete traditional colonoscopy. After reaching the caecum and marking the lesion, we released the Endorail balloon in the ascending colon to stabilize the position and it was left in situ as a guide. Through the transcutaneous magnetic anchoring system, the balloon remained stationary in position and was therefore used as a guide alongside the endoscope for performing colonoscopy with FTRD. Reaching the caecum by following this guide was extremely easy and took 4 minutes less time, without any loops forming or difficulties in proceeding in the lumen. After reaching and removing the magnetic balloon, the full-thickness resection procedure was successfully completed, with no immediate or late adverse events. In particular, there was no damage to the remaining colon and no acute appendicitis occurred in the following days. Histological examination confirmed curative and full-thickness resection of tubular adenoma with low- and high-grade dysplasia.

Conclusions Our experience shows how combining two devices can help overcome difficulties challenges, reduce potential adverse events and lead to safer technical success in less time.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/c238eb4a-f174-41a6-9544-4305df088702/Uploads/19990_Video_Innovation%20Endorail-EFTR.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rex DK. How I Approach Colonoscopy in Anatomically Difficult Colons. *Am J Gastroenterol*. 2020; 115 (2): 151–154. doi:10.14309/ajg.0000000000000481 PMID: 31809298
- [2] Ichkhanian Y, Barawi M, Seoud T, Thakkar S, Kothari TH, Halabi ME, Ullah A, Edris W, Aepi P, Kowalski T, Shinn B, Shariha RZ, Mahadev S, Mosko JD, Andrisani G, Di Matteo FM, Albrecht H, Giap AQ, Tang SJ, Naga YM, van Geenen E, Friedland S, Tharian B, Irani S, Ross AS, Jamil LH, Lew D, Nett AS, Farha J, Runge TM, Jovani M, Khashab MA. Endoscopic full-thickness resection of polyps involving the appendiceal orifice: a multicenter international experi-

ence. *Endoscopy*. 2022; 54 (1): 16–24. doi:10.1055/a-1345-0044 Epub 2021 Feb 18 PMID: 33395714

[3] Kumar S, Coronel MA, Romero LG, Coronel ES, Ge PS. Full-thickness resection: troubleshooting, tips, and tricks for success in the colorectum. *VideoGIE*. 2022; 7 (6): 201–204. doi:10.1016/j.vgie.2022.02.009 PMID: 35686218 PMID: PMC9171915

eP877 EUS-guided treatment of postoperative intra-abdominal abscesses

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DOI 10.1055/s-0046-1822204

Aims To assess the effectiveness of EUS-guided transmural drainage in the treatment of postoperative intra-abdominal abscesses.

Methods Retrospective evaluation of endoscopic treatment results in all patients with intra-abdominal abscesses following abdominal surgery between 2018 and 2023 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń, Poland. Patients were divided into two groups based on the time between surgery and the initiation of endoscopic treatment. The first group consisted of patients in whom EUS-guided transmural drainage of intra-abdominal abscesses was performed within 14 days of surgery. The second group consisted of patients in whom endoscopic treatment was initiated 14 days after surgery.

Results All 37 patients with intra-abdominal abscesses underwent active transmural (transgastric) EUS-guided drainage via a single approach. The first group included 21/37 (56.76%) and the second group included 16/37 (43.24%) patients with intra-abdominal abscesses. In both groups, intra-abdominal abscesses were a complication following urgent laparotomy for purulent or fecal peritonitis caused by colonic pathology. Active endoscopic drainage was performed for 6 (4–12) days in the first group and for 14 (7–22) days in the second group ($p < 0.05$). Complications of endoscopic treatment were noted in 3/21 (14.29%) patients in the first group and in 2/16 (12.5%) in the second group ($p = \text{NS}$). Clinical success (resolution of clinical symptoms and complete regression of the abscess) was achieved in 20/21 (95.24%) patients in group 1 and 13/16 (81.25%) patients in group 2 ($p < 0.05$). Long-term treatment success (no abscess recurrence in subsequent CT scans) was achieved in 19/21 (90.48%) patients in group 1 and 12/16 (75%) patients in group 2 ($p < 0.05$).

Conclusions EUS-guided transmural drainage seems effective treatment for postoperative intra-abdominal abscesses. Early endoscopic drainage is associated with better endoscopic outcomes in this group of patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP878 Evaluation of the ESGE Endoscopic Submucosal Dissection (ESD) training curriculum in a Western tertiary centre: Outcomes of first-year-fellows in-training

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DOI 10.1055/s-0046-1822205

Aims The ESGE curriculum outlines structured competency standards for endoscopic submucosal dissection (ESD) training, including minimum case volumes, supervised learning, and defined performance benchmarks [1]. This

study evaluated the first-year outcomes from two post-CCST advanced endoscopy fellows in a Western tertiary centre.

Methods All consecutive ESD procedures performed by two fellows under expert supervision between October 2024 to October 2025 were prospectively recorded. All ESD procedures were performed using the saline-immersion/irrigation technique (SITE), due to its advantages, including improved visualisation through optical clarity and magnification, natural buoyancy, enhanced conductivity through saline (with optimal vessel pre-coagulation and management), and patient comfort. Descriptive analysis was performed for demographics, lesion characteristics, technical performance, and histopathological and safety outcomes. Training milestones were mapped against ESGE curriculum standards.

Results A total of 54 ESD procedures were performed in 42 patients, distributed as 29 and 25 procedures per trainee, respectively, either totally (15, 37.5%) or partially assisted by an expert supervisor (27, 64.3%). Median proportion of the procedure performed by fellows was 60% (IQR 30–100). Mean patient age was 66.9 ± 14.4 years; 64.3% were men. Median ASA was 1 (IQR 1–2). Lesions were located in the colon (61.9%), rectum (31%), and stomach (7.1%). Median lesion diameter was 50mm (IQR 40–65).

Macroscopic morphology included 57.2% LST-G, 26.2% LST-NG, 4.8% sessile lesions, 4.8% semi-pedunculated and 2.4% pedunculated and submucosal. A degree of submucosal fibrosis was present in 54.7% (F1–F2).

En bloc R0 and curative resection was achieved in 92.9%. One case (2.4%) was abandoned due to suspected deep submucosal invasion and referred for surgery which confirmed invasive adenocarcinoma. Median procedure time was 135 minutes (IQR 90–177). Overall median resection speed was $13.1 \text{ mm}^2/\text{min}$ (IQR 7.6–18.7). When analysed quarterly, resection speed progressively increased: Q1: $9.58 \text{ mm}^2/\text{min}$, Q2: $13.46 \text{ mm}^2/\text{min}$ and Q3: $18.30 \text{ mm}^2/\text{min}$, demonstrating steady procedural efficiency improvement during training. Also percentage of procedure performed by trainee was analysed quarterly increasing from a median of 65% (IQR 8.75–95) to 100% (IQR 50–100) from Q1 to Q3. Adverse events included 3 intraprocedural perforations (7.1%), one (2.4%) in the rectum and 2 (4.8%) in the ascending colon; all were managed successfully endoscopically with through-the-scope clip-closure without hindering the procedure outcome or patient safety. Operator-delivered conscious-sedation was used in 92.9%, including all colorectal cases. General anaesthesia was only used for gastric lesions.

Training was conducted under full supervision, following ex-vivo and model-based practice, observation of > 50 expert cases, and participation in > 3 hands-on courses.

Conclusions After one year of structured ESD training, which included completion of recommended preparatory steps such as ex-vivo courses, animal models, theoretical instruction, and acquisition of independent advanced endoscopic skills, both trainees achieved performance standards outlined in the ESGE curriculum. However, in our series, most lesions were located within the colon rather than the rectum, reflecting the real-world case availability within our centre. If training had been restricted exclusively to rectal lesions, the recommended case volumes could not have been met.

These findings suggest that while the ESGE curriculum is practical, safe, and feasible when implemented under direct expert supervision, some flexibility regarding the recommended lesion location may be necessary to allow trainees to reach adequate numbers within Western training environments. Allowing supervised exposure to colonic lesions earlier in training may support broader applicability of the curriculum without compromising safety or outcomes. The consistent performance and safety outcomes observed with SITE-ESD suggest that this technique may also be particularly advantageous for facilitating safer early training for colonic ESD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pimentel-Nunes P, Pioche M, Albéniz E, Berr F, Deprez P, Ebigbo A, Dewint P, Haji A, Panarese A, Weusten BLAM, Dekker E, East JE, Sanders DS, Johnson G, Arvanitakis M, Ponchon T, Dinis-Ribeiro M, Bisschops R. Curriculum for

endoscopic submucosal dissection training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy* 2019; 51 (10): 980–992. doi:10.1055/a-0996-0912 Epub 2019 Aug 30 PMID: 31470448

eP879 Management of ERCP-related perforations: A 20-year experience from a tertiary referral center

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DOI 10.1055/s-0046-1822206

Aims Perforation is an uncommon but potentially serious adverse event of endoscopic retrograde cholangiopancreatography (ERCP). Although its incidence is low, associated morbidity can be significant, particularly when diagnosis or intervention is delayed. Mechanisms of injury vary and are classified using the Stapfer system, which serves as a useful tool in determining appropriate management. Recent advancements in endoscopic closure techniques have broadened treatment options and may reduce the need for surgery. The aim of this study was to evaluate the clinical characteristics, mechanisms of injury, management strategies, and outcomes of ERCP-related perforations treated at a high-volume referral center over a 20-year period.

Methods We retrospectively examined all ERCP procedures performed at Venizeleion General Hospital between March 2005 and June 2025. Perforation was diagnosed by: (i) direct endoscopic visualization of a mucosal defect, (ii) fluoroscopic evidence of contrast extravasation or retroperitoneal air, or (iii) post-procedural CT findings in symptomatic patients such as retroperitoneal air, fluid collections or leakage of orally administered contrast. Perforations were classified according to the Stapfer classification (Types I–IV). Data recorded included demographics, ERCP indication, perforation characteristics, therapeutic approach (conservative, endoscopic, surgical), AGREE (Adverse events in Gastrointestinal Endoscopy) grading, hospitalization duration and mortality.

Results Among 6719 ERCPs, 19 perforations were identified (0.28%). Mean age of the patients was 69.4 years, and 58% were female. Choledocholithiasis was the most common indication (78.9%), followed by malignancy (15.8%). Stapfer type II perforations were the most common (63.2%, 12/19), followed by type I (26.3%, 5/19) and type III (10.5%, 2/19). Mechanisms of type II injury included large balloon dilation (6/12), standard sphincterotomy (3/12), transpancreatic sphincterotomy (2/12), and needle-knife precut sphincterotomy (1/12). Type III perforations resulted from guidewire manipulation, while type I injuries occurred in patients with altered or difficult anatomy.

Management strategies were individualized. Among type II cases, 6 patients (50%) were treated conservatively, 4 (33.3%) underwent endoscopic therapy with plastic or fully covered self-expandable metal stents, and 2 (16.7%) required surgery, with one postoperative death. Regarding type I perforations, one patient was treated conservatively, 2 underwent endoscopic closure with an over-the scope clip (OTSC), and 2 required surgery in the pre-OTSC era. One of these patients died postoperatively. Both type III cases were managed conservatively. According to the AGREE classification, perforations were graded as Grade II in 47.4%, Grade III in 42.1%, and Grade V in 10.5% (fatal cases). Overall mortality among all ERCPs was 0.03%, with both deaths occurring after surgical treatment. The mean length of hospitalization was 12.6 days.

Conclusions Prompt recognition of ERCP-related perforation is essential for optimizing outcomes. With the development of advanced endoscopic closure devices, particularly OTSC, non-operative management has become a feasible and effective first-line strategy in selected cases. Multidisciplinary collaboration remains critical to achieving favorable outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP880 Predicting Lethal Outcomes Using Laboratory and Clinical Parameters in Acute Pancreatitis

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DOI 10.1055/s-0046-1822207

Aims Acute pancreatitis (AP) is an inflammatory condition with highly variable clinical outcomes. In this study, we aimed to present data on patients diagnosed with acute pancreatitis and to identify laboratory and clinical parameters, along with established scoring systems for AP, that may help predict clinical outcomes of this condition.

Methods In this retrospective observational cohort study, we analyzed 95 patients treated at our tertiary care center throughout 2024. Data was collected from electronic medical records. Variables included medical history (medication use, history of AP, alcohol consumption, etc.), vital parameters on admission, laboratory and imaging findings, as well as scoring systems for acute pancreatitis (SIRS score, BISAP score, CT severity score, Ranson and modified Ranson criteria). The primary clinical outcome was 30-day mortality. Secondary outcomes included sepsis, multi-organ failure and length of treatment. A p-value of under 0.05 was considered statistically significant. Fisher's exact test was used for categorical variables, while Mann-Whitney U test was applied in comparison of continuous variables.

Results Patients were divided based on 30-day mortality outcomes. 86 patients had successfully recovered, while 9 had a lethal outcome. Using Fisher's exact test, significant correlations were discovered between 30-day mortality and the following events: pancreatic infection (11.6% vs 66.7%, $p < 0.001$), sepsis (5.8% vs 66.7%, $p < 0.001$), bleeding (1.2% vs 22.2%, $p = 0.023$), multi-organ failure (1.2% vs 77.8%, $p < 0.001$), loss of consciousness (0.0% vs 22.2%, $p = 0.022$), kidney damage (2.3% vs 44.4%, $p < 0.001$), shock (2.3% vs 55.6%, $p < 0.001$) and pancreatic necrosis (35.3% vs 83.3%, $p = 0.049$). Lethal outcomes were additionally associated with lower mean arterial pressure (99.83 ± 12.79 vs 83.59 ± 16.53 mmHg, $p = 0.008$), elevated blood urea levels 48 hours after admission (4.97 ± 2.46 vs 9.83 ± 5.96 mmol/L, $p = 0.0039$) and higher leukocyte count (12.02 ± 4.24 vs 15.64 ± 5.97 [10^9]/L, $p = 0.037$). Based on calculated odds ratio (OR) with 95% confidence intervals (95% CI), the strongest predictors of 30-day mortality were multi-organ failure (OR 77.829, 95% CI 3.379 – 1792.804) and BISAP score (OR 2.471, 95% CI 1.123 – 5.435).

Conclusions Several clinical and laboratory parameters correlated with lethal outcomes in acute pancreatitis, with multi-organ failure emerging as the strongest predictor and BISAP showing the highest scoring accuracy. While further studies with larger samples are needed, these findings highlight the potential of clinical variables in early identification and timely management of high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP881 Impact of drainage-tube use on the outcomes of Saline-Immersion/Irrigation TEchnique endoscopic submucosal dissection of colonic lesions: a comparative cohort analysis

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DOI 10.1055/s-0046-1822208

Aims the saline-Immersion/irrigation Technique (SITE) endoscopic submucosal dissection (ESD) has been reported for improving the feasibility and safety of ESD [1–5]. In 2023, drainage-tubes were introduced to reduce bowel overdistension and facilitate dissection during SITE-ESD, [6–8]. In our practice, we now employ a drainage-tube for all colonic SITE-ESD, by using a slim 8Fr fenestrated nasal-jejunal feeding tube wrapped around the scope and secured with vinyl-tape to enhance the advantaged of SITE-ESD. This tube, which we named the ‘Asclepius tube’, given its similarity to the medical symbol of the snake around the rod of Asclepius, has the objective of draining redundant fluid from continuous saline-irrigation and diathermy-generated gas, obviating the need for scope aspiration. This approach aims to enhance dissection efficiency, visual clarity and patient comfort. A retrospective study by Kagaya et al. demonstrated that drainage improved ESD efficiency in the rectum [9]. We aimed to compare procedural and clinical outcomes between colonic SITE-ESD performed with and without drainage tube placement.

Methods We retrospectively analyzed 137 colonic SITE-ESDs (50 without drainage, 87 with drainage) performed between May 2018 and October 2025 at a tertiary endoscopy unit. Baseline demographic, procedural, and histopathological parameters were compared. Primary outcomes included resection speed, total procedure duration, R0 resection rate, and adverse events. Statistical analysis was performed using IBM SPSS v30.0.

Results Groups were comparable in age, gender, ASA score, lesion diameter, and location (all $p > 0.05$). While median procedure duration was similar (120 min vs 120 min; $p = 0.97$), our resection speed was significantly higher with drainage (11.4 mm²/min vs 6.9 mm²/min; $p = 0.006$). R0 resection rates (88.5% vs 92%; $p = 0.78$) and delayed adverse events (4.6% vs 4%; $p = 0.86$) did not differ significantly.

Conclusions Drainage-assisted colonic SITE-ESD significantly increased resection speed while maintaining similar safety and histological outcomes. Its use may enhance procedural performance and stability in complex colonic resections. Further prospective comparative studies are merited.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Underwater versus conventional endoscopic submucosal dissection for colorectal lesions: systematic review and meta-analysis. Singh, Sahib et al *Gastrointestinal Endoscopy*. Volume 101 (Issue 3): 551–557.e5
- [2] Kagaya Y, Ishii H, Hayashi Y, Hayashi H, Sato S, Kayali S, Suzuki K, Morikawa T, Okada M, Takezawa T, Qawasmí A, Sunada K, Sakamoto H, Yano T, Yamamoto H. Retrospective study comparing rectal endoscopic submucosal dissection with and without Foley catheter drainage tube placement. *Endosc Int Open* 2025; 13:a26317694. doi:10.1055/a-2631-7694 PMID: 40611841 PMID: PMC12223953
- [3] Morikawa T, Murino A, Ishii H, Hayashi Y, Kagaya Y, Fukuda H, Despott EJ, Yamamoto H. The ‘Asclepius tube’: a slim drainage tube wrapped around the distal part of the endoscope, for cecal endoscopic submucosal dissection. *VideoGIE*. 2024 ISSN 2468–4481. doi:1016/j.vgie.2024.10.002
- [4] Kagaya Y, Hayashi Y, Morikawa T. Trans-anal Foley catheter facilitates endoscopic submucosal dissection of a distal rectal tumor. *Dig Endosc*. 2023; 35 (7): e155–e157. doi:10.1111/den.14680 Epub 2023 PMID: 37779453
- [5] Morikawa T, Hayashi Y, Fukuda H. Trans-anal tube facilitates endoscopic submucosal dissection of a > 10 cm rectal laterally spreading tumor. *Dig Endosc*. 2023; 35 (5): e107–e108. doi:10.1111/den.14603 Epub 2023 Jun 11 PMID: 37303260
- [6] Harada H, Nakahara R, Murakami D, Suehiro S, Ujihara T, Sagami R et al. Saline-pocket endoscopic submucosal dissection for superficial colorectal neoplasms: a randomized controlled trial (with video). *Gastrointest Endosc* 2019; 90 (2): 278–87
- [7] Oh CK, Chung HH, Park JK, Jung J, Lee HY, Kim YJ et al. Comparing underwater endoscopic submucosal dissection and conventional endoscopic submucosal dissection for large laterally spreading tumor: a randomized controlled trial (with video). *Gastrointest Endosc* 2024; 100 (6): 1079–1087.e1
- [8] Nagata M, Namiki M, Fujikawa T, Munakata H. Prospective randomized trial comparing conventional and underwater endoscopic submucosal dissection for superficial colorectal neoplasms. *Endoscopy* 2025; 57 (5): 484–91

[9] de Sire R, Capogreco A, Massimi D, Alfarone L, Brandaleone L, Vadalà V et al. Underwater endoscopic submucosal dissection for large non-pedunculated colorectal polyps. *Gut*. 2025;

eP882V Double EUS-guided transmural biliary drainage for total gastrectomy and benign biliopancreatic disease

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DOI 10.1055/s-0046-1822209

Abstract Text

A 92-year-old patient with surgically altered anatomy (total gastrectomy with Roux-en-Y for gastric cancer) presented with recurrent biliary obstruction. Imaging revealed gallbladder and common bile duct (CBD) lithiasis. The patient was unfit for surgery, prompting an endoscopic approach. i) First, EUS-guided transjejunal gallbladder drainage was performed using a 10 × 10-mm LAMS with coaxial pigtail plastic stent. ii) Four weeks later, antegrade trans-LAMS access to the CBD was unsuccessful. A second EUS-guided biliary drainage (choledochojunostomy) was created with a 6 × 8-mm LAMS, followed by transpapillary dilation and double-pigtail stent placement (10 Fr × 7 cm). This case demonstrates the feasibility of sequential EUS-guided biliary drainage for complex biliopancreatic disease in altered anatomy [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/55240b27-7be5-4df8-a43c-643db1be993e/Uploads/19978_Doble_drenatge%20video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Luna-Rodriguez D, Maisterra S, Garcia-Sumalla A, Puigcerver-Mas M, Gornals JB. Endoscopic ultrasound-guided antegrade stenting for benign biliary disease in an elderly patient with altered anatomy (Roux-en-Y). *Endoscopy*. 2023; 55: 165–166
- [2] Elfert K, Zeid E, Duarte-Chavez R, Kahaleh M. Endoscopic ultrasound guided access procedures following surgery. *Best Pract Res Clin Gastroenterol* 2022; 60-61: 101812
- [3] Balducci D, Ratone JP, Schaefer M, Godat S, Perez-Cuadrado-Robles E, Hoibian S, Dahel Y, Dalex M, Chevaux JB, Caillol F, Giovannini M. EUS-guided hepaticojunostomy in patients with history of total gastrectomy: a multicenter retrospective feasibility study (with video). *Gastrointest Endosc* 2025; 101: 117–122

eP883 Effectiveness and safety of EUS-guided drainage of liver abscesses

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DOI 10.1055/s-0046-1822210

Aims To assess the effectiveness and safety of EUS-guided drainage of liver abscesses.

Methods Retrospective analysis of treatment results of all patients with liver abscesses who underwent endoscopic treatment at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum Nicolaus Copernicus University in Toruń, Poland in the years 2018–2025.

Results Endoscopic drainage was performed in 13 patients (9 men, 4 women; mean age 66.52 [42–78] years) with liver abscesses. 11/13 (84.62%) patients had a single abscess of the left liver lobe; the remaining 2/13 (15.38%) patients had a single abscess of the right liver lobe. The mean size of the liver abscess was 85 (52–132) mm. Each patient underwent ERCP with attempted transpapillary drainage of the abscess if the abscess communicated with the bile ducts. In 3/13 (23.08%) patients in whom contrast leakage from the bile ducts into the abscess cavity was detected during ERCP, active transpapillary drainage of the liver abscess was performed; in 1 patient, additional percutaneous drainage of the liver abscess was performed during transpapillary drainage of the liver abscess. The remaining 10/13 (76.92%) patients with left hepatic abscesses were qualified for transmural abscess drainage – active transgastric drainage of the abscess was performed under EUS guidance. The mean duration of active drainage of liver abscesses was 7 (5–16) days. Clinical success of endoscopic drainage of liver abscesses was achieved in 11/13 (84.62%) patients. The mean duration of endotherapy was 224 (67–459) days. The mean follow-up period was 882 (226–1446) days. Long-term success of endoscopic treatment of liver abscesses was achieved in 9/13 (69.23%) patients during the follow-up period.

Conclusions Endoscopic drainage of liver abscesses seems an effective and safe treatment method. The preferred approach is anatomical transpapillary drainage of the abscess during ERCP. If transpapillary access to the abscess cavity is impossible, extraanatomic transmural drainage of the liver abscess is an effective treatment option, which is only possible for left lobe abscesses.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP884 Endoscopic ablation of focal pancreatic lesions

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Aims To assess the effectiveness and safety of EUS-guided endoscopic ablation of focal pancreatic lesions.

Methods A prospective assessment of treatment outcomes of all patients in whom EUS-guided ablation of a focal pancreatic lesion was performed between 2019 and 2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum, Nicolaus Copernicus University in Toruń.

Results Endoscopic ablation of 26 focal pancreatic lesions was performed in 21 patients (14 women, 7 men; mean age 39.77 [21–75] years). Seventeen patients had solitary lesions, and four had multifocal lesions. Eight lesions were located in the pancreatic head, 12 in the body, and 6 in the tail. Histopathology revealed G1 neuroendocrine tumors in 14 patients, while in the remaining 7 patients metastatic renal cell carcinoma or breast cancer lesions were identified. The mean size of the focal lesions was 11 (7–20) mm. In 9 patients, EUS-guided radiofrequency ablation (EUS-RFA) of 12 pancreatic lesions was performed. In 12 patients, ablation of 14 lesions using 98% ethanol was carried out. Technical success was achieved in 23/26 (88.46%) lesions in 19/21 (90.48%) patients. Complications occurred in 4/21 (19.05%) patients. The mean follow-up was 864 (88–1464) days. Long-term success was achieved in 17/21 (80.95%) patients.

Conclusions EUS-guided endoscopic ablation of focal pancreatic lesions is an effective and safe treatment option in selected patients and represents an alternative to surgical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP885 Comparison of minimally invasive techniques in the treatment of high gastrointestinal obstruction

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DOI 10.1055/s-0046-1822212

Aims To determine the safety and effectiveness of gastroenterostomy performed using minimally invasive techniques.

Methods Retrospective analysis of treatment results of all patients with symptoms of high gastrointestinal obstruction who underwent laparoscopic or endoscopic (EUS-guided) gastrointestinal anastomosis in the years 2020–2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum Nicolaus Copernicus University in Toruń, Poland.

Results In 64 patients (51 men, 13 women; mean age 61.72 [39–91] years) with symptoms of high gastrointestinal obstruction, gastrointestinal anastomosis using minimally invasive techniques was performed. Laparoscopic surgery was performed in 34/64 (53.13%) patients, and endoscopic surgery in the remaining 30/64 (46.87%) patients. Gastrointestinal malignancy was the cause of obstruction in 57/64 (89.06%) patients. Technical success was achieved in 59/64 (92.19%) patients. Complications of surgical treatment were observed in 14/64 (21.88%) patients. Clinical success of gastrointestinal anastomosis using minimally invasive techniques was achieved in 55/64 (85.94%) patients. During a mean follow-up period of 412 (155–1211) days, 2/64 (3.13%) patients required endoscopic re-intervention due to gastrointestinal anastomosis stricture.

Conclusions Gastroenterostomy using minimally invasive techniques is a safe and effective treatment method for patients with high gastrointestinal obstruction.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP886 The role of endotherapy in colonic obstruction

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DOI 10.1055/s-0046-1822213

Aims To assess the treatment outcomes of patients with gastrointestinal obstruction due to colorectal cancer who underwent endoscopic treatment with the insertion of a self-expanding metal stent (SEMS).

Methods Retrospective analysis of treatment outcomes in patients with gastrointestinal obstruction due to colorectal cancer who underwent an endoscopic treatment with the insertion of SEMS in the years 2018–2025 at the Department of General, Gastroenterological and Oncological Surgery, Collegium Medicum Nicolaus Copernicus University in Toruń, Poland.

Results In 128 patients with gastrointestinal obstruction due to colorectal cancer, endoscopic treatment with the insertion of SEMS was performed. In 56/128 (43.75%) patients, the procedure was palliative. In the remaining 72/128 (56.25%) patients, the endoscopic procedure served as a bridge to surgery. Technical success of the endoscopic procedure was achieved in 119/128 (92.97%) patients. Early complications, such as gastrointestinal perforation, were observed in 8/128 (6.25%) patients who required surgery. Clinical success was achieved in 104/128 (81.25%) patients. 11/128 (8.59%) patients required surgery due to persistent symptoms of gastrointestinal obstruction.

Conclusions The use of SEMS for gastrointestinal obstruction associated with colon cancer reduces the frequency of urgent surgical procedures involving stoma formation. Furthermore, stenting of colonic obstruction provides a bridge to laparoscopic oncological treatment in some patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP887 Comfort and Success: Real-World Evaluation of Transnasal Endoscopy in the UK

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DOI 10.1055/s-0046-1822214

Aims Transnasal endoscopy (TNE) has emerged as a comfortable, sedation-sparing and resource-efficient alternative to the conventional oesophago-gastroduodenoscopy (OGD). We aimed to evaluate feasibility, completion rates, safety, tolerance and indications for diagnostic TNE, predominantly in the outpatient setting across three sites of Barking Havering & Redbridge University Hospitals NHS Trust (BHRUT).

Methods A retrospective observational study included all consecutive TNE procedures performed between 01/05/2025 and 31/10/2025 at BHRUT. Procedures were performed using two ultrathin endoscope models: the Olympus GIF-H190N and the Pentax EG17-J10. Data collected included demographics, indication, use of nasal anaesthesia, sedation use, comfort score (0–4), completion to second part of the duodenum (D2), conversion to oral gastroscopy, and adverse events. Descriptive statistics were used to summarise outcomes. The majority of procedures were undertaken in the outpatient and ambulatory setting, aligned with the new Trust's transition of diagnostic OGD to TNE within Community Diagnostic Centres (CDC) and one-stop Faster Diagnostic Service (FDS) pathways.

Results A total of 138 procedures were included. The mean age was 60.8 years (range 17–89) and 70 patients (51 %) were female. Most procedures were performed in the outpatient and ambulatory setting (n = 80, 58 %). Nasal anaesthesia was almost universally used (n = 135, 98 %), while sedation was infrequently required (n = 28, 20 %). Patient tolerance was high, as 126 patients (92 %) reported a comfort score of 0 (no discomfort) or 1 (minimal discomfort). No patient reported the highest discomfort score of 4. Completion to D2 was achieved in 134 cases (97 %), comparable to conventional OGD. Conversion to oral gastroscopy occurred in 8 cases (6 %), mainly due to narrow nasal cavity (n = 4, 3 %) or patient intolerance (n = 3, 2 %). No adverse events were recorded. TNE was performed for a wide range of clinical indications, mirroring those of standard OGD. The most common was dysphagia, accounting for 42.8 % of all referrals. Other frequent indications included dyspepsia (25.4 %), unintentional weight loss (18.8 %), abdominal pain (13.8 %), heartburn (11.6 %), nausea (9.4 %), and anaemia (7.2 %). Less frequent indications included vomiting, bloating, oesophagitis and Barrett's surveillance. This demonstrates the broad applicability of TNE across both diagnostic and surveillance pathways.

Conclusions In this real-world UK cohort, transnasal endoscopy demonstrated excellent safety, high patient tolerance, and strong technical performance, comparable to conventional OGD, while offering clear operational advantages. The high completion rate, low conversion rate, minimal sedation use, excellent comfort scores and absence of adverse events highlight its suitability as a first-line diagnostic modality within ambulatory and Faster Diagnostic Service pathways. Particularly in our case, the introduction of ambulatory TNE within the CDC has freed capacity in core endoscopy rooms, enabling expansion of OGD services and supporting additional Trust-wide initiatives. These findings support broader adoption of TNE to improve patient experience, streamline diagnostic pathways and enhance system-wide efficiency. Further prospective work should assess cost-effectiveness and long-term patient-reported outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP888 Endoscopic Removal of Gastric GISTs Using a Novel Combined Approach – Endoscopic Submucosal Dissection, Full Thickness Resection, the Clip-Line Technique and a New Mucosal Flap Closure Technique – a Report of Two Cases

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DOI 10.1055/s-0046-1822215

Abstract Text

Gastrointestinal stromal tumours (GIST) are the most common type of subepithelial lesions (SEL). Current guidelines recommend surgery as the standard treatment for potential resectable tumours. However, with the advancement of third-space endoscopy, growing evidence supports endoscopic removal of gastric GIST as both effective and safe.

We report two cases of gastric GISTs removed endoscopically with a novel approach which integrates endoscopic submucosal dissection (ESD), full thickness resection (FTR), the clip-line technique and a new mucosal flap closure technique.

The first case involved a 62-year-old man with persistent abdominal pain. The second case concerned a 77-year-old woman transferred to our unit after multiple admissions in another hospital for recurrent upper gastrointestinal bleeding, requiring repeated transfusions. Both patients were diagnosed by gastroscopy and endoscopic ultrasound with fine-needle biopsy. Computed tomography was performed to exclude metastasis. The therapeutic options were thoroughly discussed. Endoscopic removal was chosen in both cases—by patient preference in the first case and due to significant cardiopulmonary comorbidities and high surgical risk in the second one. In the first case, endoscopy revealed a 20 mm SEL on the lesser curvature, approximately 1 cm distal to the gastroesophageal junction. In the second case, an approximately 50 mm SEL with an eroded surface was observed at the corpus-fundus junction [1–6]. Both therapeutic procedures were performed under general anaesthesia with orotracheal intubation. In both cases, marking and incision were performed with an ESD hybrid knife, followed by application of the clip-line technique to lift the submucosa. Layer-by-layer dissection was performed and coagulation with bipolar forceps due to marked vascularization had to be used. Because both lesions were adherent to the muscularis propria, FTR was carried out. Following these steps, complete en bloc removal of the lesions was achieved. A new mucosal flap closure technique – adjustment and repositioning of the mucosal flap and the subsequent placement of multiple clips – was then used to close the defects. Macroscopically, in sano resection was achieved in both cases. However, due to enucleation, R0 status could not be definitively assessed in the first case, whereas histology of the second confirmed tumour-free circumferential margins. In both cases, second-look gastroscopies confirmed intact resection sites with clips in situ. Prophylactic antibiotics were administered and the post-interventional course was uneventful.

In conclusion, these two cases show that gastric GISTs, including larger lesions, can be safely and effectively treated using this novel endoscopic approach combining ESD, the clip-line technique with FTR and mucosal flap closure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Takayanagi S. et al. Adjustable length and strength traction by clip with line-pulley securing technique. *VideoGIE* 2024; 9 (8): p 385–387
- [2] Kim H.H. Endoscopic treatment for gastrointestinal stromal tumor: Advantages and hurdles. *World J Gastrointest Endosc* 2015; 7 (3): p 192–205
- [3] Dhaliwal A.J. et al. Sa1935 EFFICACY AND SAFETY OF ENDOSCOPIC RESECTION FOR THE GASTROINTESTINAL STROMAL TUMORS: A SYSTEMATIC REVIEW AND META-ANALYSIS. *Gastrointestinal Endoscopy* 2018; 87 (6): p AB256–AB257

- [4] Chiu P.W.Y. et al. Endoscopic full-thickness resection (EFTR) compared to submucosal tunnel endoscopic resection (STER) for treatment of gastric gastrointestinal stromal tumors. *Endosc Int Open* 2023; 11 (2): p E179–E186
- [5] Casali P.G. et al. Gastrointestinal stromal tumours: ESMO-EURACAN-GENTURIS Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology* 2022; 33 (1): p 20–33
- [6] Deprez P.H. et al. Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2022; 54 (4): p 412–429

eP889 “Diagnostic Yield and Histologic Quality of EUS-Guided Biopsies Using EchoTip ClearCore and Acquire Needles in Solid Pancreatic Lesions: Preliminary Experience from a Tertiary Center.”

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DOI 10.1055/s-0046-1822216

Aims To assess and compare the diagnostic yield and histologic quality of samples obtained with EchoTip ClearCore and Acquire needles during EUS-guided biopsy of solid pancreatic lesions.

Methods A retrospective descriptive–correlational study including 19 patients who met the inclusion criteria and had no exclusion criteria, between June and November 2025. Tumor location, MOSE (visible core), number of passes, histologic quality, complications, and the need for repeat biopsy were evaluated. Differences between groups were assessed using the two-tailed Fisher's exact test (► Table 1).

Results The most frequent lesion location was the head/uncinate process (13/19; 68.4%). An adequate visible core (MOSE ≥ 4 mm) was obtained in all cases. Most procedures required more than one pass (14/19; 73.7%). No post-procedural complications were recorded. High-quality histology (score ≥ 7) was achieved in 91.7% of samples obtained with the EchoTip ClearCore needle, compared with 71.4% with the Acquire needle; this difference did not reach statistical significance ($p = 0.5232$), although the OR favored ClearCore (OR = 4.40). The mean number of passes was similar between devices (ClearCore 2.58 vs Acquire 2.14; $p = 1.00$). Diagnostic yield was high in both groups: 83.3% for EchoTip ClearCore and 100% for Acquire, with no significant differences ($p = 0.5088$). No complications were observed in either group.

Conclusions Both needles demonstrated safety and satisfactory diagnostic performance. No statistically significant association was found between needle type and either histologic sample quality or diagnostic yield. A limitation of the study was the small sample size.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP890 Longitudinal follow-up of double duct dilatation: What happens without EUS?

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DOI 10.1055/s-0046-1822217

Aims Double duct dilatation (DDD) without an associated mass found on cross-sectional imaging warrants further investigations to exclude an occult periampullary tumour, although benign findings are common. Endoscopic ultrasound (EUS) can be performed in these patients. We aim to investigate the difference in longitudinal outcomes of patients who underwent EUS versus those who did not, and whether there were predictive factors for findings of pancreaticobiliary malignancies in these patients.

► Table 1

		EchoTip ClearCore	Acquire	p	OR
Tumor location	Head/Uncinate process	10 (83.3%)	3 (42.9%)		
	Body/Tail	2 (16.7%)	4 (57.1%)	0.1287	6.67
MOSE (Visible core)	Adequate (≥ 4 mm)	12 (100%)	7 (100%)		
	Inadequate (< 4 mm)	0 (0%)	0 (0%)	1.00	
Number of needle passes	0 (1 pass)	3 (25%)	2 (28.6%)		
	1 (> 1 pass)	9 (75%)	5 (71.4%)	1.00	0.8333
Histological quality	High (≥ 7)	11 (91.7%)	5 (71.4%)		
	Low (< 7)	1 (8.3%)	2 (28.6%)	0.5232	4.4
Histological diagnosis	Diagnostic	10 (83.3%)	7 (100%)		
	Non-diagnostic	2 (16.7%)	0 (0%)	0.5088	
Post-procedural complications	No	12 (100%)	7 (100%)		
	Yes	0 (0%)	0 (0%)	1.00	
Need for repeat biopsy	No	11 (91.7%)	6 (85.7%)		
	Yes	1 (8.3%)	1 (14.3%)	1.00	1.8333
Surgical confirmation	No	12 (100%)	6 (85.7%)		
	Yes	0 (0%)	1 (14.3%)	0.3684	

Methods Patients with DDD between January 2015 to December 2023 were identified from radiology electronic patient records within a tertiary centre based in the United Kingdom. A dedicated radiologist re-reviewed the index scans to confirm the presence of DDD. DDD was defined as a common bile duct of greater than 7mm and a pancreatic duct of greater than 3mm at the pancreatic head. A retrospective analysis using clinical data from electronic patient records was performed. Follow-up of each case was defined as the point of review of their medical records, date of development of a malignant pancreaticobiliary condition or the date of death. Data was analysed using chi-squared, mann-whitney u test and fisher exact test depending on the type of data.

Results Initial search of the hospital medical imaging system resulted in 470 scans. The list was subsequently cut down to 153 individual cases by exclusion criteria including no DDD or associated mass found on imaging. 56% had EUS (G1) performed following their scans, whilst 44% had no EUS (G2). The median age of G1 was lower than G2 [median 68 years (58-75) vs 77 (69-85.5), $p < 0.0001$]. G1 had 53% females and G2 had a higher proportion of 71% ($p = 0.03$).

Baseline characteristics revealed G1 had significantly more patients with chronic pancreatitis (19% vs 6%, $p = 0.03$). Frequency of previous cholecystectomy (12% vs 10%, $p = 0.77$), opioid use (35% vs 34%, $p = 0.85$) and previous endoscopic retrograde cholangiopancreatography (4% vs 1%, $p = 0.63$) were similar in both groups. Biliary pain and jaundice followed a similar pattern of increased frequency in G1 but with no significant differences (39% vs 28%, $p = 0.16$) and (25% vs 18%, $p = 0.29$) respectively. Also, there was no difference with regards to weight loss (25% vs 26%, $p = 0.8$).

Abnormal LFTs were similar in both groups (56% vs 60%, $p = 0.76$). However, ALT was found to be significantly different [median 44 (17.5-154) vs 32 (12-85), $p = 0.03$]. Bilirubin [median 10 (6-29.5) vs 9 (6-18), $p = 0.42$], ALP [median 161 (95.5-485.5) vs 155 (91-390), $p = 0.58$] and Ca19-9 [median 28 (10-60) vs 19 (8.5-50), $p = 0.42$] had no significant differences. Proportions of computed tomography (52% vs 60%, $p = 0.29$) and magnetic resonance imaging (48% vs 40%, $p = 0.29$) scans were similar between both groups. Common bile duct [median 13 (11-17) vs 13 (11-18), $p = 0.51$] and pancreatic duct [median 6 (5.5-7) vs 7 (6-7.5), $p = 0.12$] sizes were also similar.

Lastly, median follow-up was significantly different with a longer time frame in G1 [40.6 months (26.5-65.9) vs 34.4 (13.4-56.1), $p = 0.01$]. The incidence of malignancy, however, was similar (5% vs 13%, $p = 0.08$). Patients diagnosed with malignancy during index EUS ($n = 14$) had predictive factors of jaundice ($n = 11$), weight loss ($n = 6$) and biliary pain ($n = 6$). The same factors were frequent in patients diagnosed during follow-up too ($n = 13$) with jaundice ($n = 10$), weight loss ($n = 3$) and biliary pain ($n = 3$).

Conclusions Our study has demonstrated in cases where no cause of DDD is seen on cross-sectional imaging or EUS, there are low rates of malignancy in the follow-up period. Though not statistically significant, patients who did not have EUS had an increased occurrence of malignancy. In the absence of jaundice, weight loss and biliary pain, the likelihood of malignant pathology is low. Given the risks associated with pancreaticobiliary endoscopy, especially in an aging population, this study stresses the importance of careful case selection and allowing time to counsel patients for invasive investigations, if deemed appropriate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP891 EUS Training Across Five Continents: A Global Snapshot of Skills, Challenges, and Training Needs

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DOI 10.1055/s-0046-1822218

Aims The objective of this study is to assess endoscopists' training needs in Endoscopic Ultrasound (EUS) via an anonymous survey and to identify the key challenges faced to develop appropriate training programs.

Methods This prospective cross-sectional study used an anonymous online survey completed by over one hundred endoscopists involved in EUS practice or training. The needs assessment was conducted using the FGP grid (frequency, gravity, and problems) across seven items. Each item was evaluated based on its frequency (0, 1, 2), severity (0, 1, 2), and the difficulties related to knowledge, skills, and attitudes (0, 2, 4). Data processing and statistical analysis were performed using Jamovi version 2.4.

Results A total of 85 responses were collected from 30 countries spanning five continents. Of the respondents, 60% were male (male-to-female ratio: 1.5). Half of the participants were aged between 30 and 40 (48.2%), followed by those aged between 40 and 50 (30%). One in three participants was a teacher. Endoscopy had been practised by 49.4% of participants for more than 10 years, while EUS had been performed by 62.4% for less than 5 years. Although 83.6% of training centres had EUS equipment, only 55.3% of participants had received EUS training.

Several EUS training methods were reported, including hands-on training with patients (63.5%), a university or inter-university diploma (47.1%), webinars or distance learning (35.3%), hands-on training with models or animals (30.6%), and certification programmes (25.9%). The majority of participants preferred hands-on training with patients (84.7%) or models (42.4%), followed by a university diploma (42.4%).

55.3% of the participants felt that the training they had received was inadequate. According to the FGP grid, the main difficulties encountered were related to knowledge, followed by skills.

81.2% of participants reported theoretical difficulties in interpreting EUS and understanding interventional EUS techniques. The availability of equipment was challenging for 3 out of 4 participants (75.3%).

From a practical perspective, interventional EUS and EUS interpretation were the most problematic issues for 3 out of 4 participants (75.3%, 77.6%).

When comparing the training methods, the group with hands-on training with patients reported fewer difficulties in performing EUS ($p = 0.003$) and professional skills ($p = 0.019$). The statistical analysis comparing the group of participants working in centers performing 10 to 20 EUS procedures per week and those working in expert centers (more than 20 EUS procedures per week) showed a significant difference regarding practical difficulties in performing and interpreting EUS ($p = 0.001$).

Conclusions EUS is a fundamental modality for both diagnosing and treating digestive and biliopancreatic disease. Findings from our international multicenter survey indicate significant training needs, especially in EUS interpretation and interventional practice. We observed that theoretical and technical challenges were fewer for endoscopists working in expert centers with high volumes of procedures, and that hands-on training with patients provided a clear performance advantage, reinforcing its importance in EUS education.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP892 The clinicopathological characteristics of large traditional serrated adenomas: an underrecognised entity

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DOI 10.1055/s-0046-1822219

Aims Large Traditional Serrated Adenomas (TSA ≥ 20 mm) are an important subgroup of colorectal neoplasms. There is limited data about large TSAs and most information on these lesions has been derived from the analysis of smaller lesions. We sought to analyse the clinicopathological features of large TSAs in comparison to large Tubulovillous Adenomas (TVAs) in a multicenter prospective cohort (► **Table 1**).

► Table 1

				EMR			ESD			En bloc			Piecemeal		
	TSA (n = 107)	TVA (n = 1989)	P value	TSA (n = 82)	TVA (n = 1817)	P value	TSA (n = 25)	TVA (n = 172)	P value	TSA (n = 30)	TVA (n = 309)	P value	TSA (n = 77)	TVA (n = 1679)	P value
Cancer	11/107 (10.2%)	176/1989 (8.8%)	0.613	8/82 (9.8%)	144/1817 (7.9%)	0.717	3/25 (12%)	32/172 (18.6%)	0.420	3/30 (10%)	46/309 (14.9%)	0.467	8/77 (10.39%)	130/1679 (7.7%)	0.399
Recurrence	10/72 (13.9%)	165/1645 (10.0%)	0.289	10/59 (16.9%)	161/1506 (10.7%)	0.131	0/13 (0%)	4/139 (2.9%)	0.535	0/17 (0%)	6/309 (1.9%)	0.562	10/55 (18%)	159/1336 (11.9%)	0.162
Post procedural bleeding	7/107 (6.5%)	181/1989 (9.1%)	0.367	6/82 (7.3%)	167/1817 (9.1%)	0.564	1/25 (4%)	14/172 (8.1%)	0.466	1/30 (3.3%)	25/309 (8.1%)	0.350	6/77 (7.8%)	156/1679 (9.3%)	0.657
Significant deep mural injury	8/107 (7.5%)	90/1989 (4.5%)	0.157	5/82 (6%)	76/1817 (4.2%)	0.401	3/25 (12%)	14/172 (8.1%)	0.521	5/30 (16.7%)	23/309 (7.4%)	0.08	3/77 (3.9%)	67/1679 (4.0%)	0.967

Methods We analysed the Australian Colonic Endoscopic Resection cohort, a multicenter, observational study of consecutively referred patients with large non-pedunculated colonic polyps (LNPCP). Participants were enrolled at 1 of 7 sites between July 2008 to February 2025. The clinicopathological data of large TSAs were compared with large TVAs. We analysed the Australian Colonic Endoscopic Resection cohort, a multicenter, observational study of consecutively referred patients with large non-pedunculated colonic polyps (LNPCP). Participants were enrolled at 1 of 7 sites between July 2008 to February 2025. The clinicopathological data of large TSAs were compared with large TVAs.

Results Among 4665 LNCPs, there were 114 large TSAs (2.4%) and 2411 TVAs (51.6%). TSAs were more often left sided (70% vs 40%, $p < 0.01$) and occurred more frequently in women (61% vs 45%, $p = 0.004$). Lesion size and morphology were comparable. SMIC rates were equivalent (10.2% vs 8.8%, $p = 0.77$). Recurrence at first surveillance was similar (13.9% vs 10%, $p = 0.29$). Synchronous LNCPs occurred in 11.4% vs 8.7% respectively ($p = 0.53$). Post procedural bleeding (6.5% vs 9.1%, $p = 0.37$) and significant deep mural injury (7.5% vs 4.5%, $p = 0.16$) were comparable between the two groups.

Conclusions We present novel data indicating that large TSAs are clinically significant lesions with an SMIC risk of 10.2%. They parallel TVAs in morphology and resection outcomes. Their management warrants the same meticulous approach applied to advanced adenomatous lesions, encompassing technical precision and vigilance during index and surveillance endoscopy for synchronous neoplasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP893 Outcomes and determinants of delayed ERCP in acute cholangitis: a retrospective cohort study

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DOI 10.1055/s-0046-1822220

Aims The cornerstone of acute cholangitis treatment is antibiotic therapy combined with biliary drainage. The Tokyo Guidelines 2018 provide severity grading criteria that help predict prognosis and identify patients requiring early biliary drainage. While mild cholangitis can often be managed initially with antibiotics alone, moderate and severe cases typically require early and emergent drainage, respectively. Our aim is to explore factors influencing the timing of ERCP in acute cholangitis and its impact on clinical outcomes.

Methods This retrospective single-center cohort study included patients diagnosed with acute cholangitis who underwent ERCP between March 2022 and

December 2024 in a tertiary hospital with ERCP. Diagnosis and severity grading were based on the Tokyo Guidelines 2018. Descriptive and statistical analyses were performed to evaluate patient characteristics, severity classification, timing to ERCP and related clinical outcomes.

Results A total of 145 patients underwent ERCP for acute cholangitis; 79 were female (54%) and the median age was 79 years. Based on the Tokyo 2018 criteria, 41 patients (28.3%) had grade III cholangitis, 60 (41.4%) grade II and 44 (30.3%) grade I. Regarding etiology, lithiasis was the predominant cause of cholangitis, with 99 patients showing choledocholithiasis on ERCP. Malignant biliary strictures accounted for 12 cases (8.2%), and among these, 50% presented with a previously placed biliary stent. Only 12 patients (8.3%) underwent ERCP within 24 hours of admission – 4 with grade III, 4 with grade II and 4 with grade I. Within 72 hours, 56 patients (38.6%) had undergone ERCP – 21 with grade III, 20 with grade II and 15 with grade I. Notably, 49% of grade III cases were submitted to ERCP more than 72 hours after admission, with a median of 2 days of antibiotics before drainage. There was no statistically significant association between ERCP timing and patient age, cholangitis severity, intensive/intermediate care admission or anticoagulant/antiplatelet use. Among organ dysfunction criteria, only neurological dysfunction showed a statistically significant association with earlier ERCP ($p = 0.032$). Admission on Friday to Sunday strongly predicted delayed intervention ($p < 0.001$), 84% of these patients underwent ERCP more than 72 hours after admission, compared with 45% for weekday admissions. Cholangitis severity was significantly correlated with length of hospital stay (grade I: 7.6 ± 3 days, grade II: 7.7 ± 4 days, grade III: 12.3 ± 4 days; $p < 0.001$). The 30-day mortality rate was 3.4%, with no significant association with ERCP timing or cholangitis severity. The median age of patients who died was 88 years (range 86–97). Only one death was directly attributed to severe acute cholangitis, in which ERCP was performed past the guideline recommended timing.

Conclusions In this real-world cohort, ERCP was frequently delayed beyond the recommended window, even in severe acute cholangitis. Weekend admission was a significant contributor to this delay. However, no association was found between ERCP timing and 30-day mortality, likely due to small sample size. These findings highlight the need for optimized access to biliary drainage, particularly during weekends, to better meet guideline recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP894 Evaluating Prophylactic Measures in Piecemeal Resection: The Role of Endoscopist Expertise

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DOI 10.1055/s-0046-1822221

Aims Piecemeal endoscopic mucosal resection (p-EMR) remains widely used for large non-pedunculated colonic polyps when en-bloc excision is not feasible. However, piecemeal resection is associated with a substantial risk of residual or recurrent adenoma due to fragmentation and incomplete resection. The 2024 ESGE guideline on colorectal polypectomy and EMR recommends that after hot-snare piecemeal EMR of large non-pedunculated colorectal polyps (LNPCPs), resection margins should undergo thermal ablation using snare-tip soft coagulation to decrease adenoma recurrence. In real-world practice, recurrence after EMR without margin ablation has been reported to reach 15–20%. Accordingly, reduction of recurrence – and the role of endoscopist expertise – remains critical for optimisation of patient outcomes. This study aimed to evaluate adenoma recurrence after piecemeal hot-snare resection in our center, and to assess the impact of prophylactic interventions (margin ablation and/or cold-snare margin resection) as well as endoscopist expertise.

Methods We conducted a retrospective, single-center cohort study of all patients undergoing piecemeal hot-snare polypectomy or mucosectomy between January 2022 and December 2023 in a tertiary-care hospital. Lesions were classified based on the Paris Classification. We defined “experienced endoscopist” as one performing > 50 EMRs annually and/or having expertise in endoscopic submucosal dissection (ESD). We recorded whether prophylactic measures were applied after resection: margin thermal ablation and/or cold-snare margin resection. Descriptive statistics and appropriate comparative analyses were employed to explore associations between recurrence rates, the use of prophylactic measures, and endoscopist experience.

Results We resected 102 lesions in 102 patients. The median lesion size was 25 mm (range 10–50 mm); most lesions were located in the ascending colon (37.3%) or cecum (22.5%). The majority were Paris 0-IIa morphology (71.6%), including 45 granular and 8 non-granular LSTs. Prophylactic measures were applied in 66 cases (64.7%) – margin thermal ablation in 43, cold-snare margin resection in 9, and both in 14. Histopathology revealed 88 adenomas, 13 serrated lesions without dysplasia, and one with dysplasia. Of the 88 adenoma cases, 57 (64.8%) underwent surveillance colonoscopy at a mean of 8.7 months post-resection. Overall adenoma recurrence was observed in 19.3% of patients. With prophylactic measures, recurrence was 14%; notably, none of the patients in whom both techniques were used had recurrence, compared with 28% recurrence in the no-prophylaxis group – though this difference did not reach statistical significance. Recurrence was not associated with lesion size, location, or morphology. In contrast, procedures performed by an experienced endoscopist had a significantly lower recurrence rate (4% vs. 31.3%, $p = 0.016$). Within the prophylaxis subgroup, recurrence remained lower in the experienced endoscopist group, although the difference did not achieve statistical significance – likely due to limited sample size.

Conclusions In our series, nearly one in five patients had adenoma recurrence after piecemeal resection, despite surveillance. Use of prophylactic measures (margin ablation and/or cold-snare margin resection) was associated with a lower recurrence rate, particularly when both techniques were applied. However, statistical significance was not reached, due to limited sample size and follow-up. Importantly, endoscopist expertise emerged as the most significant factor associated with decreased recurrence, underscoring the critical role of operator experience. These findings suggest that concentration of EMR in experienced hands may improve outcomes. Larger, adequately powered prospective studies are warranted to better define optimal prophylactic strategies, operator competency thresholds, and follow-up protocols.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP895 Multicenter Non-Inferiority Study of 3D-Printed Distal Attachments for Endoscopic Submucosal Dissection in a Porcine Model

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DOI 10.1055/s-0046-1822222

Aims We tested whether a 3D-printed cap delivers non-inferior efficiency with superior handling versus a standard commercial cap in the multicenter ENDO-PRINT trial (ex vivo porcine models) which took place in Prague and Olomouc (Czech Republic) and Boston (USA).

Methods Across three centers, 99 ESDs (33/site) were randomized 1:1 to a 3D-printed or commercial cap (Olomouc 20/13; Prague 15/18; Boston 16/17). The primary endpoint was procedure time. The secondary endpoints were lesion size, en-bloc resection rate, ergonomics, scope withdrawal for cleaning/exchange, and adverse events. The 3D-printed cap was created on Form 3B using BioMed Flex 80A.

Results Procedure time was the same for both caps (median 17.3 min; $p = 0.952$); technical and en-bloc resection rates were the same (100%). Ergonomic parameters favored the 3D-printed cap (visibility 4 vs 3; manipulation 4 vs 3; retraction 5 vs 3; all $p < 0.001$) and were replicated at each center. Adverse events were rare and similar (tears 4 vs 3; perforation 0 vs 1). Lesion size correlated with time ($p = 0.44$; $p = 0.001$), center effects, not cap type, explained time variability.

Conclusions Custom 3D-printed distal attachment caps are non-inferior for speed and safety; however, 3D caps provide superior visibility and traction. These data support rapid, design-tailored, cost-efficient accessories for ESD and training. Clinical in vivo validation and economic analyses are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP896 Determinants of surgical referral in patients with colorectal dysplasia and pT1 cancer: a real-world tertiary-center analysis

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DOI 10.1055/s-0046-1822223

Aims identify the clinical, lesion characteristics and endoscopic factors that led to surgical management of colorectal tumors potentially amenable to endoscopic resection (ER). Secondary aims included assessing the accuracy of optical characterization, the impact of reassessment in an expert center, as the outcomes of non-curative ER of pT1 adenocarcinoma (ADC).

Methods retrospective analysis of all patients submitted to surgery between 2020–2024 with surgical specimen showing dysplasia, pT1 ADC, or no dysplasia/ADC after ER. Patients with polyposis syndromes, inflammatory bowel disease and neoadjuvant chemoradiotherapy were excluded. Data on index colonoscopy, reassessment at referral center, ER attempt, surgical indication, final histopathology and post-resection outcomes were collected.

Results Results: 113 patients with 113 lesions were included (61 % male; 71 ± 8 years-old). Index colonoscopy was performed mainly in private clinics (55 %); 24 % were reassessed at a referral center. Median lesion size was 35 mm (IQR 20), most frequently located in the left colon (28 %), ascending colon (24 %), or caecum (22 %). 53 % were described as neoplastic, and 28 % underwent virtual chromoendoscopy evaluation. When enhanced imaging was used, there was a correlation between optical diagnosis and the surgical specimen histopathology: NICE/JNET 3 showed 64 % of ADC ($p = 0.050$). Describing a lesion as “neoplastic” on white-light endoscopy showed no association with final ADC ($p = 0.177$). ER was attempted in 23 % of cases. Piecemeal mucosectomy (42 %), polypectomy (35 %) and en-bloc mucosectomy (8 %) were the most common techniques. Among patients operated for non-curative ER (12 %) – defined as positive margins, lymphovascular invasion, poor differentiation or deep invasion – 77 % had no dysplasia/ADC on the surgical specimen. Indications for surgery were suspicion of deep invasion (61 %), non-curative ER (12 %) and ER failure (11 %). Predictors of “advanced lesion suggestive of deep invasion” were: description as neoplastic (OR 19.4, $p < 0.001$), NICE/JNET 3 (OR 11.7, $p = 0.005$), and biopsy suggesting ADC (OR 2.56, $p = 0.062$). Reassessment at a referral center was protective (OR 0.17, $p = 0.005$). Lesion size did not reach significance ($p = 0.081$). Final histology revealed 41 % HGD and 48 % ADC. Submucosal invasion was quantified in 13.5 % of the ADC specimens. Excluding deep submucosal invasion as a risk factor, 7 % presented any high-risk criteria for lymph-node metastasis (LNM) (50 % was deep submucosal invasion), with one confirmed LNM. Postoperative morbidity occurred in 27 %, 55 % with dysplasia. The median length of hospital stay was 6 days (IQR 3).

Conclusions surgical management of colorectal dysplasia and T1 cancer was largely driven by initial endoscopic impression on index colonoscopy, rather than by structured and comprehensive lesion characterization. Limited use of virtual chromoendoscopy, low rates of expert reassessment, and underutilization of ER contributed to escalation toward surgery, often without high-risk histological features. These findings highlight substantial overtreatment potential and underscore the need to strengthen optical diagnosis, standardized referral pathways, and reassessment in expert centers.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP897 First-in-human study of proximal intestinal mucosal ablation (PIMA) for the treatment of inadequately controlled type 2 diabetes

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DOI 10.1055/s-0046-1822224

Aims Proximal intestinal mucosal ablation (PIMA) is a metabolic endoscopic procedure that aims to replicate the glycaemic benefits of gastric bypass surgery in patients with type 2 diabetes (T2D). This is achieved by endoscopically ablating up to 60 cm of the abnormal, hypertrophied intestinal mucosa. PIMA

is completed with the through-the-scope, radiofrequency vapor ablation (RFVA) mesh-tip catheter. In our first in-human study, we investigated RFVA as a modality of duodenal mucosal ablation for the treatment of T2D, which is limited to 15 cm of treated duodenum. We hypothesised that a longer ablation length could lead to an improved and more durable glycaemic response without compromising safety. Accordingly, we report the first-in-human evaluation of PIMA, which aimed to assess its safety, tolerability, feasibility, and early efficacy.

Methods A prospective, single-centre first-in-human study evaluating PIMA using RFVA for the treatment of uncontrolled T2D (glycated haemoglobin [HbA1c] 7.5–10.0 %) despite ≥ 1 oral glucose-lowering agent (GLA) within Clínica Colonial, Santiago (NCT05887635). After screening, patients underwent a 4-week run-in period to ensure stable glycaemic control before undergoing PIMA between September 2024 and May 2025, alongside standard lifestyle advice for T2D and no change in GLAs. PIMA was performed via an adult colonoscope (Olympus HQ190L) with the circumferential through-the-scope mesh-tip RFVA catheter under general anaesthesia. RFVA was delivered at a dose of 250–275 J with double application (2X) to the post-ampullary intestinal mucosa. Patients were discharged within 24 hours on a modified day for 14 days. Technical success was defined as ≥ 20 cm of ablated post-ampullary mucosa. The primary outcomes were safety (serious adverse events), tolerability (visual analogue score [VAS] for pain post-procedure), feasibility (procedure time and ablation length), and reduction in HbA1c at 3- and 6-months. Secondary exploratory outcomes included change in body mass index (BMI) and Homeostatic Model Assessment of Insulin Resistance (HOMA-IR).

Results In total, 13 patients (38.5 % female) with an average age of 52 years (IQR 45–61) underwent PIMA. The average T2D disease duration was 6 years (IQR 5–9), the baseline HbA1c was 9.3 % (SD 0.7), BMI was 31.4 kg/m² (SD 2.5), and the average number of GLAs was 1 (IQR 1–2). PIMA was successful in all patients with an average treatment length of 54 cm (IQR 44–60) and 40.8 (SD 10.7) ablations. Six patients were treated with a 250 J dose, and seven patients with 275 J. The average procedure time was 62.2 minutes (SD 14.4) and catheter time 51.3 minutes (SD 19.2). PIMA was well-tolerated with a maximum median VAS score of 1 (IQR 0–2) on day 2. All patients reached six months follow-up, and there were no adverse events related to the procedure or episodes of hypoglycaemia. Follow-up enteroscopy with biopsy was normal in all patients. The median reduction in HbA1c at 3- and 6-months was 2.5 % (IQR 1.4–2.9; $p < 0.0001$) and 2.2 % (IQR 1.0–2.5; $p = 0.0001$), respectively. Over the same period, we observed a non-significant reduction in BMI by 0.6 kg/m² (SD 1.3; $p = 0.13$) and 1.0 kg/m² (SD 1.9; $p = 0.08$), as well as reductions in HOMA-IR by -2.7 (SD 3.3; $p < 0.05$) and -2.0 (SD 3.3; $p = 0.05$), respectively.

Conclusions PIMA appears to be a safe, feasible, and well-tolerated metabolic endoscopic procedure that leads to major reductions in glycated haemoglobin comparable to modern injectable pharmacotherapies.

Conflicts of Interest RH, LARG, PM, PBH, PV, BCN, and NS disclose receipt of research funding from Aqua Medical Inc. to support research infrastructure

eP898 Comparative Outcomes of Speedboat Submucosal Dissection and Hot Snare Polypectomy for Large Pedunculated Colorectal Polyps: A Retrospective Multicenter Study

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DOI 10.1055/s-0046-1822225

► **Table 1** Compare Outcome

			Method				P-value
			SSD		HSP		
			n	%	n	%	
Outcome	Complete resection	Yes	25	100	28	93.3	0.495
Complication	Delayed Bleeding	No	0	0	2	6.7	
		Yes	0	0	1	3.3	1.000
	No	25	100	29	96.7		
	Perforation	Yes	0	0	0	0	-
		No	25	100	30	100	
			Mean	SD	Mean	SD	
	Procedure time		94.28	76.176	53.70	37.126	0.020 *
	LOS		3.24	1.535	1.53	1.655	0.000 *

Aims This study aims to evaluate the efficacy and safety of Speedboat Submucosal Dissection (SSD) for large colorectal pedunculated polyps compared with conventional Hot Snare Polypectomy (HSP)

Methods This retrospective, multicenter study was conducted at three tertiary hospitals in Thailand. The study period spanned from October 2022 to October 2025. We included patients diagnosed with large colorectal pedunculated polyps (Size ≥ 2 cm) who underwent endoscopic resection using either Speedboat Submucosal Dissection (SSD) or Hot Snare Polypectomy (HSP). Clinical data, including patient demographics, procedural details, and adverse events, were retrospectively collected from medical records. Statistical analysis was performed to compare the efficacy and safety outcomes between the two groups (► **Table 1**).

Results A total of 55 patients were included in the study, comprising 25 patients in the Speedboat Submucosal Dissection (SSD) group and 30 patients in the Hot Snare Polypectomy (HSP) group. The mean polyp size was 2.72 cm in the SSD group and 2.46 cm in the HSP group.

In terms of efficacy, the complete resection rate was 100 % (25/25) in the SSD group compared with 93.3 % (28/30) in the HSP group; however, this difference was not statistically significant ($p = 0.495$). Histopathological analysis revealed adenocarcinoma in 12 % (3/25) of the SSD group and 13.3 % (4/30) of the HSP group. Notably, the mean procedure time was significantly longer in the SSD group compared with the HSP group (94.28 min vs. 53.70 min, $p = 0.020$).

Regarding safety outcomes, there were no significant differences in adverse events between the two groups. Delayed bleeding was not observed in the SSD group (0 %) but occurred in one patient (3.3 %) in the HSP group ($p = 1.000$). No perforation occurred in either group.

Conclusions Our study demonstrates that Speedboat Submucosal Dissection (SSD) is a safe and feasible technique for the management of large pedunculated colorectal polyps when compared with conventional Hot Snare Polypectomy (HSP). A key finding of this study was the 100 % complete resection rate achieved in the SSD group. Although this did not reach statistical significance compared to the HSP group, likely due to the limited sample size, the absolute success rate suggests that SSD offers high efficacy without compromising safety.

In terms of safety, SSD showed a comparable profile to HSP with no occurrences of serious complications, such as perforation or uncontrolled bleeding. However, it is important to note that the procedure time for SSD was significantly longer than that for HSP. This difference reflects the technical complexity of the SSD procedure, which involves precise submucosal dissection, compared to the more rapid snare technique.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP899V Full-Thickness Endoscopic Resection for Esophageal Adenocarcinoma: A Case Report

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DOI 10.1055/s-0046-1822226

Abstract Text

We present a 73-year-old patient with multiple cardiovascular comorbidities, unfit for surgery, diagnosed with Barrett's esophagus (C3M6) with visible lesions (Parisla, Ilc, Is) and high-grade dysplasia (HGD). The patient underwent endoscopic submucosal dissection (ESD) for suspected submucosal invasion. Histopathology revealed G2 adenocarcinoma (pT1b sm2) with intestinal metaplasia and extensive HGD, but no lymphovascular invasion, with clear margins (R0). Post-procedure, esophageal stricture required multiple dilations. Surveillance gastroscopy identified a new adenocarcinoma (pT2Nx, R0), managed by full-thickness resection and stenting. Nine months post-treatment, the patient remains recurrence-free. This case underscores advanced endoscopic techniques as organ-sparing solutions for high-risk patients.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/975719fc-494b-40bf-92fb-61b4715846e0/Uploads/19978_Kopia_Intramascular%20full-thickness%20dissection%20in%20esophageal%20ade....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP900 Evaluating Proximal Intestinal Mucosal Ablation as a Repeat Endoscopic Therapy for Type 2 Diabetes

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DOI 10.1055/s-0046-1822227

Problem to solve Endoscopic small intestinal ablation is an investigational therapy for patients with type 2 diabetes (T2D) designed to replicate the metabolic benefits of gastric bypass surgery. To date, ablation has been limited to 10–15 cm of the post-ampullary duodenum due to limitations with currently available devices. In our first-in-human study (NCT05887635), we demonstrated that radiofrequency vapor ablation (RFVA) with a novel through-the-scope catheter was feasible for duodenal mucosal ablation (DMA), though glycaemic responses were heterogeneous. Major unanswered questions in the field are whether endoscopic small intestinal ablation is durable and whether the procedure can be safely repeated to maximise metabolic benefit over time. To address these limitations, we developed proximal intestinal mucosal ablation (PIMA), which is an extended ablation approach targeting up to 60 cm of proximal small bowel. Through PIMA, we hypothesised that (1) small intestinal ablation with RFVA could be safely repeated, and (2) extending the ablation length would elicit improved glycaemic control even in patients with an inadequate response to prior DMA.

Innovation This prospective, single-centre study (NCT06724822) evaluated PIMA, a newly developed small intestinal ablation technique using the second-generation circumferential RFVA catheter. This catheter was specifically designed to safely enable a longer ablation (up to 60 cm) with its mesh-tip and ability to pass through-the-scope. Patients with an inadequate glycaemic response to initial DMA (defined as $<0.5\%$ glycated haemoglobin [HbA1c] reduction or $\text{HbA1c} > 7.5\%$ at the end of 6-months follow-up from our initial DMA cohort) were enrolled. All suitable participants underwent PIMA between Sep-2024 and May-2025. Continuous glucose monitoring (CGM) was initiated at baseline, and PIMA was performed via an adult colonoscope (Olympus HQ190L) under general anaesthesia. RFVA was delivered at a dose of 275J with double application to the post-ampullary intestinal mucosa. Post-procedure, patients followed a 14-day modified diet, continued oral glucose-lowering agents (GLA), and received standard lifestyle advice for T2D. Primary innovation endpoints included (1) Procedural feasibility, (2) Safety and tolerability of repeat RFVA, and (3) Early metabolic efficacy captured by HbA1c and CGM parameters over six months.

Results Nine patients were screened and six (mean age 52.5 years [IQR 48–58], 83.3 % female) underwent PIMA at an average of 13.9 months after DMA. During initial DMA, mean HbA1c reductions from screening to 3-, 6-, and 12-months were 0.8 % (SD 0.9), 0.4 % (SD 0.7), and –0.3 % (SD 0.9). At re-treatment, mean baseline HbA1c was 9.0 % (SD 0.9), body mass index (BMI) 30.3 kg/m² (SD 4.0), and patients were on a median of one GLA. PIMA was successful in all patients with an average length of treated bowel of 57.5 cm (IQR 51–63) and 51.0 (SD 11.8) ablations. Average procedure time was 74.5 minutes (SD 20.1) and catheter time 62.3 minutes (SD 19.8). PIMA was well tolerated, with a maximum median visual analogue score for pain of 1 (IQR 0–2) on day 3. Follow-up enteroscopy with biopsies was normal in all patients. Five patients have completed 6-month follow-up with no serious adverse events and one related adverse event (abdominal pain). Median HbA1c reduction was 1.9 % (IQR 1.2–2.5; $p = 0.002$) at 3-months and 1.8 % (IQR 1.7–2.3; $p = 0.0006$) at 6-months. BMI decreased by 1.3 kg/m² (SD 1.0; $p = 0.03$) and 1.0 kg/m² (SD 1.8; $p = 0.35$), respectively, while time-in-range (3.9–10.0 mmol/L) at these time points was 87 % (IQR 75–91) and 74 % (IQR 73–81).

Conclusions PIMA with RFVA appears safe and feasible as a repeat endoscopic therapy for T2D. The greater HbA1c reduction observed with PIMA suggests that ablation length may be a key determinant of metabolic efficacy.

Conflicts of Interest RH, LARG, PM, PBH, PV, BCN, and NS disclose receipt of research funding from Aqua Medical Inc. to support research infrastructure

eP901 From Routine to Optimized: The Real-World Impact of Water-Assisted Colonoscopy

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DOI 10.1055/s-0046-1822228

Aims Water-assisted colonoscopy (WAC) has gained attention over the past decade as a technique that may enhance patient comfort, reduce sedation needs, and potentially improve mucosal visualization compared with conventional gas insufflation. Despite its advantages, widespread adoption in daily practice remains limited. The aim of this study was to evaluate the real-world performance, safety and feasibility of implementing WAC as the default method for routine colonoscopy in a high-volume endoscopy unit.

Methods This prospective observational study included all consecutive colonoscopies performed with the water-assisted technique over a 12-month period. A total of 487 examinations were analyzed. Data collected included cecal intubation rate (CIR), total procedure time, propofol dose, adenoma detection rate (ADR), patient-reported tolerance and adverse events. The feasibility and safety of underwater polypectomy during WAC were also assessed.

Results Cecal intubation was achieved in all examinations (100 %), demonstrating the technical reliability of the method even in a mixed screening and diagnostic population. The mean total procedure time was 12.6 ± 3.5 minutes, clearly shorter than commonly reported times for standard air or CO₂ insufflation techniques. Sedation requirements were remarkably low, with a mean propofol dose of 35 ± 10 mg. Nearly one quarter of patients (23.8 %) required only minimal sedation (< 20 mg). These findings highlight one of the most practical advantages of WAC in real-world settings: significantly reduced medication use and faster post-procedural recovery. The overall ADR was 45.8 %, a performance level consistent with high-quality colonoscopy practice and comparable to or superior to previously published WAC data. The clear water-filled lumen and buoyancy-induced stabilization of mucosal folds appeared to assist in the visualization of flat or subtle lesions. Underwater polypectomy was performed in 67 polyps, mainly flat or sessile lesions up to 25 mm. In approximately 75 % of these cases, no submucosal injection was required due to the lifting effect created by the water column, which facilitated safe and controlled resection. Safety outcomes were excellent. No perforations or delayed bleeding events occurred, and overall complications were negligible. Mild, transient post-procedural abdominal discomfort was reported in only 2.4 % of patients. Patient satisfaction was high, with 96 % rating the experience as “excellent” or “very good,” largely attributed to minimal discomfort, reduced cramping and decreased need for sedation.

Conclusions In conclusion, water-assisted colonoscopy can be successfully incorporated into the daily workflow of a modern endoscopy unit, offering significant advantages over conventional colonoscopy. The technique was associated with shorter examination times, minimal propofol requirements, high adenoma detection rates, excellent patient tolerance and an extremely low complication profile. These real-world findings support the broader adoption of WAC as an efficient, patient-friendly and high-quality method for routine colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP902 Unmasking IBS: A Deep Learning Model for Functional Disease Detection in patients with Suspected Inflammatory Bowel Disease

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Aims Irritable Bowel Syndrome (IBS) affects 5–10% of the population and remains a diagnosis of exclusion, based on Rome IV symptom-based criteria, rather than analytical, endoscopic or histological biomarkers. Given clinical similarities with inflammatory bowel disease many patients with IBS-like symptoms—such as diarrhea, constipation or abdominal pain—undergo colonoscopy, that has no macroscopic or histological abnormalities, contributing to diagnostic delay and healthcare burden. The absence of identifiable endoscopic features differentiating Rome IV-confirmed IBS from nonspecific symptom presentations highlights a major unmet clinical need. Deep learning models may detect subtle mucosal patterns beyond human perception, potentially redefining the diagnostic role of endoscopy in functional bowel disorders. In this context, the authors aimed to develop an artificial intelligence model capable of identifying endoscopic features suggestive of IBS during colonoscopy.

Methods A total of 183,543 frames from 242 colonoscopy exams performed in Portugal, Spain and Brazil, using five different colonoscopy systems, were included for model development. Only exams with good bowel preparation (Boston Bowel Preparation Scale ≥ 6) and no evidence of inflammatory bowel disease were considered. Among these, 129 patients had IBS confirmed according to Rome IV criteria. Images were divided into training, validation and testing sets (70% / 20% / 10%). The model was evaluated using accuracy, precision, recall and F1-score.

Results In the testing dataset, frames from IBS-confirmed patients were identified with 97.1% accuracy, 91.7% precision, 70.6% recall, and an F1-score of 79.5%. Frames from non-IBS patients were classified with 91.7% accuracy, 94.3% precision, 91.2% recall, and an F1-score of 92.6%.

Conclusions This proof-of-concept study is the first to demonstrate that deep learning can identify endoscopic patterns associated with IBS, even when colonoscopy appears macroscopically normal. These findings suggest the existence of subtle visual signatures of IBS that may be detectable by AI but remain invisible to the human eye, potentially transforming the diagnostic pathway from a purely symptom-based approach to an image-assisted functional assessment during standard colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP903 Procedural Learning Curve For Proximal Intestinal Mucosal Ablation (PIMA) Using A Novel Through-The-Scope Radiofrequency Vapor Ablation Catheter

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DOI 10.1055/s-0046-1822230

Problem to solve Metabolic endoscopy is increasingly recognised as a potential adjunct to conventional treatment for patients with type 2 diabetes (T2D). Current ablation modalities are limited by technical intricacies because of their over-the-guidewire design, which could limit real-world scalability. These systems used for duodenal mucosal ablation have been associated with prolonged procedure times relative to the length of tissue treated. An advancement of current ablation methods is proximal intestinal mucosal ablation (PIMA), an investigational endoscopic procedure for the treatment of T2D. The procedure aims to reversibly destroy up to 60 cm of the abnormal, hypertrophied proximal intestines with a through-the-scope Radiofrequency Vapor Ablation (RFVA) catheter. While ablating a longer segment of bowel may enhance glycaemic effect and durability, procedure skill acquisition is unclear. Therefore, we aimed to evaluate the feasibility and scalability of PIMA through a procedural learning curve.

Innovation We evaluated procedure times among 39 patients undergoing PIMA for the treatment of T2D in a series of first-in-human studies (NCT06655740, NCT06724822, NCT05887635). All procedures were performed between Sep-2024 and May-2025 in Santiago, Chile, by two therapeutic endoscopists in five discrete treatment windows. Patients underwent PIMA via an adult colonoscope (Olympus HQ190L) with the through-the-scope RFVA catheter. Sequential ablations were delivered with double application to the post-ampullary intestinal mucosa with minimal overlap. Total procedure time was defined as the duration (minutes) from endoscope insertion to final removal. Catheter time was defined as the duration from RFVA catheter insertion to final removal. Time per ablation was calculated as total catheter time divided by the number of ablations delivered. Learning curves were modelled using non-linear regression of the form $\text{time} = a + b/\text{case number}$. Predicted values and 95% confidence intervals were generated to visualise the model fit. The first derivative of the fitted curve was used to identify the procedural plateau, defined as a reduction of <0.5 minutes per additional case (<0.05 minutes for time per ablation), beyond which further experience did not meaningfully reduce procedure time. Mean procedure duration at this plateau was considered the stabilised procedural time (procedural efficiency). Linear regression evaluated temporal changes in ablation number.

Results Across the cohort, average age was 50.2 years (SD 7.9) and 56.4% were female. The mean procedure time was 62 minutes (SD 16.2), catheter time was 53 minutes (SD 14.2), and time per ablation was 1.14 minutes. The median ablated length was 60 cm (IQR 50–65). The learning curve for catheter time showed a plateau after approximately five cases, with a stabilised mean duration of 53.1 minutes. However, the non-linear learning-curve explained little of the variation in catheter time ($R^2 = 0.01$; $p = 0.535$), which indicates no measurable reduction in catheter duration with increasing operator experience. A similar pattern was observed for total procedure time ($R^2 = 0.01$; $p = 0.483$). The paradoxical initial increase in catheter and procedure times on the learning curve is driven by the increasing number of total ablations delivered, which was confirmed on linear regression ($\beta = 0.40$; $R^2 = 0.21$; $p = 0.004$). When assessing true procedural efficiency, measured using time required to deliver each ablation, we observed a stabilised performance at 1.13 minutes per ablation after only five cases, with no further evidence of learning beyond this point.

Conclusions PIMA is associated with a minimal ongoing learning effect, with stable time per ablation after five cases. Case-to-case variability appears driven by the complexity of enteroscopy with increasing treatment lengths rather than by catheter manipulation.

Conflicts of Interest RH, LARG, PM, PBH, PV, BCN, and NS disclose receipt of research funding from Aqua Medical Inc. to support research infrastructure

eP904 Secondary Tumors of the Pancreas: a retrospective multicenter study concerning EUS appearance and FNB efficacy

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DOI 10.1055/s-0046-1822231

Aims Metastatic pancreatic lesions (mPLs) arising from extra-pancreatic primary malignancies represent an uncommon entity, sparsely documented in the literature, accounting for approximately 2 % of pancreatic neoplasms. mPLs demonstrate variable endoscopic ultrasonographic (EUS) morphology (focal or diffuse parenchymal involvement with multinodular presentation) without predilection for specific anatomical subsites of the gland. EUS-guided tissue acquisition, especially with fine-needle biopsy (FNB), is essential for the definitive cytohistological diagnosis of pancreatic solid lesions, including mPLs. This multicenter retrospective analysis from two tertiary referral centers for hepatobiliary-pancreatic disorders in Southern Italy examines EUS characteristics and contrast-enhanced ultrasound (CH-EUS) patterns of mPLs, along with FNB diagnostic accuracy.

Methods We retrospectively analyzed consecutive patients undergoing EUS-FNB for suspected mPLs between November 2019 and April 2025. Thirty-five patients with histopathologically confirmed intrapancreatic metastases were enrolled. Patient demographics, EUS and CH-EUS imaging characteristics of mPLs, and diagnostic yield were systematically evaluated.

Results Patient characteristics are reported in ► **Table 1**. Echoendoscopically, all lesions demonstrated solid echotexture: 28 presented as solitary nodules and 7 as multiple lesions. Anatomical distribution showed predominant involvement of the uncinate process/pancreatic head (n = 25, 75 %) versus body-tail (n = 10, 25 %). Echogenicity patterns revealed hypoechoic appearance in 30 cases, hyperechoic in 2, isoechoic in 1, and markedly heterogeneous in 2. CH-EUS with sonovue demonstrated characteristic hypervascular enhancement networks in all RCC metastases, representing a nearly pathognomonic pattern. Remaining lesions exhibited non-specific, heterogeneous enhancement patterns. EUS-FNB achieved 100 % technical success utilizing 22-G needles with slow-pull and suction technique. Access routes included trans-gastric (n = 13) and trans-duodenal (n = 22) approaches. Mean pass number was 2.3 ± 0.64 and MOSE was always performed and revealed a 100 % of accuracy. Periprocedural adverse events (AEs) occurred in 2 patients (6.2 %), consisting of self-limited intratumoral hemorrhage. No delayed AEs were documented. Histological evaluation reported 100 % adequate specimen with definite diagnosis. Contextual ERCP was performed in all the cases of clinical/biochemical jaundice with biliary stent placement. Management of mPLs was patient-tailored and specifically guided by the primary tumor type, disease burden, and patient performance status in a multidisciplinary approach. In particular, therapeutic management consisted predominantly of oncological intervention: systemic chemotherapy (n = 24), immunotherapy (n = 2), surgical resection (n = 3), with remaining patients receiving best supportive care. Six-month survival was documented in just 15 patients.

Conclusions mPLs constitute an uncommon entity among solid pancreatic masses. Metastatic lesions may present incidentally in asymptomatic individuals without known primary malignancy. EUS features are often characteristic demonstrating hypo-isoechoic or hyperechoic echotexture in solitary or multifocal distribution. CH-EUS characteristics vary according to histological subtype and provide valuable diagnostic information perioperatively especially for RCC. EUS-FNB represents a safe and highly effective diagnostic modality with excellent diagnostic yield, facilitating accurate mPLs identification. Prognosis remains guarded, particularly for SCLC and breast cancer metastases, paralleling that of the metastatic primary neoplasm.

► **Table 1**

Demographics	N = 35; Male 19 (54 %), Female 16 (46 %); Mean age 68 ± 12.1 years
Presentation	Incidental 16 (47 %): CT scan n = 25, MRI n = 10 Symptomatic 18 (53 %): Obstructive jaundice n = 13, Abdominal pain n = 5
CA19-9	Normal in all patients
Primary Tumors	Breast carcinoma (n = 8), Renal Cell Carcinoma RCC (n = 7), Colorectal carcinoma (n = 6), small cell lung cancer SCLC (n = 5), Lymphoma (n = 4), Multiple myeloma (n = 1), Sarcoma (n = 1), Endometrial (n = 1), HCC (n = 1), Melanoma (n = 1)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP905 Cold Endoscopic Mucosal Resection for Sessile Serrated Lesions with Dysplasia

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Aims Cold endoscopic mucosal resection (CEMR) is widely accepted as the optimal technique for resecting large sessile serrated lesions (SSLs). Sessile serrated lesions with dysplasia (SSLDs) are rare precursors in the sporadic serrated colorectal cancer pathway, that are linked to post-colonoscopy colorectal cancer (PCCRC). The application of CEMR in SSLDs remains unexplored. The use of conventional hot endoscopic resection techniques (hot polypectomy, endoscopic mucosal resection, or endoscopic submucosal dissection) especially in the proximal colon were most SSLs and SSLDs reside, can increase risks of delayed bleeding, post polypectomy syndrome, deep mural injury and perforation. In addition, it is not cost-effective, as using electrocautery in the proximal colon mandates costly clip closure to mitigate against risk of delayed bleeding and can interfere with confident CEMR scar assessment at surveillance due to clip artefacts, resulting in unnecessary biopsy or re-treatment. We evaluate CEMR efficacy for SSLDs in a prospective observational cohort [1–6].

Methods We prospectively collected data from elective colonoscopies at a single academic tertiary centre, with 1 or more SSLDs treated with CEMR. All lesions were treated by a single experienced therapeutic colonoscopist with expertise in image-enhanced endoscopy and advanced resection techniques. Our CEMR technique comprised of submucosal injection with chromosaline (methylene blue with diluted epinephrine 1:100,000) prior to piecemeal cold snare resection of all visible neoplasia using dedicated cold snare. When feasible, dysplastic components are resected enbloc and always submitted separately from non-dysplastic tissue to facilitate histopathologic confirmation. Post resection, careful defect and margin assessment for residual neoplasia without use of adjuvant thermal ablation. Surveillance colonoscopy (SC1 at 6 months, SC2 at 12 months post-SC1) with standardised CEMR scar assessment including high-definition white light, narrow band imaging with optical magnification, photodocumentation, and scar biopsies.

Results CEMR was performed on 15 SSLDs in 12 patients (60 % females; mean age 53.3 years; 83 % with serrated polyposis syndrome). The mean polyp size was 17.3mm and mean dysplasia size was 4.3mm. There were no adverse events (delayed bleeding or perforation) and clip closure was not used in any of the cases (67 % proximal colon predominance). All lesions underwent SC1 (mean 5.9 months post CEMR) and 73 % reached SC2 (mean 13.1 months post SC1) without endoscopic or histopathologic recurrence.

Conclusions CEMR is safe, effective, and cost-efficient in resecting SSLDs without recurrence, delayed bleeding, perforation, or need for clip closure even in

the proximal colon. The absence of clips provides artefact-free CEMR scar facilitating easier detection of recurrence at surveillance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tutticci NJ, Kheir AO, Hewett DG. The cold revolution: how far can it go? *Gastrointest Endosc Clin N Am* 2019; 29 (4): 721–736. doi:10.1016/j.giec.2019.06.002
- [2] Ferlitsch M, Hassan C, Bisschops R et al. Colorectal polypectomy and endoscopic mucosal resection (EMR): European Society of Gastrointestinal Endoscopy (ESGE) guideline. *Endoscopy* 2024. doi:10.1055/a-2304-3219
- [3] Aslan F, Bayrakdar A, Unsal B et al. Cold EMR vs. Hot EMR for the removal of sessile serrated lesions: a systematic review with meta-analysis. *Endoscopy*. 2024; 56 (8): 591–602. doi:10.1055/a-2276-0313
- [4] Suzuki S, Toyoshima O, Taniguchi Y et al. Cold snare polypectomy for large sessile serrated lesions is safe but requires careful endoscopic diagnosis and long-term surveillance. *Endosc Int Open* 2021; 9 (2): E245–E253. doi:10.1055/a-1338-5228
- [5] Burgess NG, Metz R, McLeod D et al. Cold EMR of large sessile serrated polyps at colonoscopy (with video). *Gastrointest Endosc* 2018; 87 (4): 837–842. doi:10.1016/j.gie.2017.10.009
- [6] Tutticci NJ, Hewett DG. Cold EMR of large sessile serrated polyps at colonoscopy (with video). *Gastrointest Endosc* 2018; 88 (2): 341–341.e2. doi:10.1016/j.gie.2018.03.017

eP906 Endoscopic ultrasound shear wave elastography for advanced liver fibrosis a systematic review and meta-analysis

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DOI 10.1055/s-0046-1822233

Aims Endoscopic ultrasound-guided shear wave elastography (EUS-SWE) allows quantitative liver stiffness assessment from both hepatic lobes during standard EUS. Its diagnostic accuracy for staging liver fibrosis remains incompletely defined. We performed systematic review and meta-analysis of cumulative data to evaluate the accuracy of EUS-SWE for detecting advanced fibrosis (F3–F4) compared with no/mild fibrosis (F0–F2).

Methods We systematically searched PubMed, Embase, and Scopus from inception. 490 records were identified, 161 underwent title/abstract screening and 156 were excluded; 5 studies met inclusion criteria.

5 prospective studies of patients undergoing EUS-SWE with liver biopsy and/or validated non-invasive reference standards and reported diagnostic performance for fibrosis staging were included. EUS-SWE was performed, using 10 valid measurements per lobe and a reliability index (VsN) $\geq 60\%$. The primary outcome was the area under the ROC curve (AUROC) for advanced fibrosis (F3–F4 vs F0–F2). Where multiple lobes were reported, we used the best-performing lobe for the main analysis and summarized lobe-specific data separately. Because standard errors were not consistently reported, we calculated a pooled AUROC as the simple mean of study-level AUROCs and described ranges of sensitivity and specificity at authors' optimal cut-offs.

Results Five prospective studies included 323 patients (range 42–108 per study; mean age 48–63 years; BMI 26.8–40.7 kg/m²), predominantly MASLD, with smaller proportions of viral, autoimmune, or alcohol-related liver disease. EUS-SWE was technically successful in >95% of cases and rescued patients with

unreliable or failed VCTE in two series. Four studies, (264 patients) reported AUROCs for advanced fibrosis (F3–F4 vs F0–F2). The reported AUROC for left lobe stiffness was 0.93 with sensitivity 0.90 and specificity 0.83 at a cut-off of 8.48 kPa. [1] Diehl et al. found AUROCs of 0.98 (right) and 0.95 (left) versus biopsy, with right-lobe sensitivity 0.60 and specificity 0.98 at 25.5 kPa [2]. Kohli et al. reported AUROCs of 0.80 (left) and 0.78 (right) with sensitivities 0.58–0.75 and specificities 0.86–0.93 at 18–24 kPa [3]. AbiMansour et al. observed AUROCs of 0.80 (right) and 0.73 (left) for advanced liver disease (stage ≥ 3) defined by biopsy, MRE, or transient elastography [4]. The pooled AUROC for advanced fibrosis across these studies was 0.87 indicating good overall diagnostic accuracy. Sensitivities ranged from 0.58 to 0.96 and specificities from 0.83 to 0.98 at study-specific thresholds. Cirrhosis-focused data from Del Valle et al. (n = 59) showed AUROCs of 0.97 (right) and 0.99 (left) for biopsy-proven cirrhosis, with sensitivity 0.97 and specificity 0.90–0.97 at cut-offs of 10.7 and 14 kPa. [5] In Kohli and Wang, cirrhosis AUROCs ranged from 0.90 to 0.96 with sensitivities 0.89–1.00 and specificities 0.87–0.92. [1, 3]. Right- versus left-lobe analyses showed broadly comparable performance. [2, 4] Diehl and AbiMansour reported slightly higher AUROCs or sensitivity for the right lobe (0.98 vs 0.95; 0.80 vs 0.73, respectively), whereas Kohli and Del Valle observed marginally higher AUROCs for the left lobe (0.80 vs 0.78; 0.99 vs 0.97). [3, 5] Wang assessed only the left lobe [1]

Conclusions EUS-SWE demonstrates good overall diagnostic accuracy for advanced fibrosis (pooled AUROC ~ 0.87) and excellent accuracy for cirrhosis (AUROCs often > 0.95). Its performance is comparable or superior to VCTE, particularly in patients with obesity or unreliable transcutaneous measurements. EUS-SWE be integrated into routine EUS examinations as a comprehensive tool for non-invasive staging of liver fibrosis, especially when transabdominal elastography are impractical or inconclusive.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Del Valle R, Cunto D, Puga-Tejada M et al. Comparative analysis of vibration-controlled transient elastography and EUS-shear wave elastography for liver stiffness measurement in cirrhosis. *Endosc Ultrasound* 2025; 14 (2): 57–64. doi:10.1097/eus.0000000000000114
- [2] AbiMansour J, Chin JY, Kaur J et al. Endoscopic Ultrasound-based Shear Wave Elastography for Detection of Advanced Liver Disease. *J Clin Gastroenterol*. 2025; 59 (3): 256–261 Published 2025 Mar 1. doi:10.1097/MCG.00000000000002013
- [3] Kohli DR, Mettman D, Andrews N et al. Comparative accuracy of endosonographic shear wave elastography and transcutaneous liver stiffness measurement: a pilot study. *Gastrointest Endosc* 2023; 97 (1): 35–41.e1. doi:10.1016/j.gie.2022.08.035
- [4] Diehl DL, Sangwan V, Khurana S, Khara HS, Zhang J, Confer BD. Reproducibility of EUS-guided shear wave elastography for assessment of hepatic fibrosis: a prospective pilot cohort study. *Gastrointest Endosc* 2025; 101 (3): 659–662. doi:10.1016/j.gie.2024.10.064
- [5] Wang TJ, Jirapinyo P, Shah R et al. EUS-guided shear wave elastography for fibrosis screening in patients with obesity and metabolic dysfunction-associated steatotic liver disease: a pilot study (with video). *Gastrointest Endosc* 2025; 101 (2): 456–462.e1. doi:10.1016/j.gie.2024.10.054

eP907 Endoscopic management of post-Hartmann recto-vaginal fistula using an Amplatzer occluder device: A minimally invasive alternative for non-surgical candidates

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DOI 10.1055/s-0046-1822234

Introduction Recto-vaginal fistula (RVF) is a rare complication after Hartmann's intervention, with little evidence regarding non-surgical alternatives, particularly in fragile patients who are unfit for major surgery.

Endoscopic Procedure A 78-year-old woman, functionally dependent due to cognitive impairment, had undergone Hartmann's intervention for sigma volvulus after three unsuccessful endoscopic detorsion attempts. Two years later, she was readmitted with sepsis and rectal bleeding. CT imaging revealed spontaneous perforation of the rectal stump, a presacral collection and suspicion of a RVF. Rectoscopy showed diversion colitis and a 10mm fistulous orifice with purulent/fecaloid drainage. Partial exploration of the tract was possible, and rectovaginal communication was confirmed by vaginal examination. Given her condition, conservative management (antibiotic therapy) was initially chosen; however, she experienced multiple readmissions due to sepsis secondary to recurrent urinary tract infections. Faced with the surgical contraindication, an Amplatzer luminal apposition device of 14 x 18 mm was deployed with support from Cardiology under fluoroscopic guidance, using rectal access (conventional gastroscope) and vaginal access (pediatric gastroscope). A guidewire was advanced through the fistula, and the device was released under dual endoscopic vision. Subsequently, the patient evolved favourably, with no further septic episodes or Emergency Department visits.

Discussion Post-Hartmann RVF in elderly patients with comorbidities imposes a therapeutic challenge. Evidence on endoscopic closure of RVF with cardiac devices (Amplatzer) is scarce, although promising cases have been reported in colovaginal and rectal fistulas. This case illustrates the feasibility of a minimally invasive strategy in patients with surgical contraindication, achieving fistula closure and clinical improvement, with no septic recurrences after the procedure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP908 Assessing Esophageal Stricture Severity and Response to Dilation With FLIP Technology

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DOI 10.1055/s-0046-1822235

Aims To determine esophageal diameter(D), distensibility index(DI), and pressure(P) before and after dilation, and to assess whether these parameters correlate with the number of dilation sessions required or the need for repeat dilation after initial improvement.

Methods This single-center prospective study included patients undergoing esophageal stricture dilation between July 2022 and July 2024. FLIP measurements were obtained at various balloon volumes, with comparisons based on the highest volume achieved. Clinical data were collected before and after dilation using validated questionnaires and the electronic medical record [1–3].

Results Twenty-two strictures in 20 patients were analyzed. The mean age was 57.4 years (SD 15.6); 31.8% were female. Etiologies included peptic strictures (10, 45.5%), EoE (3, 13.6%), prior esophageal surgery (4, 18.2%), lichen planus (1, 4.6%), caustic injury (3, 13.6%), and a Schatzki ring (1, 4.6%). All underwent their first dilation except those with caustic injury. Five lesions (22.7%) were considered clinically chronic. ES and BEDQ scores improved significantly ($p < 0.00001$), with no significant change in GERD-Q.

The initial endoscopic diameter estimate was 10.5 mm (IQR 8–13 mm), increasing to 15 mm (IQR 15–16 mm) after dilation. FLIP-measured diameters were 9.4 mm (IQR 7–12.6 mm) pre-dilation and 13.2 mm (IQR 12–15 mm) post-dilation, with a significant pre–post difference ($p = 0.0003$). Pre-dilation endoscopic and FLIP diameters were similar (10.0 mm vs 9.95 mm), but post-dilation endoscopic diameters were significantly larger than FLIP measurements (15.6 mm vs 13.6 mm; $p = 0.0001$).

DI increased from 0.8 (IQR 0.5–2.4) to 1.8 (IQR 1–2.7) ($p = 0.0290$). Pressure decreased from 92 (IQR 75–105) to 76 (IQR 61–100) ($p = 0.0005$) after dilation

(► Table 1).

► **Table 1** Median pre and post-dilatation diameters measured by endoscopy and FLIP

	Pre dilatación	Post dilatación	p
D Endoscopy mm (IQR)	10.5 (8-13)	15 (15-16)	<0,0001
D FLIP mm (IQR)	9.4 (7-12,6)	13.2 (12-15)	0.0003
DI mm2/mmHg (IQR)	0.8 (0,5-2,4)	1.8 (1-2,7)	0.0290
Pressure mmHg (IQR)	92 (75-105)	76 (61-100)	0.0005

Five patients required repeat dilation within one year. Etiologies were caustic injury(3), peptic stricture(1), and lichen planus(1). Compared with patients who did not require re-dilation, these cases had lower initial and final diameters and DI values, with a significantly lower initial DI (0.3 [IQR 0.2–0.5] vs 1.2 [IQR 0.5–3.1]).

No significant differences in pre- or post-dilation D, DI, or P were observed based on the total number of dilation sessions. No major adverse events occurred. In one case, the FLIP catheter could not be advanced through the stricture.

Conclusions FLIP measurements of diameter, distensibility, and pressure improve after dilation. Endoscopic and FLIP diameters are similar before dilation, but endoscopy tend to overestimate post-dilation diameter relative to FLIP. Patients requiring repeat dilation had lower initial distensibility. FLIP may be useful in selected cases to help predict treatment failure and to direct dilation diameter in complex cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sami SS, Haboubi HN, Ang Y et al. UK guidelines on oesophageal dilatation in clinical practice. *Gut* 2018; 67 (6): 1000–1023. doi:10.1136/gut-2017-315414
- [2] Chen JW, Pandolfino JE, Lin Z et al. Severity of endoscopically identified esophageal rings correlates with reduced esophageal distensibility in eosinophilic esophagitis. *Endoscopy* 2016; 48 (9): 794–801. doi:10.1055/s-0042-107340
- [3] Ng K, Mogul D, Hollier J, Khashab MA. Utility of functional lumen imaging probe in esophageal measurements and dilations: a single pediatric center experience. *Surg Endosc* 2020; 34 (3): 1294–1299. doi:10.1007/s00464-019-06898-5 Epub 2019 Jun 11. *Surg Endosc*. 2019 Jun 25 PMID: 31187234

eP909 Predictive factors for mortality in patients undergoing endoscopic drainage of walled-off pancreatic necrosis

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Aims Patients with walled-off pancreatic necrosis (WOPN) are burdened by a high risk of mortality. Primary aim was to identify early clinical and procedural risk factors for mortality after endoscopic ultrasound (EUS)-guided drainage of WOPN. Secondary aim was to compare clinical and procedural characteristics before and after EUS-guided WOPN drainage between survivors and patients experiencing WOPN-related death.

Methods In a retrospective study, all patients with WOPN treated with EUS-guided drainage with lumen apposing metal stent (LAMS) were enrolled.

WOPN characteristics were assessed by the QNI system. Risk factors were searched among pre-procedural, procedural and early (occurring < 14 days from EUS-guided drainage) post-procedural items. Inclusion criteria: 1) age > 18 years; 2) WOPN treated with LAMS. Exclusion criteria: 1) pancreatic pseudocysts; 2) post-surgical pancreatic collections; 3) pancreatic neoplasms. Data expressed as median [range], differences assessed with the χ^2 test, the Student t-test or the Mann-Whitney u-test, risk factors searched by using uni- and multivariate logistic regression.

Results 61 patients with WOPN treated by EUS-guided drainage with LAMS were enrolled (age: 63 [33-86] years). Overall, 8 (13.1 %) patients died during hospitalization due to WOPN-related complications. Endoscopic necrosectomy was performed in a comparable proportion of patients between survivors and patients experiencing mortality (35 [66.04 %] vs 6 [75 %], $p = 0.92$). In patients experiencing mortality, higher median BMI (24.2 [14-39] vs 27.7 [24.5-40.5], $p = 0.027$), pre-procedural procalcitonin levels (0.13 [0-16] vs 2.5 [0.2-20.8], $p = 0.0003$), frequency of N2 (≥ 30 % necrosis) (12 [22.6 %] vs 6 [75.0 %], $p = 0.009$) and frequency of post-procedural percutaneous drainage placement (11 [18.9 %] vs 5 [62.5 %], $p = 0.038$) were observed. At multivariate analysis, intensive care unit recovery (4.4 [1.9-7.5], $p = 0.0009$), higher pre-procedural procalcitonin values (1.9 [1.05-3.4], $p = 0.04$), and duodenal double-gating (2.05 [1.08-3.7], $p = 0.03$) were identified as risk factors for mortality, while a BMI < 25 was protective (0.24 [0.15-0.37], $p = 0.005$).

Conclusions In the present study only non-modifiable predictive factors for mortality have been identified. Nonetheless, recognition of early predictive factors for WOPN-related mortality may suggest the need for treatment optimization or accelerated step-up strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP910 Clinical performance and environmental impact of BougieCap dilation for esophageal strictures

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DOI 10.1055/s-0046-1822237

Aims The second-generation BougieCap esophageal dilation device (Ovesco AG) has recently become available; however, data on its efficacy and safety for the treatment of esophageal strictures in routine clinical practice, outside eosinophilic esophagitis (EoE), are limited [1]. We aimed to assess the feasibility, safety, and efficacy of BougieCap dilation in general GI endoscopy practice and to generate pilot data to inform the design of a future randomized clinical trial.

Methods This two-center retrospective study included adult patients with esophageal strictures who underwent dilation using the BougieCap device. The primary outcome was patient-reported dysphagia improvement within 2–3 weeks after dilation. Secondary outcomes included technical feasibility and adverse events during the procedure and within two weeks post-procedure. Technical feasibility was defined as successful completion of dilation without the need for an alternative device. Serious adverse events included esophageal perforation, clinically significant bleeding, or severe pain. In a secondary analysis, we assessed environmental impact, plastic waste, and procedural costs, comparing BougieCap dilation with standard balloon dilation and Savary dilators. Carbon emissions were estimated using life-cycle assessment with SimaPro software, the EcolInvent database, and the TRACI 2.1 method (► Table 1).

► **Table 1** Carbon emissions, plastic waste, and cost (per procedure)

	Bougie-Cap	Balloon	Savary	d (Balloon)	d (Savary)
Carbon emissions (kgCO ₂ e)	0.016	0.273	1.961	-94.20 %	99.20 %
Plastic waste (g)	3.4	34.6	444.0	-90.30 %	99.24 %
Waste, Total (g)	3.4	57.4	454.5	-94.10 %	99.26 %
Price (\$)	67	280.5	472.66	-213.50	-405.66

Results Twenty-four patients (mean age 70 years; 75 % male) with 28 esophageal strictures (57 % distal; 96 % benign) underwent 31 dilation sessions, most commonly for peptic strictures (79 %). Six patients underwent sequential dilations within a single session, and a total of 44 BougieCaps were used. Technical success was achieved in 100 % of cases. Mucosal tears were observed in 81 % of dilations. No immediate adverse events occurred, and mild post-procedural symptoms (sore throat, odynophagia, or pain) were reported by 17 % of patients. Complete dysphagia resolution was reported by 86 % of patients, and partial improvement by 14 %. Compared to balloon dilation as the alternative approach, BougieCap use would result in a 94 % reduction in carbon emissions, a 90 % reduction in plastic waste, and cost savings of \$213 (–76 %) per procedure. Compared with Savary dilators, carbon emissions would be reduced by 99 %, plastic waste by 99 %, and costs by \$473 (–86 %).

Conclusions BougieCap dilation (2nd generation) appears to be feasible, safe, and effective for the treatment of esophageal strictures. Compared with conventional dilation methods, BougieCap use may offer substantial economic and environmental advantages. Prospective comparative studies with longer-term follow-up are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Schoepfer AM, Biedermann L, Kreienbuehl A et al. Clinical effectiveness of esophageal stricture dilation using an improved endoscopic attachment cap in adults with eosinophilic esophagitis. *Endoscopy* 2025; 57: 1106–1111

eP911 Efficacy and safety of endoscopic ultrasound-guided drainage of post-surgical fluid collections

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DOI 10.1055/s-0046-1822238

Aims Post-surgical fluid collections (PSFCs) are a common complication of gastrointestinal surgery and are usually managed by percutaneous drainage. Emerging data suggests that endoscopic ultrasound (EUS) guided drainage of PSFCs may be a safe and effective alternative. The aim of this study was to assess the technical feasibility, safety and efficacy of EUS-guided drainage of PSFCs.

Methods Retrospective, multi-centre cohort study assessed all patients referred for EUS-guided drainage of symptomatic PSFCs after hepatobiliary, upper GI or colorectal surgery at two tertiary referral centres in Australia from 1st January 2016 to 31st December 2022. Primary outcome measures were technical success (ability to access and drain a PSFC by placement of a transmural stent), clinical success (complete clinical resolution of symptoms and reduction/resolution of PSFC on CT at 3 months) and rate of adverse events, with major adverse events defined as grade III or above on the Clavien Dindo Classification.

Results Forty-two patients were referred for EUS-guided drainage of PSFCs (median age 61 years (IQR, 46–71); 25 (60 %) male). The most common index surgery was pancreatic (N = 19, 45 %) and the primary indication for drainage was sepsis (N = 29, 69 %). Mean collection size was 53mm (IQR, 41–91mm). EUS was performed at a median of 30 days (IQR, 19–69 days) post-surgery; 19 (45 %) were done in < 4 weeks of PSFC development. EUS-guided drainage was attempted in 34 (81 %) patients with 100 % technical success. Eight patients were excluded at EUS due to unsuitable collection morphology, including PSFC too small or not identified, n = 5; immature PSFC wall, n = 2; PSFC not abutting the GI lumen, n = 1. Clinical success was achieved in 33/34 (97 %) patients who underwent EUS-guided drainage; one patient had symptom resolution post drainage however follow up CT showed an increase in the size of the PSFC. A single EUS-guided drainage was performed in 29 (85 %) patients; 5 (15 %) patients required > 1 endoscopic procedure with a median number of drainages of 2 (IQR, 1–2). There were no intra-procedural complications. Nine (26 %) post-procedural adverse events occurred, of which 9 (33 %) were classified as major adverse events.

Conclusions EUS-guided drainage of PSFCs is technically feasible, can be safely performed early following PSFC formation in a significant proportion of patients and achieves high rates of clinical success with few major adverse events. This technique offers a minimally invasive alternative to percutaneous drainage, avoiding the need for an external drain with attendant risk of blockage, dislodgement, and infection. EUS-guided drainage should be considered as a therapeutic option for patients with PSFCs after GI surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP912 Hereditary Alpha-Trypsinemia (HaT) Coexisting with Dense Gastrointestinal Mast Cell Infiltration: A Challenging Diagnostic Case for Gastroenterologists

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DOI 10.1055/s-0046-1822239

Background Mast cell disorders present a diagnostic challenge. Hereditary Alpha-Trypsinemia (HaT), defined by extra copies of the TPSAB1 gene leading to baseline elevated trypsin, is a predisposing factor. The coexistence of HaT with tissue infiltration complicates the distinction from other mast cell diseases [1].

Case Presentation and Genetic Confirmation We report a 65-year-old female with two months of epigastralgia and recurrent urticaria and elevated serum trypsin (38ug/L). Molecular analysis for TPSAB1 confirmed a genotype consistent with HaT (\beta:\alpha / \beta:\alpha:\alpha).

Histological Findings and Diagnosis The gastroscopy showed mild gastropathy. Histopathology of the gastro-duodenal biopsies was crucial, revealing a dense infiltration of mast cells (CD117 +) in the lamina propria: > 80/HPF in the duodenum and > 30/HPF in the stomach. This profound infiltration suggests that symptoms were driven not solely by HaT, but also by a significant local mast cell pathology in the GI tract.

Discussion and Conclusion This condition is rare and under-recognized by gastroenterologists, as non-specific GI symptoms are often confused with IBS or GERD. The correct diagnosis, leading to rapid symptom remission with famotidine and sodium cromoglycate, required integrating the clinical history, the HaT genetic finding, and a targeted histopathological examination of the GI biopsies. This case highlights the importance of ruling out mast cell proliferation in the GI tract in patients with unexplained abdominal symptoms and

baseline elevated trypsin, regardless of an underlying genetic predisposition like HaT.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Lyons JJ, Yu X, Hughes JD et al. Elevated basal serum trypsin identifies a multisystem disorder associated with increased TPSAB1 copy number. *Nat Genet* 2016; 48 (12): 1564–1569

eP913 Endoscopic Ultrasound-Guided Gastroenterostomy As A Definitive Anastomosis For Pancreaticoduodenectomy

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DOI 10.1055/s-0046-1822240

Abstract Text

Endoscopic-ultrasound guided gastroenterostomy (EUS-GE) has recently emerged as the most optimal endoscopic treatment for malignant gastric outlet obstruction (MGOO) [1–4]. EUS-GE, however, is generally used in the palliative setting, rather than in patients pursuing definitive treatment. Recent case reports have reported the use of EUS-GE using a lumen-apposing metal stent (LAMS) as a bridge to pancreaticoduodenectomy where the stents were resected *en bloc* followed by a surgical gastrectomy [5, 6]. To our knowledge, we present the first reported case of a patient with duodenal obstruction for whom an EUS-GE was performed in the neoadjuvant setting and the LAMS was left *in situ* as the definitive anastomosis after surgical resection.

A 56 year-old female presented with MGOO secondary to duodenal adenocarcinoma. EUS-GE was performed. The patient then received neoadjuvant chemotherapy followed by pancreaticoduodenectomy six months later. The area of the cancer was readily visible and palpable. The stent was palpable with a well-connected and well-healed anastomosis. The pancreatic head and neck, duodenum, and pylorus were resected *en bloc* and sent to pathology. The surgical team then opted to leave the previously constructed anastomosis intact, in part due to the EUS-GE being more cranial in the stomach than a surgical gastrectomy. A Roux-Y limb was created 30–40 cm distally, which was used to perform a pancreaticojejunostomy. Further distally, a hepaticojunostomy was performed.

Post-operatively, clear fluid diet was initiated on POD 2, diet-as-tolerated on POD 4, and the patient was discharged on POD 8. A follow-up EGD was performed 8 months post EUS-GE confirming a patent stent. In order to reinforce the anastomosis as a permanent solution, we considered performing endoscopic suturing as a stent-free strategy. Unfortunately, however, at 1 year follow-up the patient had recurrence of metastatic disease to the liver and a decision was taken to simply exchange the stent given the guarded prognosis.

Our case supports the hypothesis that EUS-GE is a viable and effective option for managing MGOO as a bridge to pancreaticoduodenectomy. It may enable patients to maintain adequate nutritional status, tolerate neoadjuvant chemotherapy and major surgery. Additionally, this case demonstrates feasibility of using EUS-GE as a definitive anastomotic solution during Whipple surgery, which may decrease surgical time, eliminate the risk for anastomotic leak, and most importantly decrease the risk for delayed gastric emptying, which is reported in as much as 20–40 % of patients undergoing pancreaticoduodenectomy [7].

Conflicts of Interest Yen-I Chen is a consultant for Boston Scientific and Cook Medical. He is also the president of Chess Medical. All other authors have no relevant conflict of interest.

References

- [1] Hanna MM, Gadde R, Allen CJ, Meizoso JP, Sleeman D, Livingstone AS et al. Delayed gastric emptying after pancreaticoduodenectomy. *J Surg Res [Internet]* 2016; 202 (2): 380–8. Available from <https://linkinghub.elsevier.com/retrieve/pii/S0022480416000044>
- [2] Vanella G, Tamburrino D, Dell'Anna G, Petrone MC, Crippa S, Falconi M et al. Endoscopic ultrasound-guided gastrojejunostomy does not prevent pancreaticoduodenectomy after long-term symptom-free neoadjuvant treatment. *Endoscopy [Internet]* 2022; 54 (4): E143–5. Available from <http://www.thieme-connect.de/>. doi:10.1055/a-1408-1180
- [3] Yu TZ, Agnihotri A, Zheng R, Bashir B, Nasher N, Yeo CJ et al. Salvage endoscopic ultrasound-guided gastrojejunostomy as a bridge to definitive surgical therapy for duodenal adenocarcinoma presenting with duodenal stent obstruction. *Clin J Gastroenterol [Internet]* 2023; ;16 (3): 387–91. Available from <http://www.ncbi.nlm.nih.gov/pubmed/37029881>
- [4] Miller C, Benchaya JA, Martel M, Barkun A, Wyse JM, Ferri L et al. EUS-guided gastroenterostomy vs. surgical gastrojejunostomy and enteral stenting for malignant gastric outlet obstruction: a meta-analysis. *Endosc Int open [Internet]* 2023; 11 (7): E660–72. Available from <http://www.ncbi.nlm.nih.gov/pubmed/37593104>
- [5] van de Pavert YL, Kastelijn JB, Besselink MG, Booi DC, Boonstra JJ, Boot J et al. Endoscopic versus surgical gastroenterostomy for palliation of malignant gastric outlet obstruction (ENDURO): a randomised controlled trial. *Lancet Gastroenterol Hepatol [Internet]*. 2025; Available from <https://linkinghub.elsevier.com/retrieve/pii/S2468125325002092>
- [6] Bang JY, Puri R, Lakhtakia S, Thakkar S, Waxman I, Siddiqui I et al. Endoscopic or surgical gastroenterostomy for malignant gastric outlet obstruction: a randomised trial. *Gut [Internet]*. 2025 gutjnl-2025-336339. Available from <https://gut.bmj.com/lookup/>. doi:10.1136/gutjnl-2025-336339
- [7] Teoh AYW, Lakhtakia S, Tarantino I, Perez-Miranda M, Kunda R, Maluf-Filho F et al. Endoscopic ultrasonography-guided gastroenterostomy versus uncovered duodenal metal stenting for unresectable malignant gastric outlet obstruction (DRA-GOO): a multicentre randomised controlled trial. *lancet Gastroenterol Hepatol [Internet]* 2025; 10 (6): e8–16. Available from <http://www.ncbi.nlm.nih.gov/pubmed/40347959>

eP914 Outcomes of G-POEM for refractory gastroparesis: A tertiary centre experience in UK

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DOI 10.1055/s-0046-1822241

Aims Gastric peroral endoscopic myotomy is a minimally invasive endoscopic option for patients with refractory gastroparesis, but clinical response rates remain variable and factors to predict success have not been clearly elucidated. We assessed the outcomes of G-POEM for patients with refractory gastroparesis in our cohort, and the utility of intra-operative endoluminal functional luminal imaging probe (EndoFLIP).

Methods Retrospective, single tertiary centre, case-control study assessing the outcomes of G-POEM for refractory gastroparesis. Outcome measures include clinical response (decrease of 1 point in the total Gastroparesis cardinal Symptom Index (GCSI)) and complications. Impedance planimetry (EndoFLIP, EF-325N, Medtronic Ltd) readings were obtained before and after myotomy, standardised to 50ml balloon inflation.

Results 104 patients underwent G-POEM for refractory gastroparesis (n = 43 with type 1 diabetes). Technical success was 100%. 53/104 patients were able to be discharged on the same day (SDD), now adopted as standard of care protocol. 12/104 (11.5%) patients had hospital readmission within 30 days, of whom 5 required repeat endoscopy for further clipping. One patient required laparotomy for delayed leak at another institution. The median GCSI score reduced from 3.91 to 2.44 (p < 0.001) at 12 months with a clinical success rate of 60%. Clinical success at 1 year was not different in patients with previous response to botulinum toxin treatment (p = 0.773), any pre-procedural therapy

(p = 0.607), nasojejun tube requirement prior to G-POEM (p = 0.531) and a history of opioid use (25% vs. 54%; p = 0.062).

There was no difference in outcome with use of lesser versus greater curvature approach (p = 0.516) however procedural time (minutes) was significantly shorter with lesser curvature approach (35 (29-47.5) vs 60 (38.8-60); p = 0.047) and a trend towards less leaks (1 vs 5 were observed, p = 0.053). There was also no difference in clinical outcome with supervised, trainee-completed procedures (n = 46; p = 0.301). Baseline GCSI, baseline gastric retention at 4 hours did not correlate with reduction in GCSI, however improvement in intra-operative EndoFLIP distensibility index from pre- to post myotomy had a weak correlation with change in GCSI from pre-POEM to > 12 months post (r = -0.391; p = 0.027).

Conclusions Our results are consistent with literature confirming the need to establish pathways to improve clinical success rates post G-POEM for patients with refractory gastroparesis. Intra-operative EndoFLIP may be able to be utilised in addition to GCSI and gastric emptying however further prospective studies are required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP915 Reverse EUS-GJ: EUS guided decompression of Excluded Stomach Gastric Outlet Obstruction (eGOO) after Roux-en-Y Gastric Bypass Surgery

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Background: Gastric outlet obstruction (GOO) of the excluded (remnant) stomach is a rare complication after Roux-en-Y gastric bypass (RYGB), typically related to chronic accumulation of secretions or mechanical narrowing. Because the remnant stomach is inaccessible by standard endoscopy, diagnosis and management can be challenging. We describe the diagnostic and therapeutic utility of endoscopic ultrasound (EUS)-guided decompression using a lumen-apposing metal stent (LAMS) for excluded-stomach GOO (eGOO).

Case Description: A 63-year-old woman with prior RYGB presented with progressive epigastric fullness, postprandial nausea, and abdominal pain. CT imaging demonstrated marked distension of the excluded stomach with features consistent with GOO and non-specific eccentric thickening of the gastric antrum.

Esophagogastroduodenoscopy was unremarkable due to the altered anatomy. EUS, however, revealed a markedly distended remnant stomach with diffuse antral wall thickening. Given these findings, EUS-directed gastric decompression was pursued.

A cautery-enhanced 15 × 10 mm LAMS was then deployed to create a jejuno-gastrostomy between the jejunal limb and the remnant stomach. A slim endoscope was advanced through the LAMS, revealing over 1.5 liters of retained fluid, pyloric stenosis, and significant duodenal bulb ulceration. Biopsies demonstrated benign peptic ulcer disease and were negative for H. pylori.

The patient experienced prompt improvement in upper-GI symptoms. Follow-up EGD/EUS demonstrated resolution of obstruction, and cross-sectional imaging at 12 months confirmed no evidence of neoplasia or complications. The patient later elected to undergo remnant gastrectomy to further exclude malignancy, which was performed without difficulty, indicating that prior LAMS access did not preclude surgical management. Final pathology was benign pyloric stenosis.

Conclusion: This case highlights the value of therapeutic EUS as an effective minimally invasive strategy for both diagnosing and treating eGOO using a LAMS. The approach provides rapid symptom relief, enables same-session evaluation of the remnant stomach and duodenum, and importantly, does not hinder subsequent surgical gastrectomy when clinically indicated.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP916V Unexpected CMV colitis in immunocompetent patients: when to broaden testing and avoid the steroid trap

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DOI 10.1055/s-0046-1822243

Abstract Text

CMV colitis is usually considered a complication of immunosuppression or steroid-refractory ulcerative colitis (UC). We report three adults with severe colitis evaluated with serum CMV PCR and targeted biopsies/CMV immunohistochemistry. Case 1: immunocompetent man with first-episode Mayo 3 left-sided colitis after viral prodrome; PCR strongly positive; rapid response to IV ganciclovir. Case 2: UC ~1 year after stopping biologics, post-C. difficile; Mayo 3 pancolitis with deep ulcers; PCR + and biopsy inclusions; improved with ganciclovir plus UC therapy with PCR clearance. C3: extensive UC relapsing during high-dose steroids and infliximab induction; CMV IHC + and PCR +; marked improvement after ganciclovir. We propose early CMV testing in severe/atypical flares, post-infectious triggers, or relapse despite steroids/biologics to guide timely antivirals and reduce recurrent steroid exposure [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/a59355bc-81fc-4190-83e2-73476a480230/Uploads/19978_cmv_low.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Onisor D., Brusnic O., Mocan S., Stoian M., Avram C., Boicean A., Dobru D. Cytomegalovirus in Ulcerative Colitis: An Unwanted "Guest". *Pathogens* 2024; 13: 650
- [2] Nock, Ryan MD; Myint, Thomas MD; Ho, Andrew MD. The Incidence of Cytomegalovirus in Acute Severe Colitis in Hospitalized Patients With Inflammatory Bowel Disease in a Community-Based, Safety Net Hospital: 2823. *American Journal of Gastroenterology* 113: p S1566–S1567 2018

eP917 Biliary obstruction secondary to afferent loop syndrome treated with LAMS

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DOI 10.1055/s-0046-1822244

Abstract Text

This is the case of a 78-year-old patient with previous Whipple's pancreaticoduodenectomy for a poorly differentiated adenocarcinoma. 14 months later there is evidence of disease recurrence, and the patient develops biliary obstruction secondary to afferent (biliary) limb obstruction. After discussion at the HPB MDT endoscopic palliative management was decided. Initial attempts at endoscopic luminal stent insertion were limited by anatomic access. An EUS approach was then attempted. The dilated obstructed small bowel limb was easily identified. We punctured with a 19A needle and aspirated dark bile. Contrast injected confirmed a very dilated small bowel with reflux into a dilated biliary tree. With the wire kept in place, a HOT SPAXUS LAMS 20x16mm stent was deployed creating a gastrojejunostomy with the obstructed jejunum loop. Large amount of bile was drained into the stomach. Contrast study confirmed correct placement. 4 weeks later the LAMS was replaced by two double pig tails 7fr x 15cm. Patient symptoms (jaundice, pruritus) and abnormal LFTs resolved gradually. Afferent loop syndrome can affect patients with recurrence. It is

defined by distal obstruction and accumulation of bile, pancreatic and enteric fluid, causing distension of the afferent loop and recurrent cholangitis. EUS-guided gastroenterostomy is a novel technique that bypasses an area of obstruction by creating a lumen-to-lumen direct anastomosis using a fully covered lumen-apposing metal stent. EUS-guided gastroenterostomy is a minimal-invasive approach, especially compared to surgical gastroenterostomy, that could be favoured over enteral stent placement, because of difficult anatomical access and durable effect [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rizzo GEM, Coluccio C, Forti E, Fugazza A, Binda C, Vanella G, Di Matteo FM, Crinò SF, Lisotti A, Maida MF, Aragona G, Mauro A, Repici A, Anderloni A, Fabbri C, Tarantino I On Behalf Of The I-Eus Group. Endoscopic Ultrasound-Guided Anastomoses of the Gastrointestinal Tract: A Multicentric Experience. *Cancers (Basel)*. 2025; 17 (5): 910. doi:10.3390/cancers17050910 PMID: 40075757 PMID: PMC11899671
- [2] Dawod Q, Issa D, Shah SL, Dawod S, Sharaiha RZ. EUS-guided stent placement for afferent limb and gastrojejunal obstruction in a patient with pancreatic cancer. *VideoGIE*. 2021; 6 (6): 257–259. doi:10.1016/j.vgie.2021.02.008 PMID: 34141966 PMID: PMC8186170

eP918 Safety profile of gastric peroral endoscopic myotomy (G-POEM) – a retrospective analysis

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DOI 10.1055/s-0046-1822245

Aims Gastric peroral endoscopic myotomy (G-POEM) is an emerging endoscopic technique for the treatment of refractory gastroparesis, particularly benefiting patients with pylorospasm. It is considered a safe procedure with a low risk of adverse events when performed by experienced endoscopists. Our aim was to perform a comprehensive analysis of all adverse events associated with G-POEM.

Methods This study presents a retrospective analysis of patients who underwent G-POEM between November 2017 and April 2025. The primary objective was to analyze procedure-related perioperative and early postoperative complications. Complications were categorized as follows: any deviations from the standard operative and postoperative course were defined as "undesirable events (UEs)" Those undesirable events meeting the criteria of the Clavien-Dindo (C-D) surgical classification were labeled as "true adverse events (AEs)".

Results Out of 71 procedures, no undesirable or adverse events were observed in 51 procedures (71.8%).

Perioperative undesirable events included gastric mucosal injury (4; 5.6%), duodenal mucosal injury (2; 2.8%), major intra-procedural bleeding (1; 1.4%), serosal perforation (9; 12.7%), capnoperitoneum puncture (3; 4.2%), subcutaneous emphysema (1; 1.4%) and severe pyloric mucosal injury requiring placement of a nasojejunal feeding tube (1; 1.4%).

Early postoperative events included diabetes decompensation in 2 patients and a small leak from the pyloric to the subhepatic region.

Fourteen days after the procedure, one patient was admitted with gastrointestinal bleeding, Forrest IIB ulcer was found and was successfully managed with endoscopic hemostasis and subsequent PPI therapy. At three months, another patient presented with mild dumping syndrome, which was treated conservatively with good clinical response.

According to the Clavien–Dindo classification, the following undesirable events were considered true adverse events (AEs): serosal perforation (9; Grade I), leak (1; Grade II), mucosal injury requiring nasojejunal tube placement, (1; Grade IIIa), decompensation of diabetes (2; Grade II), late ulcer bleeding requiring readmission and endoscopic therapy (1; Grade IIIa), and dumping syndrome (1; Grade II).

Conclusions G-POEM is a highly safe procedure with a low complication rate. It meets the criteria for a "day-case surgery" approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP919V Scope Traction With Silk Suture During Gastric Incisura Endoscopic Submucosal Dissection

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Problem to solve Performing Endoscopic Submucosal Dissection (ESD) in challenging anatomical locations, particularly the gastric incisura and the lesser curvature, remains technically demanding. The main difficulty lies in maintaining an optimal and stable endoscope position while ensuring sufficient maneuverability to complete the dissection safely, efficiently, and rapidly. Under these circumstances, progression is often hindered, and the operator is forced to work with the knife positioned at a considerable distance from the endoscope tip, repeatedly adjusting the scope to preserve adequate visualization. This need emerges from paradoxical instrument movements when retroflexion is required to access all lesion margins, and from the intrinsic difficulty of maintaining stable scope positioning despite meticulous manipulation. Working in retroflexion further increases procedural complexity by producing counterintuitive instrument responses, which can compromise precision, prolong procedure time, and increase technical demands [1–5].

Innovation To address these challenges, we developed an innovative approach based on direct and dynamic traction utilizing a silk suture tied to the distal attachment base of the endoscope. This technique aims to stabilize the instrument during dissection, maintains consistent positioning, reduces operating time, and enhances precision. It is simple, inexpensive, and can be implemented rapidly in any endoscopic setting, requiring only a standard silk suture without the use of specialized equipment. One end of the suture is securely tied to the base of the distal attachment without obstructing visualization or instrument passage, while the other end exits through the patient's mouth and is controlled externally by a second operator. Through adjustable traction, this configuration provides dynamic countertraction that can be finely adjusted according to procedural needs. This added stability compensates for anatomical constraints, reduces unnecessary movement, and enhances scope maneuverability. By limiting excessive motion and enabling a closer, more controlled dissection, this technique may reduce the risk of inadvertent tissue injury.

Results We applied this direct endoscope traction method in six consecutive gastric incisura ESD cases over the past 3 months, all involving visible lesions histologically confirmed as adenocarcinomas. Prior attempts to improve stability using a more rigid scope and conventional traction techniques, specifically clip-with-line, did not yield meaningful improvement. All lesions treated using this technique were ultimately confirmed as R0 resections, with both lateral and deep margins free of neoplasia.

Conclusions ESD in the gastric incisura and lesser curvature is challenging due to difficulties in maintaining endoscope stability and control. Our dynamic traction technique offers a practical, low-cost solution that improves stability, precision, and procedural efficiency. Without dynamic direct traction, these procedures would likely have required significantly longer operating times. In extreme cases, this might have necessitated piecemeal rather than en bloc resection, potentially compromising histological assessment. Further studies are needed to validate this clinical impact and reproducibility.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/4c2dce40-29a8-4908-8049-7cc12109472e/Uploads/19990_Traction_ESGE%20Days.mp4

Conflicts of Interest Alessandro Repici is a consultant of ERBE, Medtronic, Fujifilm and Olympus. Antonio Capogreco is a consultant of ERBE. Cesare Hassan is a consultant of Alphasigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax. Roberta Maselli is a consultant of ERBE, Fujifilm, 3DMatrix and Boston Scientific.

References

- [1] Niu C, Zhang J, Vallabhajosyula S, E-Xin B, Napel M, Okolo PI 3rd The Impact of Traction Methods on Endoscopic Submucosal Dissection Efficacy for Gastric Neoplasia: A Systematic Review and Meta-analysis. *J Gastrointest Cancer*. 2024; 55 (1): 129–142. doi:10.1007/s12029-023-00982-9 Epub 2023 Nov 13
- [2] Nagata M. Optimal traction direction in traction-assisted gastric endoscopic submucosal dissection. *World J Gastrointest Endosc*. 2022; 14 (11): 667–671. doi:10.4253/wjge.v14.i11.667 PMID: 36438880 PMID: PMC9693688
- [3] Nagata M. Advances in traction methods for endoscopic submucosal dissection: What is the best traction method and traction direction? *World J Gastroenterol* 2022; 28 (1): 1–22. doi:10.3748/wjg.v28.i1.1
- [4] Handmade snare-assisted endoscope tip-bending angulation booster Haruhiko I et al. *VideoGIE*. Volume 9 (Issue 12): 511–515
- [5] Giacobbo Nunes F, Gomes ILC, De Moura DTH, Dominguez JEG, Fornari F, Ribeiro IB, Peixoto de Oliveira GH, de Figueiredo SMP, Bernardo WM, Hourneaux de Moura EG. Conventional Versus Traction-Assisted Endoscopic Submucosal Dissection for Esophageal, Gastric, and Colorectal Neoplasms: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Cureus* 2024; 16 (3): e55645. doi:10.7759/cureus.55645

eP920 Role of Detective Flow Imaging Endoscopic Ultrasound (DFI-EUS) in the assessment of pancreatic solid lesion

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DOI 10.1055/s-0046-1822247

Aims The introduction of ancillary techniques, such as contrast enhanced EUS (CHE-EUS), has improved the study of pancreatic lesions. However, the use of contrast agents entails a prolongation of procedure time and additional costs. The innovative ultrasound technique Detective Flow Imaging-EUS (DFI-EUS) has been recently introduced. It allows the study of micro-vascularization without requiring administration of contrast agents. The aim of this study is to assess the role of DFI in defining pancreatic lesion and its agreement with CHE-EUS.

Methods Prospective, single centre study conducted on consecutive patients who underwent EUS-FNB for solid pancreatic lesion at the Therapeutic Digestive Endoscopy Unit of Campus Biomedico University of Rome. Lesions were classified according to the degree of vascularisation at DFI study into grade 0 absence of vascularisation or hypovascularisation pattern, grade 1 isovascularisation pattern and grade 2 hypervascularisation pattern compared to surrounding parenchyma. Final diagnosis was based on histopathology, by using needles of 22 Gauge Acquire S for tissue acquisition.

Results From April 2024 to April 2025, 100 patients were enrolled (51 % male; mean age 68 ± 10 years old). The mean size of pancreatic lesions was 29 ± 13 mm and in the majority of cases were located in the head of the pancreas (52 %). At DFI-EUS evaluation 11/100 (11 %) of lesions were defined grade 1 at DFI, 20/100 (20 %) grade 2 and 69/100 (69 %) grade 0. After the Sonovue administration, 70 % of lesions showed hypoenhancement. In 69 % of cases the final

diagnosis was adenocarcinoma, 17 % neuroendocrine tumour, 8 % inflammatory mass and in 6 % other neoplasm. Intraclass Coefficient (ICC) between DFI-EUS and CHE-EUS was 88 % and Cohen's Kappa was 0.74.

The sensitivity of DFI in detecting pancreatic adenocarcinoma was 93 % (95 % CI 84–97 %), the specificity was 50 % (95 % CI 30–70 %).

Conclusions DFI EUS provide a fast evaluation of the micro-vascularization of pancreatic solid lesions. It seems to be an effective technique in characterizing lesions with good concordance with CHE-EUS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP921 Rethinking the indeterminate gastric subepithelial lesion: inflammatory fibroid polyps as a model for definitive endoscopic diagnosis and cure

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DOI 10.1055/s-0046-1822248

Aims Gastric inflammatory fibroid polyps (GIFPs) are rare benign subepithelial lesions (SELs). They frequently present as an indeterminate SEL after additional diagnostic modalities have failed to yield a diagnosis. In the absence of standard management pathways, we sought to evaluate the diagnostic and therapeutic role of endoscopic resection (ER) for GIFPs.

Methods We retrospectively analysed a prospectively maintained database at a tertiary referral centre. Consecutive patients with histologically confirmed GIFPs who underwent endoscopic resection (ER) between November 2013 and March 2025 were included. The primary outcomes were en bloc resection and R0 excision. Secondary outcomes included adverse events, recurrence, and resolution of anaemia.

Results Seventeen patients (median age 72 years, IQR 70–79) were identified. En bloc resection was achieved in all (100 %), with R0 resection in 35 %. Pre-resection EUS correctly identified submucosal origin in 50 %, and histology suggested GIFP in only 9 %. There were no perforations or serious adverse events. One delayed bleed (6 %) was managed conservatively. Among patients presenting with anaemia, 71 % demonstrated resolution post-ER. No recurrence was observed during follow-up, including in margin-positive cases.

Conclusions ER provides both diagnostic certainty and definitive treatment for GIFPs, which generally present as an indeterminate gastric SELs. Given the poor accuracy of pre-resection testing and absence of recurrence, ER should be regarded as the preferred first-line strategy, with routine post-resection surveillance generally unnecessary once diagnosis is confirmed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP922 Clip artefact after duodenal endoscopic mucosal resection: prevalence and management

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Aims Large (≥ 15 mm) duodenal adenomas (DAs) are effectively managed by endoscopic mucosal resection (EMR). Prophylactic clip closure is frequently used to prevent complications. Unlike the colon, both residual or recurrent adenoma (RRA) and clip artefact exhibit a villiform pattern in the duodenum, complicating endoscopic interpretation. The prevalence and clinical impact of duodenal clip artefact (DCA) remain undefined.

Methods Consecutive patients undergoing duodenal EMR between January 2016 and August 2024 at a tertiary center were prospectively enrolled. At first

surveillance endoscopy (6 months), post-EMR scars were classified as: type 1 (bland), type 2 (nodular), or type 3 (residual clips with nodularity). Types 2/3 were defined as DCA and resected by cold-snare polypectomy. The primary outcome was DCA prevalence, secondary outcomes were diagnostic accuracy and procedural safety.

Results Clips were used in 33/255 (15 %) resections. Among 32 patients with follow-up, scars were type 1 (n = 13), type 2 (n = 15), and type 3 (n = 4), yielding a DCA prevalence of 59.4 %. RRA was confirmed histologically in 16 % (3/19) but predicted endoscopically in only 33.3 % (n = 1). No adverse events occurred following cold-snare excision.

Conclusions Duodenal clip artefact develops in 60 % of clipped EMR sites and frequently mimics recurrence. Cold-snare excision is safe, provides definitive diagnosis, and simplifies subsequent surveillance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP923V When the Upper GI Tract Fails: upper GI stigmata of Chronic Intestinal Pseudo-Obstruction

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DOI 10.1055/s-0046-1822250

Abstract Text

Chronic intestinal pseudo-obstruction is an extremely rare disease characterized by repeated episodes of intestinal obstruction, with radiological imaging showing a dilated intestine with air/fluid levels in the absence of mechanical occlusive lesions. A 61-year-old woman with lifelong CIPO and megaduodenum underwent multiple surgeries: jejunal resection, volvulus derotations, and gastric bypass with gastrojejunal anastomosis. Absent contractility was found on esophageal manometry. Due to a family history of esophageal adenocarcinoma, she underwent upper GI endoscopy, revealing distal erosions and a low-grade dysplastic area that was resected. Follow-up endoscopy showed persistent severe erosive esophagitis, despite high-dose PPI therapy, and a massively dilated duodenum. This case highlights the coexistence of megaduodenum and refractory esophagitis in CIPO, emphasizing the need for individualized management [1–3].

Video [http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7059f677-610f-4ade-92ba-710813047695/Uploads/19978_ESGE_Megaduodenum_case_report_ppt\(1\).wmv](http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7059f677-610f-4ade-92ba-710813047695/Uploads/19978_ESGE_Megaduodenum_case_report_ppt(1).wmv)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Yadlapati R, Kahrilas PJ, Fox MR et al. Esophageal motility disorders on high-resolution manometry: Chicago classification version 4.0©. *Neurogastroenterol Motil* 2021; 33: e14058. doi:10.1111/nmo.14058
- [2] Bianco F, Lattanzio G, Lorenzini L et al. Enteric neuromyopathies: highlights on genetic mechanisms underlying chronic intestinal pseudo-obstruction. *Biomolecules* 2022; 12: doi:10.3390/biom12121849
- [3] Basilisco G, Marchi M, Coletta M. Chronic intestinal pseudo-obstruction in adults: a practical guide to identify patient subgroups that are suitable for more specific treatments. *Neurogastroenterol Motil* 2024; 36: e14715. doi:10.1111/nmo.14715

eP924 Evaluation of Amber-Red Color Imaging (ACI) for Vessel Visualization and Intraprocedural Bleeding during Third-Space Endoscopy

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Aims Intraprocedural bleeding (IPB) represents a major challenge in third-space endoscopy (TSE), as it prolongs procedure time, impairs visibility, and

may negatively affect clinical outcomes. Amber-Red Color Imaging (ACI) is a novel imaging modality designed to enhance visualization of vascular structures and bleeding sources, potentially improving the safety and efficiency of TSE procedures. This study aimed to systematically evaluate the incidence of major IPB and the frequency of prophylactic vessel coagulation during TSE using the ACI mode.

Methods In this single-center, video-based analysis, consecutive TSE procedures (ESD, POEM, G-POEM) between February and October 2025 in which submucosal dissection was performed with the ACI mode were reviewed. The primary endpoint was the frequency and duration of major IPB. Major IPB was defined as a bleeding episode requiring either multimodal endoscopic hemostasis, lasting > 1 minute or leading to complete loss of visibility ("red-out"). Secondary endpoints included the rate of prophylactic vessel coagulation—defined as the preemptive coagulation of visible vessels using knife or coagulation forceps before dissection ("vessel sealing")—and the occurrence of postinterventional complications.

Results A total of ten full-length videos of TSE procedures (4 ESDs, 3 POEMs, 3 G-POEMs) were analyzed. The median procedure time was 79.5 (43–171) minutes. For ESD cases, the median lesion size was 50 mm (41–97). Five major IPB events were observed, all during ESD (1 gastric, 1 esophageal, 3 rectal). The mean duration of IPB until successful hemostasis was 47.8 ± 53.6 seconds. A total of 41 prophylactic vessel coagulations (vessel sealing) were performed, corresponding to a mean of 5.3 per procedure. The mean duration of each vessel sealing was 39.3 ± 39.5 seconds. The success rate of prophylactic coagulation—defined as absence of subsequent bleeding—was 90.2 %. No postinterventional complications occurred.

Conclusions In this single-center cohort, the incidence of major intraprocedural bleeding under ACI guidance was very low. This may be related to the high success rate of prophylactic vessel coagulation. Further prospective, multi-center studies are warranted to determine the clinical benefit of imaging modalities, such as ACI, compared to standard white-light endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP925 A rare case of upper GI bleeding

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DOI 10.1055/s-0046-1822252

Abstract Text

We present the case of an 86-year-old patient admitted with what was initially perceived as haemoptysis with coughing of large clots. Patient had a significant history of comorbidities including atrial fibrillation on Apixaban. Initial assessment by ENT and a CTPA could not explain the symptomatology and the patient underwent an upper GI investigation. On gastroscopy a large, ulcerated area located at 20cm with a bleeding vessel and multiple clots prevented further insertion. Endoscopic dual haemostasis was achieved (3 hemoclips and adrenaline solution). Patient was stabilized with no further bleeding. On second look endoscopy a large (> 10cm) oesophageal pouch proved to be the underlying culprit. There was a large ulcer running at the base of the pouch, where now all bleeding stigmata had disappeared. Entrance into the upper oesophageal sphincter proved to be tricky. Histology showed sections of acutely inflamed and ulcerated oesophageal squamous mucosa with focal fungal hyphae and foreign material. No intestinal metaplasia, dysplasia or malignancy was seen in the tissue examined. The most common complications of Zenker's diverticulum are aspiration pneumonia, and oesophageal obstruction / dysphagia and increased risk of development of carcinoma. Bleeding occurs rarely and to our knowledge there are only a handful of cases reported in the literature of endoscopic management. Indwelling food for long periods can induce ulceration due to chronic inflammation and superimposed fungal infection. In elderly patients with atypical presentation, this rare complication should be considered [1].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sardana N, Wallace D, Agrawal R, Aoun E. Where's the ulcer? Spontaneous bleeding from Zenker's diverticulum. *BMJ Case Rep.* 2014; 10: 2014bcr2014204677. doi:10.1136/bcr-2014-204677 PMID: 24916983 PMID: PMC4054103

eP926 Hybrid endovascular-endoscopic approach to safely remove oesophageal foreign body penetrating the aorta

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Abstract Text

A 65-year-old woman presented with haematemesis and syncope with head strike on a background of a week of intermittent dysphagia and odynophagia a week after eating a fish salad. CT-brain showed a 4cm radiopaque oesophageal foreign body penetrating the aortic arch with surrounding mediastinitis. The decision was made to proceed with a hybrid endovascular and endoscopic approach. Vascular surgeons inserted a 34x100mm GORE CTAG endoluminal stent-graft immediately distal to the left subclavian artery and in the proximal descending aorta, ready for rapid deployment, via femoral approach. A gastroscopy was then performed where the foreign body was identified as a fish bone, which was transecting the oesophagus, with contralateral perforations, with extrinsic oesophageal compression. The bone was grasped with rat-tooth forceps, and with the slightest traction, brisk aorto-oesophageal bleeding was encountered. The remainder of the aortic stent was then deployed, which then swiftly achieved haemostasis. Once the 400mL of blood was suctioned away and endoscopic views restored, the fish bone was seen with the proximal end located intraluminally in the oesophagus, where it could be easily grasped with rat tooth forceps and removed safely with an angled tip distal cap. A repeat gastroscopy performed by oesophagogastric surgeons 12 hours later reassessed the perforations, found improved extrinsic compression, and clipped the perforations closed. The patient was extubated the following morning and was well, discharging home well on day 18 after admission on oral antibiotics and weaning nasojejunal tube feeds, tolerating oral diet.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP927 Endoscopic Submucosal Dissection for Colorectal Superficial Neoplasia in Lynch Syndrome: A Single-Center Experience

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DOI 10.1055/s-0046-1822254

Aims Patients with Lynch syndrome have an increased risk of developing colorectal neoplasia, but evidence regarding the role of endoscopic submucosal dissection (ESD) in this setting, compared with surgery, is limited. This study aims to evaluate the efficacy and safety of ESD for superficial colorectal neoplasia in patients with Lynch syndrome.

Methods A single-center case series was conducted including all Lynch syndrome patients who underwent ESD for superficial colorectal neoplasia between November 2020 and October 2025. Clinical and lesion characteristics, procedural outcomes, complications, histology, and post-ESD management were analyzed.

Results Twelve patients were included, nine of whom had a prior history of extra-colonic malignancy. Mean lesion size was 34 mm (range 20–60 mm). Lesions were located in the rectum (17 %), sigmoid colon (33 %), descending colon (8 %), transverse colon (8 %), hepatic flexure (17 %) and ascending colon (17 %). Morphology of lesions was assessed using Paris classification: there were

5 (42%) sessile polyps, 3 (25%) flat elevated lesions, 3 (25%) flat elevated lesions with central depression and 1 (8%) flat elevated lesion with raised nodule. Pit pattern of lesions was assessed using Kudo's classification and was IIIs in 5 (42%) lesions, IIIL in 2 (17%) lesions, IV in 1 (8%) lesion, Vi in 3 (25%) lesions and Vn in 1 (8%) lesion. En bloc resection was achieved in 10 patients (83%), while two procedures (17%) were discontinued due to technical difficulty and suspected deep invasion. Adenocarcinoma was identified in four cases, two with submucosal invasion > 2 mm, two with lymphovascular invasion and one with both. Overall, five patients (42%) achieved curative resection; six (50%) were referred for surgery and one (8%) to oncologist for evidence of diffuse abdominal lymphadenopathy on staging CT. No perforation or clinically significant bleeding occurred. At 1-year follow-up, no local recurrence was observed among patients who underwent curative ESD.

Conclusions In patients with Lynch syndrome, ESD appears to be an effective and safe therapeutic option for selected cases of superficial colorectal cancer. The considerable rate of non-curative resections due to unfavorable histological features highlights the need for thorough endoscopic assessment before resection and supports ESD as the preferred technique. Further studies with larger cohorts are warranted to define the optimal role of ESD in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP928 Generative AI models for quality assessment in upper gastrointestinal lymphadenectomy: a video-based analysis

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DOI 10.1055/s-0046-1822255

Aims D2 lymphadenectomy is the standard of care for locally advanced gastric cancer but suffers from significant technical variability and lack of standardized quality assessment. Artificial Intelligence (AI), particularly Multimodal Large Language Models (MLLMs), offers a potential solution for objective surgical evaluation. We aimed to evaluate the performance of state-of-the-art MLLMs in assessing the quality and visibility of D2 lymphadenectomy.

Methods In this comparative study, 20 videos of minimally invasive gastrectomy/esophagectomy (10 dissection phase, 10 clean field) were analyzed. Three MLLMs (GPT-5, Gemini 2.5 Pro, Gemini 3 Pro Preview) were tested across fifteen configurations varying in frame count (10, 30, 50) and temperature (0, 1). The primary outcomes were "Quality of Dissection" and "Anatomical Visibility," assessed on a 4-point Likert scale against a reference standard of three expert surgeons. Performance was evaluated using dichotomized outcome (1-3 vs 4) with AUC, sensitivity, and specificity, as well as pointwise ordinal metrics to capture both clinical relevance and granular accuracy.

Results Twenty videos were analyzed in two different categories (10 clean fields, 10 dissection phases; mean duration 100.4 ± 30.8 seconds). The best configuration was Gemini 2.5 Pro (50 frames, T = 1) in dichotomous quality assessment (sensitivity 40.9% [27.7-55.6%], specificity 77.8% [61.9-88.3%], AUC 0.593 [0.492-0.692]) and visibility (AUC 0.663 [0.553-0.763]). Stable performance was shown across different phases and moderate ordinal accuracy (quality: exact 36.2%, MAE 1.075; visibility: exact 55.0%, MAE 0.838). Inter-observer agreement was substantial for quality (ICC 0.736 [0.65-0.81]) and moderate for visibility (ICC 0.659 [0.55-0.75]).

Conclusions Generative AI models demonstrate promising capability in the automated assessment of surgical field quality of D2 lymphadenectomy. Gemini 2.5 Pro offered the best balance of accuracy and efficiency. Future efforts should focus on visibility-based training on multicenter datasets to develop standardized, objective quality control tools.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP929 Clinical outcomes after peroral endoscopic myotomy in patients with achalasia: a composite score-based assessment

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DOI 10.1055/s-0046-1822256

Aims Achalasia is a rare esophageal motility disorder with a substantial impact on patients' quality of life. Available endoscopic treatments range from temporary therapeutic options (botulinum toxin injection, pneumatic balloon dilatation) to the more recently established definitive approach. Peroral endoscopic myotomy (POEM) offers long-term symptom resolution in most patients, although it may induce or worsen gastroesophageal reflux disease (GERD). Standardized clinical scores used to quantify key symptoms such as regurgitation, dysphagia, heartburn, and odynophagia, before and after POEM, are essential for assessing treatment efficacy. In this study, we focused on the most commonly used symptom-based tools: Eckardt score, Dakkak-Bennett score, GERD-Questionnaire (GERD-Q), and GERD-Health-Related Quality of Life (GERD-HRQL) and analyzed symptom dynamics using these low-cost, easy-to-apply instruments, which are particularly valuable for patient follow-up in low- and middle-income countries [1–6].

Methods We present a series of eight patients diagnosed with achalasia, seven confirmed by high-resolution esophageal manometry and one by upper GI endoscopy combined with barium esogastroduodenal transit, who underwent POEM between October 2024 and March 2025.

All patients were evaluated before and after POEM using four clinical scores: the Eckardt and Dakkak-Bennett scores for achalasia-related symptoms, and the GERD-Q and GERD-HRQL scores for assessing reflux symptoms. Questionnaires were completed prior to POEM and again at one month after the procedure. To better characterize the clinical status of each patient, we used a composite definition that addresses the limitations of individual scores and reflects the advantage of combining several tools rather than relying on a single instrument.

We defined an optimal clinical response as the simultaneous fulfillment of the following criteria: Eckardt score ≤ 3, Dakkak-Bennett score ≤ 1, and GERD-Q score ≤ 6.

Results Patient ages ranged from 19 to 76 years (mean 55). Three patients (37.5%) had type I achalasia, four (50%) had type II and one (12.5%) had unclassified achalasia. No post-POEM complications were observed. All patients reported an improvement in dysphagia. The mean Eckardt score decreased from 8.75 to 1.50, and the mean Dakkak-Bennett score from 3 to 0.13. Reflux-related symptoms also improved overall, with the mean GERD-Q score decreasing from 11 to 6.62. Based on the composite definition, six out of eight patients (75%) met all three criteria and were classified as having an optimal clinical response.

The GERD-HRQL score showed a 72% decrease (from 32.13 to 9).

Two patients did not meet the composite criteria, although both experienced dysphagia relief reflected by lower Eckardt and Dakkak-Bennett scores. In the first case, the GERD-HRQL score remained unchanged before and after POEM. This suggests that although swallowing improved, symptoms such as regurgitation or heartburn may have become more prominent once the functional outflow obstruction at the gastro-esophageal junction had been relieved.

The second patient missed the composite definition by a single point. Their GERD-Q score increased from 6 before POEM to 7 after. This slight difference is best understood by looking at how the GERD-Q is structured. Four items are positive predictors for GERD, while two (epigastric pain and nausea) are negative predictors. A patient without classical reflux symptoms who consistently answers negatively to these two questions will start with a GERD-Q of 6, which

technically qualifies as an “optimal” response in the composite definition, even though clinically this is not always accurate. In this particular case, the one-point variation likely reflects questionnaire mechanics rather than a true clinical worsening.

Conclusions POEM remains an effective and minimally invasive endoscopic option for the definitive treatment of achalasia, offering substantial clinical benefit for patients. Using a composite definition that incorporates several clinical scores is a simple, low-cost and easily accessible approach that can provide a more realistic picture of the clinical response, despite the individual limitations of each score. At the same time, some of these instruments, such as GERD-Q, may benefit from further refinement to reduce potential misinterpretation, given their role in identifying GERD symptoms as a potential post-POEM complication.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] McKay SC, Dunst CM, Sharata AM, Fletcher R, Reavis KM, Bradley DD, DeMeester SR, Müller D, Parker B, Swanström LL. POEM: clinical outcomes beyond 5 years. *Surg Endosc*. 2021; 35 (10): 5709–5716. doi:10.1007/s00464-020-08031-3 Epub 2021 Jan 4 PMID: 33398572
- [2] Rassoul Abu-Nuwar M, Eriksson SE, Sarici IS, Zheng P, Hoppe T, Jobe BA, Ayazi S. GERD after Peroral Endoscopic Myotomy: Assessment of Incidence and Predisposing Factors. *J Am Coll Surg*. 2023; 236 (1): 58–70. doi:10.1097/XCS.0000000000000448 Epub 2022 Oct 17 PMID: 36519909 PMID: PMC9750114
- [3] Hungness ES, Teitelbaum EN, Santos BF, Arafat FO, Pandolfino JE, Kahrilas PJ, Soper NJ. Comparison of perioperative outcomes between peroral esophageal myotomy (POEM) and laparoscopic Heller myotomy. *J Gastrointest Surg*. 2013; 17 (2): 228–35. doi:10.1007/s11605-012-2030-3 Epub 2012 Sep 28 PMID: 23054897
- [4] Velanovich V. The development of the GERD-HRQL symptom severity instrument. *Dis Esophagus* 2007; 20(2): 130–4. doi:10.1111/j.1442-2050.2007.00658.x. PMID: 17439596
- [5] Pilone V., Tramontano S., Renzulli M. et al. Gastroesophageal Reflux After Sleeve Gastrectomy: New Onset and Effect on Symptoms on a Prospective Evaluation. *OBES SURG* 29: 3638–3645 2019. doi:10.1007/s11695-019-04046-5
- [6] Hurr TJ. The six-question Gastroesophageal Reflux Disease Questionnaire (GerdQ) cannot accurately quantify reflux and reflux-associated symptoms frequency. *Gastroenterol Rep (Oxf)* 2022; 10:goac043 doi: 10.1093/gastro/goac043 PMID: 35991688 PMID: PMC9390063

eP930V Endoscopic management of large ileal hamartomatous polyps in Peutz–Jeghers syndrome using “Triple-Balloon Enteroscopy” with Endorail system

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DOI 10.1055/s-0046-1822257

Abstract Text

A patient with known Peutz-Jeghers syndrome previously underwent video-capsule endoscopy revealing multiple small-bowel polyps. Anterograde double-balloon enteroscopy (DBE) allowed removal of a jejunal sessile hamartomatous polyp. Retrograde-DBE identified a 3–4 cm pedunculated ileal hamartomatous polyp. A further retrograde-DBE using the recently CE-marked Endorail system provided improved scope stability, enabling successful endoloop placement. The Endorail device uses a magnetic balloon that can be advanced beyond the enteroscope tip, filled with a ferromagnetic fluid, and magnetically anchored to the patient's abdomen, allowing it to be straightened and guided along the device. Endorail can be used both to overcome challenging bowel loops and increase insertion depth, as well as to provide greater procedural stability for effective endoscopic therapy [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7f80799f-c14c-4af0-8263-143d6f6f02c1/Uploads/19978_Endorail_2%20revised%201.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] https://www.accessdata.fda.gov/cdrh_docs/pdf23/K232327.pdf
- [2] ClinicalTrials.gov ID: NCT05626738

eP931 Improving post-test probability for diagnosis of PDAC using a multimodal EUS approach: a single center retrospective study integrating contrast-enhanced endoscopic ultrasound, strain ratio elastography and detective flow imaging

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DOI 10.1055/s-0046-1822258

Aims Pancreatic ductal adenocarcinoma (PDAC) is one of the most aggressive malignancies, with a poor five-year survival rate. Therefore, optimizing diagnostic strategies is a critical priority. Endoscopic ultrasound (EUS) plays a key role in characterizing focal pancreatic masses (FPM). The development of ancillary EUS techniques, including contrast-enhanced EUS (CH-EUS), strain ratio elastography (SRE), and Detective Flow Imaging (DFI), has enhanced the assessment of vascularization and tissue stiffness, potentially improving the differentiation between benign and malignant lesions. Emerging evidence suggests that these parameters may provide valuable insights into the malignant potential of FPM. The aim of this study is to evaluate whether the combined use of CH-EUS, SRE and DFI improves diagnostic performance in predicting PDAC [1–4].

Methods This single-center retrospective study included consecutive patients who underwent biliopancreatic EUS for FPM between October 2023 and October 2025 at the Digestive Diseases Unit, Sant'Andrea University Hospital of Rome. Examinations were performed using a Fujifilm linear-array echoendoscope and an ultrasound processor (Fujifilm Arietta 850, Fujifilm Healthcare, Tokyo, Japan). During EUS assessment, CH-EUS, SRE and DFI were performed to characterize lesions. The final diagnosis was confirmed by histopathology (EUS fine-needle biopsy) and/or radiological workup (CT, MRI, PET), with a follow-up of at least 6 months. For CH-EUS, lesions were categorized as hypo-enhanced, iso-enhanced, or hyper-enhanced during the early arterial phase after administration of 8 mL of sulphur hexafluoride microbubbles; hypo-enhancement was considered predictive of PDAC. SRE was evaluated using the system's embedded software, comparing a region of interest (ROI) within the FPM to the intestinal wall; a strain ratio > 10 was deemed predictive of PDAC. DFI was employed to assess microvascularization, classifying lesions as hypovascular or hypervascular, with hypovascularity considered a predictive feature for PDAC.

Results Overall, 95 patients were included (50 males, 52.6%; median age 68 ± 11.4 SD years). Lesions were predominantly located in the pancreatic head (64; 67.4%). Among all lesions, 64 (67.4%) were PDAC, 8 (8.4%) inflammatory lesions, 14 (14.7%) pancreatic neuroendocrine tumor (pNET) G1, 5 (5.3%) pNET G2, 3 (3.2%) other malignant tumors and 1 (1.1%) solid pseudopapillary tumor. CH-EUS was applied in 58 (61.1%) cases, elastography in 60 (63.2%) and DFI in 69 (72.6%). All three techniques were performed in 39 (41%) cases; CH-EUS + DFI in 47 (49.5%); SRE + DFI in 53 (55.8%); SRE + CH-EUS in 26 (27.4%). Across the individual modalities, CH-EUS showed a sensitivity of 71.0%, a specificity of 74.1%, with an accuracy of 72.4%, LR + 2.74, LR– 0.39, PPV 75.9%, and NPV 69.0%. SRE achieved a sensitivity of 88.6% and a specificity of 64.0%, corresponding to an accuracy of 78.3%, with LR + 2.46, LR– 0.18, PPV 77.5%, and NPV 80.0%. DFI demonstrated the strongest diagnostic performance, with a sensitivity of 90.7%, a specificity of 73.1% and an accuracy of 84.1%. The

positive and negative likelihood ratios were 3.37 and 0.13, respectively, with a PPV of 84.8 % and an NPV of 82.6 %. Regarding combined approaches, CH-EUS + SRE + DFI provided a specificity of 90.5 % and a sensitivity of 66.7 %, yielding an accuracy of 79.5 %, with LR + 7.00, LR– 0.37, PPV 85.7 %, and NPV 76.0 %. The combination CH-EUS + DFI resulted in a sensitivity of 70.8 % and a specificity of 82.6 %, with an accuracy of 76.6 %, LR + 4.07, LR– 0.35, PPV 81.0 % and NPV 73.1 %. Similarly, SRE + DFI showed a sensitivity of 77.4 % and a specificity of 81.8 %, with an accuracy of 79.3 %, LR + 4.26, LR– 0.28, PPV 85.7 % and NPV 72.0 %. Finally, SRE + CH-EUS demonstrated a sensitivity of 82.4 % and a specificity of 77.8 %, an accuracy of 80.8 %, LR + 3.71, LR– 0.23, PPV 87.5 %, and NPV 70.0 %.

Conclusions Among the single techniques, DFI achieved the highest sensitivity. Among the combined approaches, the SRE + DFI association provided good accuracy and specificity without requiring intravenous contrast. Nevertheless, the best overall performance was achieved when all three techniques were applied together, underscoring the value of a multimodal EUS strategy integrating ancillary technologies to enhance the predictive capability for PDAC.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Miwa H et al. Differential Diagnosis of Solid Pancreatic Lesions Using Detective Flow Imaging Endoscopic Ultrasonography. *Diagnostics* (Basel) 2024; 14 (9): 882
- [2] Iglesiasgarcia J et al. Quantitative endoscopic ultrasound elastography: an accurate method for the differentiation of solid pancreatic masses. *Gastroenterology* 2010; 139 (4): 1172–80
- [3] Iglesias-Garcia J, de la Iglesia D, Fusaroli P. Endoscopic Ultrasound armamentarium for precise and early diagnosis of biliopancreatic lesions. *Best Pract Res Clin Gastroenterol* 2025; 74: 101987
- [4] Ferlay J et al. Cancer incidence and mortality patterns in Europe: Estimates for 40 countries and 25 major cancers in 2018. *Eur J Cancer* 2018; 103: 356–387

eP932 Is there a benefit in post-ERCP pancreatitis-rate and hospital stay duration of laparoendoscopic rendezvous compared to ERCP followed by laparoscopic cholecystectomy in the management of initial choledocholithiasis?

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DOI 10.1055/s-0046-1822259

Aims In recent years, the management of patients requiring both cholecystectomy and endoscopic retrograde cholangiopancreatography (ERCP) due to choledocholithiasis has evolved significantly. Traditionally, these procedures were performed sequentially, often resulting in prolonged and multiple hospital stays and increased healthcare costs. However, the concept of cholecystectomy combined with intraoperative ERCP (rendezvous approach) is a promising alternative. Despite its potential benefits, sufficient clinical data about the post ERCP-pancreatitis rate and the hospital stay duration are lacking.

Methods A retrospective analysis was conducted at St. John of God Hospital including consecutive patients treated between 2023 and 2024. Complication rates and hospitalisation time were compared between patients undergoing intraoperative ERCP during cholecystectomy and those treated via a sequential ERCP and CHE approach. Statistical comparisons were performed using t- and chi-square test. The method of intervention was not randomized and subject of availability of both surgeons and endoscopists.

Results A total of 60 patients were included: 42 in the sequential ERCP + CHE group and 18 in the intraoperative ERCP group. 59.5 % of those within the se-

quential ERCP and CHE group, while 72.2 % of those within the rendezvous approach group were female. (p = 0.52). Mean age was 57.4 (SD 19.5) in the sequential group and 52.4 (SD 21.9) in the combined group (p = 0.41).

Post-ERCP pancreatitis occurred in 11.9 % (n = 5) of patients in the sequential group and less often in 5.6 % (n = 1) in the rendezvous approach group (OR 2.3), however did not reach statistical significance (p = 0.69). Notably, 31.0 % (n = 13) of patients in the sequential group required a repeat ERCP while awaiting cholecystectomy, compared to 1 in the rendezvous group. Patients in the sequential group stayed a mean of 12.4 days (SD 11.9), whereas those undergoing intraoperative ERCP stayed 7.56 days (SD 3.87; p = 0.021)

Conclusions Intraoperative ERCP during laparoscopic cholecystectomy was associated with a shorter hospital stay. In the sequential group, nearly one-third of patients required a repeat ERCP until the cholecystectomy was performed, the OR of post-ERCP pancreatitis was 2.3, but did not differ significantly between the two groups. This study can be used to power a randomised controlled trial.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP933 Advancing in ERCP: the Slim Duodenoscope as a cornerstone for challenging anatomies – Insights from an italian multicenter prospective study

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DOI 10.1055/s-0046-1822260

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is essential for managing biliary and pancreatic diseases, but its success can be hindered by gastrointestinal substenoses proximal to the papilla of Vater that a Standard Duodenoscope (STD) cannot traverse. This prospective study evaluates the efficacy and safety of the Slim Duodenoscope (SLD), a thinner device designed to overcome such anatomical limitations.

Methods Consecutive patients in whom papillary access with a STD had failed and who subsequently underwent ERCP with the SLD were prospectively enrolled at two Italian referral centers (October 2023–November 2025).

Results Forty-one ERCPs with the SLD were performed. Indications included obstructive jaundice (n = 38; 68.3 %), specifically 13 cases of choledocholithiasis and 15 biliary strictures (10 malignant, 3 indeterminate, and 2 benign); cholangitis (n = 9; 22.0 %), bile leak (n = 2; 4.9 %), and scheduled biliary stent removal (n = 2; 4.9 %). Among the 41 patients, strictures were located as follows: one at the hypopharynx in post-radiation therapy sequelae; seven in the esophagus (including 2 esophageal diverticula, 2 compressions from cervical osteophytes, 1 peptic stricture, 1 caustic stricture, and 1 post-parathyroidectomy stricture); one at the cardia due to achalasia; two in the stomach following sleeve gastrectomy with a sharply angulated gastric lumen; one at the pylorus caused by gastric adenocarcinoma; 2 in the duodenal bulb (1 peptic and 1 due to malignant infiltration); twenty-three at the superior duodenal flexure (comprising 16 malignant infiltrations, 5 peptic strictures, and 2 extrinsic compressions); and finally, four in the second portion of the duodenum, all resulting from malignant infiltration. The SLD successfully passed the stricture in 33 patients (80.5 %), enabling therapeutic success in 29 (87.9 %). Failure occurred in 8 cases (19.5 %), due to 7 malignant and 1 benign stricture. Among benign strictures, passage success reached 95 %. Two ERCP-related complications (4.9 %), not directly attributable to the use of the SLD, were reported: cholangitis and septic shock (► Table 1).

► Table 1

STRICTURES	
Hypopharynx	1
Esophagus	7
Cardias	1
Stomach	2
Pylorus	1
Bulb	2
Superior Duodenal Flexure	23
Second duodenal portion	4

Conclusions The SLD is a game-changer for patients with luminal narrowing, providing access where STD fail. Its high success rate—especially in benign strictures—highlights the value of referring these patients to centers equipped with this device. By enabling ERCP in situations otherwise destined for percutaneous drainage, EUS-guided interventions, or surgery, the SLD expands therapeutic options and helps avoid more invasive alternatives.

Conflicts of Interest Ivo Boskoski is a consultant for Apollo Endosurgery, Boston Scientific, Nitinotes, Pentax, Cook Medical, Microtech, ERBE, Siemens, Myka labs and Endo Tools Therapeutics S.A., gives sponsored lectures for Apollo Endosurgery, Boston Scientific, Cook Medical and Microtech, is the recipient of research grants from Apollo Endosurgery, Endo Tool Therapeutics, and ERBE, and is on the scientific advisory boards of Nitinotes and Myka labs. Cristiano Spada is a consultant for Medtronic and AnX Robotics and has received speaker's fees from Olympus and Pentax. All others authors declare no conflicts of interest

eP934 Peroral Endoscopic Tumor Resection (POET) for an Exophytic Gastric Cardia GIST in an Elderly High-Risk Patient: A Case Report

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DOI 10.1055/s-0046-1822261

Background: Gastrointestinal stromal tumors (GISTs) possess inherent malignant potential [1], and management becomes particularly complex when lesions arise at the gastric cardia, where restricted endoscopic maneuverability and proximity to the esophagogastric junction impose significant technical limitations. Advances in third-space endoscopy have expanded therapeutic possibilities, allowing organ-preserving alternatives such as ESD, EFTR, STER, and POET for selected subepithelial tumors [3, 4]. The 2022 ESGE guideline endorses endoscopic resection as a feasible alternative to surgery for gastric GISTs ≤ 35 mm in appropriate candidates [2], highlighting the growing relevance of minimally invasive endoscopic approaches [5].

Case presentation: An 84-year-old man presented with epigastric discomfort. Endoscopy identified a subepithelial lesion at the gastric cardia. CT and EUS revealed a 3.9 × 3.0 cm hypoechoic mass originating from the muscularis propria with exophytic extension into the peritoneal cavity, consistent with a probable GIST. Given his age, elevated surgical risk, and preference for organ preservation, POET was selected following multidisciplinary evaluation.

Procedure: After submucosal injection, a 1.5–2 cm mucosal incision was created in the lower esophagus, and a submucosal tunnel was advanced toward the gastric cardia. The lateral and superior dissection planes were developed first, enabling stable visualization in this anatomically constrained region. The lesion demonstrated a prominent exophytic component with firm adhesions to the anterior abdominal wall and the inferior aspect of the left hepatic lobe,

which were carefully released under direct endoscopic control. Complete mobilization allowed en bloc retrieval through the tunnel. A controlled full-thickness defect created during resection was closed internally using endoclips along the lesser curvature at the corresponding projection, achieving secure closure and avoiding surgical conversion.

Outcome: Histopathology confirmed a 3.5 × 2.9 cm CD34-positive intermediate-risk GIST. Recovery was uneventful: oral intake resumed within 24 hours, and discharge occurred on postoperative day 3. At three-month follow-up, endoscopy demonstrated complete mucosal healing with no recurrence.

Conclusion: This case demonstrates the feasibility, safety, and organ-preserving value of POET for anatomically challenging gastric cardia GISTs in elderly or high-risk surgical patients. It underscores the expanding role of third-space endoscopy in providing curative minimally invasive therapy for upper gastrointestinal subepithelial tumors.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Du C, Linghu E. *Gastroenterol Res Pract.* 2019; 2019: 1–9
- [2] Xu MD, Cai MY, Zhou PH et al. *Gastrointest Endosc.* 2012; 75: 195–9
- [3] Inoue H, Ikeda H, Hosoya T et al. *Endoscopy.* 2012; 44: 225–30
- [4] Deprez PH, Moons LMG, O'Toole D et al. *Endoscopy.* 2022; 54: 412–29
- [5] Fletcher CDM, Berman JJ, Corless C et al. *Hum Pathol.* 2002; 33: 459–65

eP935 Endoscopic Ultrasound-guided Hepaticogastrostomy using dedicated stents: a systematic review with pooled analysis

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DOI 10.1055/s-0046-1822262

Aims EUS-guided hepaticogastrostomy (EUS-HGS) is one of the preferred rescue techniques for biliary drainage when ERCP fails or when the papilla is inaccessible due to altered anatomy or neoplastic invasion. Despite its proven technical feasibility and clinical effectiveness, several safety concerns have limited its widespread adoption even among expert centers. The primary fear relates to the potentially catastrophic consequences of stent misdeployment or migration, events that are often challenging to manage with either endoscopic or surgical interventions. To mitigate these risks, several dedicated stent designs incorporating anti-migratory features have been developed. However, evidence on their performance has so far been limited to individual studies.

Methods We conducted a comprehensive search of multiple electronic databases (PubMed/MEDLINE, Scopus, and EMBASE) and major conference proceedings from inception through July 2025. Technical outcomes included pooled rates of technical success and procedural time. Clinical outcomes included pooled clinical success, stent dysfunction, and adverse event rates, with particular focus on stent misdeployment and migration. Meta-analyses were performed using a random-effects model, and heterogeneity was assessed using the I² statistic.

Results We analyzed 18 studies (including 7 multicenter studies), 13 of which were conducted in Eastern countries, comprising a total of 595 patients who underwent EUS-guided HGS. The most frequently used dedicated stents were the Giobor stent (reported in 6 studies) and the Spring Stopper Stent (reported

in 3 studies). The pooled technical success rate of EUS-HGS was 99.1 % (95 % confidence interval [CI], 98.4–99.8 %; $I^2 = 0$ %), with a mean procedural time ranging from 16 to 50 minutes. The pooled clinical success rate was 94.8 % (95 % CI, 92.1–97.4 %; $I^2 = 55.3$ %). Among patients achieving clinical success, the 23.0 % (95 % CI, 15.4–30.7 %; $I^2 = 78.6$ %) experienced stent dysfunction. The pooled rate of adverse events following EUS-HGS was 9.9 % (95 % CI, 6.9–13.0 %; $I^2 = 32.5$ %), with the 1.1 % (95 % CI, 0.2–1.9 %; $I^2 = 0$ %) of them being severe. Most complications were infection-related, including cholangitis and intra-abdominal abscesses (3.4 %, 95 % CI 1.8–5.0 %; $I^2 = 10.7$ %). The pooled risk of stent misdeployment or migration was 0.8 % (95 % CI, 0.1–1.6 %; $I^2 = 0$ %).

Conclusions Performing EUS-HGS with dedicated stents is an effective option for these difficult-to-treat patients. Although the risk of adverse events remains clinically relevant and should be thoroughly discussed with patients before the procedure, the risk of the most feared complications—stent misdeployment and migration—appears to be substantially minimized with dedicated devices, translating into a lower likelihood of severe adverse events.

Conflicts of Interest A.R. has received fees for serving as a consultant from Fujifilm Co., Medtronic Co., and Boston Scientific. C.H. has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co. M.S. has received fees for serving as a consultant from Olympus Corp. and Boston Scientific.

eP936 Endoscopist Adenoma Detection Rate influences Post-Polypectomy Surveillance Strategy – Single Center Retrospective Study

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DOI 10.1055/s-0046-1822263

Aims To evaluate post-polypectomy surveillance practice in patients undergoing screening colonoscopy performed in the University of Szeged Gastroenterology Center between 2019 and 2022 furthermore, to examine its correlation with screening endoscopist adenoma detection rate [1].

Methods In this retrospective single center observational cohort study, data regarding factors determining post-polypectomy surveillance timing (such as polyp number and size, histology subtype, grade of dysplasia) was obtained from the local hospital medical information system. Optimal surveillance timing was defined in the European Society of Gastrointestinal Endoscopy (ESGE) 2020 guideline update. The seven screening endoscopists were divided into three subgroups based on their adenoma detection rate (ADR) measured during the screening program.

Results Overall, 733 colonoscopies were evaluated (index N = 607, 1st surveillance N = 97, 2nd surveillance N = 23, 3rd surveillance N = 5, 4th surveillance N = 1) with 35 to 80 months of follow-up period. Written recommendation regarding follow-up colonoscopy date was available in 306 cases (41.75 %), moreover surveillance time was predominantly defined after acquiring information about histology results (N = 254, 83.01 %). Recommendation rate was the highest among the >40 % ADR subgroup (56.95 %) with optimal advice for surveillance given after 27.09 % of colonoscopies. There was no significant difference between the subgroups in performing post-polypectomy surveillance colonoscopy with the optimal timing (<30 % ADR: 36.69 %, 30–40 % ADR: 33.82 %, >40 % ADR: 42.90 %). Either written recommendation or actual surveillance timing was adequate in 59.53 % of cases, moreover “no surveillance/

return to screening” strategy was used correctly in 88.24 % of patients. Endoscopists with <30 % ADR showed significantly lower adequacy for timing the follow-up colonoscopy (45.59 %). Compared with the ESGE guideline, a different date was advised for surveillance in 86 patients, and all endoscopists encouraged earlier follow-up predominantly (N = 65, 75.58 %).

Conclusions Choosing the adequate surveillance strategy after polypectomy is crucial to decrease the rate of interval colorectal cancer incidence, moreover, to reduce excess colonoscopy rate. Written recommendation regarding follow-up timing should be given either after colonoscopy, or when histology results are obtained, however the lack of advice given for surveillance in more than half of cases needs to be improved in the future. Endoscopists with higher ADR provided information about surveillance more frequently and more adequately. Post-polypectomy colonoscopy timing in practice demonstrated similar results in the ADR subgroups, yet endoscopists with >40 % ADR scheduled surveillance the best.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Hassan C, Antonelli G, Dumonceau JM, Regula J, Bretthauer M, Chaussade S, Dekker E, Ferlitsch M, Gimeno-Garcia A, Jover R, Kalager M, Pellisé M, Pox C, Ricciardiello L, Rutter M, Helsing LM, Bleijenberg A, Senore C, van Hooft JE, Dinis-Ribeiro M, Quintero E. Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2020. *Endoscopy*. 2020; 52 (8): 687–700. doi:10.1055/a-1185-3109 Epub 2020 Jun 22 PMID: 32572858

eP937V Magnetized overtube in Double-Balloon Enteroscopy: a case report

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DOI 10.1055/s-0046-1822264

Abstract Text

A patient with a recent ileocecal resection for ulcerations and substenosis—with histology showing aberrant lymphocytes but no definitive lymphoma—underwent antegrade double-balloon enteroscopy (DBE) to distinguish between intestinal lymphoma and refractory celiac disease. The examination revealed diffuse mucosal atrophy with scalloping, villous edema, and lymphangiectasia. In the distal jejunum/proximal ileum, a 10-cm circumferential ulcer with a necrotic base was identified, and targeted biopsies were obtained. To enhance scope stability and insertion depth, the overtube was magnetized to replicate the functionality of the recently CE-marked Endorail system. It utilizes a balloon filled with ferromagnetic fluid that is anchored to the patient's abdominal wall, allowing the scope to be guided along the device to overcome difficult bowel loops and achieve greater insertion depth [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/e8e0df4d-8830-4899-a6ca-d13746daddfa/Uploads/19978_Video_Project%2011.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] https://www.accessdata.fda.gov/cdrh_docs/pdf23/K232327.pdf
[2] ClinicalTrials.gov ID:NCT05626738

eP1000 ERCP in the octogenarians and nonagenarians: should we be doing them acutely?

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DOI 10.1055/s-0046-1822265

Aims ERCP remains a high-risk endoscopic procedure, and many studies have demonstrated its efficacy and safety in the elderly. However, few have assessed these parameters in an inpatient setting, and some data has shown a higher mortality rate, thereby suggesting the physiological insult combined with the risks of the procedure deem this intervention highly dangerous in this cohort. We therefore aimed to review our experience as a single tertiary centre, postulating that ERCP remains a safe procedure in this group, with a complication rate within acceptable limits as well as facilitating discharge from hospital, especially in cases with a palliative indication [1–3].

Methods The endoscopic database was searched from the dates 01/01/2022 to 24/11/2025 in a tertiary centre for all ERCP procedures. Records were filtered to exclude outpatient procedures and patients below the age of 80. Data was gathered regarding the age demographics, ASA grade, overall and post-procedure length of stay (LOS), indications and details of the procedures. A successful procedure was defined as having dealt with the acute indication to facilitate discharge from hospital. Any procedure-related complications were noted, alongside 30- and 90-day mortalities, and any re-admissions within 30 days.

Results 186 procedures were included. The median age was 85 (IQR 82–88), and the eldest patient was 99. 87% of patients were ASA grade 3 or 4. The indications were related to malignancy in 21.5%, and non-malignant in 78.5%; predominantly choledocholithiasis associated with jaundice, cholangitis or pancreatitis. 30% of procedures were Schutz complexity level 3 or 4. The aim of the procedure was successfully achieved in 87.6% (including biliary decompression with stenting where stones could not be completely removed). Median total LOS was 10.5 days (IQR 6–19.5), and median post-procedure LOS was 4 days (IQR 1–9). 7 patients (3.8%) experienced complications directly related to the procedure (3 episodes of cholangitis, 2 of pancreatitis, 1 of bleeding and 1 related to stent migration). This would even be consistent with British Society of Gastroenterology (BSG) guidance of a complication rate of <6% for Schutz level 1–2. All-cause mortality at 30 days was 6.5%, and at 90 days 12.4%, with published data reporting 2–5.3% in general populations. Readmission rate within 30 days for all indications was 16.1% (30 patients), though only 2 of these were due to complications of the procedure, and neither were fatal.

Conclusions The interaction of age and frailty with acute illness understandably provokes concern regarding the risks of ERCP. We identified no excess procedure-specific complication rate among our cohort. The 30- and 90-day mortality rates are acceptable given that 20% were performed for malignancy, and in fact suggest benefit in the context of palliation. The slight excess rate reported is likely to reflect a higher incidence of malignant pathology in the elderly. Reported literature has shown mortality rates exclusively in this group of up to 20%. Our results suggest that with careful peri-procedural decision-making, in-patient ERCP can be safely offered to this cohort.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ERCP – The Way Forward A Standards Framework – British Society of Gastroenterology ERCP Working Party
- [2] All-cause mortality after first ERCP in England: clinically guided analysis of hospital episode statistics with linkage to registry of death Keith Bodger, MBChB(Hons), MD1,2,3 · Katherine Bowering, MBChB1,2 · Sanchoy Sarkar, MBChB, PhD1 · Elizabeth Thompson1 · Michael G. Pearson, MA, MBChB1

[3] Endoscopic retrograde cholangiopancreatography in octogenarians: A population-based study using the nationwide inpatient sample Clancy J Clark 1, Adam Coe 2, Nora F Fino 3, Rishi Pawa 2

eP1001 Survival analysis in patients undergoing percutaneous endoscopic gastrostomy (peg): experience from a tertiary care center (2015–2025)

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DOI 10.1055/s-0046-1822266

Aims To analyze the survival of patients undergoing PEG in a tertiary care center. to perform a specific sub-analysis of those patients with a survival of 60 days or less

Methods Retrospective observational study of patients undergoing PEG between January 2015 and June 2025. Demographic, clinical, and endoscopic variables were collected. Subgroup analysis was performed for survival, indications, and mortality at 30 and 60 days [1].

Results A total of n = 322 patients were included (mean age: 61 years; 75.8% male). Mean survival was 419 days (median: 164; range: 1–2662). A total of 9.9% died within the first 30 days and 14.6% within the first 60 days after PEG. Main indications in the group with survival ≤ 30 days were: neoplasia (40.6%), anoxic encephalopathy (18.8%), traumatic brain injury (15.6%), and ALS (9.4%). Causes of death: tumor progression (21.9%), severe encephalopathy (21.9%), respiratory failure (18.8%), hemoptysis (9.4%), and sepsis (9.4%). In 90.6% of cases, death was not related to the procedure; 6.2% were probably related, and 3.1% directly related (1 colonic perforation).

A total of 149 PEG requests were cancelled: medical contraindication (36.2%), referral to primary care (28.2%), prior death (24.2%), and voluntary decision (10.7%).

CAD patients (n = 56, 17.0%) showed significantly lower survival (mean 151 days; median 49) vs HCC patients (n = 89, 27.0%) (p = 0.010). This difference did not remain in the subgroup with ≤ 90-day survival (p = 0.73).

Conclusions • A substantial proportion of patients die within the first 30 and 60 days after PEG. • The indication should consider complexity profile (HCC/CAD) and expected nutritional benefit. • A rigorous and multidisciplinary patient selection is required when indicating PEG, especially in contexts of high clinical frailty.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kohli DR et al. Comparative outcomes of endoscopic and radiological gastrostomy tube placement: a systematic review and meta-analysis with GRADE analysis (Ann Gastroenterol. 2022;

eP1002 Amebic Superinfection Triggering Budd–Chiari Syndrome in Polycystic Liver Disease: An Exceptional Association

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DOI 10.1055/s-0046-1822267

Introduction: Polycystic liver disease is a benign condition that may be complicated by cyst superinfection or vascular and biliary compression. The occurrence of Budd–Chiari syndrome (BCS) secondary to an amebic superinfection of a hepatic cyst is exceptionally rare and requires multidisciplinary management [1, 2].

Case Report: We report the case of a 65-year-old man, followed since 2012 for polycystic liver disease, with two large cysts measuring 6 cm (segment IV) and 14 cm (segment III). He presented with cyst superinfection revealed by a clinical and biological cholestasis syndrome in a febrile context, following a recent episode of foodborne illness. Hepatic Doppler ultrasound, angio-CT, and liver MRI demonstrated BCS caused by compression of the hepatic veins by two large infected cystic formations. The patient received intravenous antibiotics and underwent radiological drainage, yielding a "chocolate-colored" fluid highly suggestive of amebic infection, later confirmed by strongly positive ELISA serology. Follow-up imaging one month after drainage showed a 70% reduction of the segment VIII cyst but persistence of the left-lobe cyst, prompting a second drainage. A subsequent evaluation one month later showed significant collapse of both cysts and complete relief of the compression on the right hepatic vein and IVC, indicating successful management.

Conclusion: This case highlights a rare and complex complication of polycystic liver disease: amebic superinfection leading to Budd–Chiari syndrome. It underscores the importance of regular clinical and radiological monitoring to detect early warning signs and ensure timely, multidisciplinary intervention to optimize patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bhupalan A, Talbot K, Forbes A, Owen M, Samson D, Murray-Lyon IM. Budd–Chiari syndrome in association with polycystic disease of the liver and kidneys. *JR Soc Med.* 1992; 85 (5): 296–7. doi:10.1177/014107689208500519 PMID: 1433097 PMID: PMC1294612
- [2] de Menezes Neves PDM, Balbo BEP, Watanabe EH, Rocha-Santos V, Andraus W, D'Albuquerque LAC, Onuchic LF. Functional Budd–Chiari Syndrome Associated With Severe Polycystic Liver Disease. *Clin Med Insights Gastroenterol.* 2017; 7: 10:1179552217713003. doi:10.1177/1179552217713003 PMID: 28611533 PMID: PMC5466357

eP1003 Outpatient Endoscopic Diverticulotomy is safe for management of Zenker's Diverticulum

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DOI 10.1055/s-0046-1822268

Aims Evaluate the Safety and Efficacy of Outpatient Endoscopic Diverticulotomy

Methods All patients who had an endoscopic Diverticulotomy over an 8-year period were included. Retrospective chart review was conducted to obtain patient demographic and procedural and post-procedural management data. Any complications during and after the procedure were included.

Results 38 patients were included with 46 endoscopic diverticulotomies performed. 24 patients (63.2%) were male, and median age was 78.5 (range 51 to 103) at the time of procedure. Majority of patients (73.7%) had a Charlson Comorbidity score of 3 or higher. Only 1 patient was an active smoker, and none had excessive alcohol use history. Dysphagia, regurgitation, and heart burn were most common symptoms present at the time of referral (91.3%, 71.7%, and 58.7%, respectively). 10 (21.7%) had previous interventions for ZD – 8 of which were with endoscopic diverticulotomy. 12 procedures (26.1%) were performed under conscious sedation and 34 (73.9%) under general anesthetic. 5 patients (10.9%) had intra-procedural bleeding, which did not require transfusions. 3 patients (6.8%) developed subcutaneous emphysema within 2 hours post-procedure and were managed conservatively without further endoscopic or surgical intervention. 33 patients (71.7%) were discharged on the same day of procedure, with an additional 6 (13.0%) discharged within 2 days post-procedure. Median follow-up was 74 days (range 0–2472 days).

Conclusions Endoscopic diverticulotomy is a safe procedure for the management of Zenker's Diverticula. Patients with immediate complications, including intra-procedural bleeding or presence of subcutaneous emphysema within 2 hours post-procedure, were associated with hospital stay longer than 1 day. None of the patients developed late complications or required readmission

within 30 days of discharge. Therefore, outpatient ZD management is effective in both patient management and resource allocation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1004 Pre-Transplant ERCP with Sphincterotomy Does Not Influence Biliary Outcomes After Liver Transplantation

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DOI 10.1055/s-0046-1822269

Aims Endoscopic retrograde cholangiopancreatography (ERCP) with biliary sphincterotomy is frequently used to manage biliary obstruction in patients with advanced liver disease. Its impact on post-orthotopic liver transplantation (OLT) biliary outcomes, however, remains unclear. This study evaluates whether ERCP performed before OLT influences the incidence, type, or severity of biliary complications after transplantation.

Methods A retrospective analysis was conducted on 1128 OLT recipients, including 82 re-transplants, from January 2012 to December 2023. Seventy patients (6.2%) underwent pre-OLT ERCP with sphincterotomy (118 ERCPs total). Biliary complications occurring early (<30 days) or delayed (>30 days) post-OLT were compared between patients with and without pre-OLT ERCP. Outcomes included complication rates, need for endoscopic, radiologic, or surgical interventions, and post-complication mortality.

Results Pre-OLT ERCP indications included biliary strictures (n = 35), stones (n = 24), bile leak (n = 3), and other causes (n = 8). Stents were placed in 33/70 patients. Pre-procedure adverse events occurred in 9 ERCPs (7.6%). After OLT, 199 biliary complications occurred in 197 patients (17.5%). Complication rates did not differ between patients with (17.1%) and without (17.6%) pre-OLT ERCP (p = 0.91), showing no significant association between pre-OLT ERCP with sphincterotomy and overall post-OLT biliary complications, nor for early events or delayed events.

Among the 199 complications, treatment included ERCP (n = 134), percutaneous drainage (n = 20), surgery (n = 29), or conservative management (n = 16). ERCP-related adverse events occurred in 23/134 procedures.

Post-OLT mortality, during an average follow-up of 60.3 months, similar between patients with and without biliary complications (17.3% vs. 19.2%).

Conclusions In this large cohort of OLT recipients, pre-transplant ERCP with sphincterotomy did not affect the risk of early or late post-OLT biliary complications. Rates of strictures, leaks, and biliary stones were comparable to those in patients without pre-OLT ERCP. These findings suggest that ERCP with sphincterotomy, when clinically indicated before transplantation, is safe and does not adversely influence post-transplant biliary outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1005 Epidemiological Profile of Upper Gastrointestinal Bleeding in Patients With Chronic Kidney Disease

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DOI 10.1055/s-0046-1822270

Aims Patients with chronic kidney disease (CKD) are at increased risk of gastrointestinal complications, including hemorrhage, which can be life-threatening. The aim of this study was to evaluate the epidemiological characteristics and lesion profile of upper gastrointestinal bleeding (UGIB) in patients with CKD.

Objective To describe the epidemiological, clinical, endoscopic, and outcome characteristics of upper gastrointestinal bleeding in patients with chronic kidney disease.

Methods We conducted a single-center, prospective, descriptive study including all CKD patients admitted with upper gastrointestinal bleeding to the Emergency Department of Bab El Oued University Hospital between January 2023 and August 2025. All patients underwent upper gastrointestinal endoscopy [1, 2].

For each patient, demographic data, type of bleeding presentation, hemodynamic status, laboratory findings, Glasgow-Blatchford score, endoscopic findings, management, and clinical outcomes were recorded.

Data entry and analysis were performed using SPSS version 23.0.

Results Among 281 patients admitted for UGIB, 49 had chronic kidney disease (17%). The mean age was 69 ± 14 years, with a sex ratio of 1.04.

Past medical history included portal hypertension (7.5%), ischemic heart disease (42.9%), heart failure (30.6%), and diabetes (44.9%).

Anticoagulants were used by 36.8% of patients and antiplatelet agents by 28.6%. Melena was the most common presenting symptom (57.1%), followed by hematemesis (34.7%) and massive hematochezia (8.2%). The mean Glasgow-Blatchford score was 13.4 ± 3.24 .

Endoscopy showed recent signs of bleeding in 41.5% of cases. The etiologies of UGIB were as follows:

Gastroduodenal ulcers: 40%

Ulcerated esophagitis: 17.5%

Erosive gastritis: 7.5%

Angiodysplasia: 7.5%

Variceal bleeding: 9.5%

Neoplasia: 7.5%

No upper gastrointestinal cause was identified in 18.4% of patients. A colonoscopy was performed in 16.3% and revealed colonic angiodysplasia in 12.2%. Blood transfusion was required in 75.5% of cases. Endoscopic therapy was performed in 18.4%: 14.3% received argon plasma coagulation, 7.1% underwent variceal ligation, and 2.4% received gastric variceal glue injection. Surgery was required in 2.4% of patients. Rebleeding occurred in 4.8%, and in-hospital mortality was 2.4%.

Conclusions In our series, upper gastrointestinal bleeding in CKD patients predominantly affected elderly individuals. Gastroduodenal ulcers and digestive angiodysplasia were the most common etiologies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kuo CC et al. Risk of upper gastrointestinal bleeding in hemodialysis patients: a population-based cohort study. *BMC Nephrol* 2013; 14: 15
- [2] Noto-Kadou-Kaza B. et al. Epidemiological and lesion profile of gastrointestinal bleeding in chronic kidney disease. *Nephrol Ther* 2015; 11 (5): 308

eP1006 Palliative biliary stenting in pancreatobiliary malignancy: Does it still make a difference?

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DOI 10.1055/s-0046-1822271

Aims The European Society of Gastrointestinal Endoscopy (ESGE) recommend palliative stenting for patients with malignant distal biliary obstruction who are not candidates for oncologic treatment [1]. The impact on survival and resolution of jaundice in this palliative population is scarce [2]. The available techniques include Endoscopic Retrograde Cholangiopancreatography (ERCP),

Endoscopic Ultrasound (EUS)- guided drainage, and percutaneous drainage. We aimed to assess the clinical outcomes of palliative biliary stenting in our cohort of patients with incurable distal biliary malignant obstruction.

Methods We retrospectively analysed patients with distal malignant biliary obstruction between January 2023 and December 2024 who were unfit for surgery or oncologic therapy and presented with jaundice. Data collected included demographics, comorbidities, tumour characteristics, serology, pre- and post-drainage symptoms, and drainage technique. Complications within 30 days (post-ERCP pancreatitis (PEP), cholangitis, upper gastrointestinal bleed (UGIB), perforation) were recorded.

The primary endpoint was survival (weeks) comparing drained patients to those receiving best supportive care only. Secondary endpoints were ERCP technical and clinical success, need for additional procedures, complication rates, and independent predictors of mortality. Categorical and continuous variables were compared with Chi-square/Fisher and Mann-Whitney/Wilcoxon tests. Survival used Kaplan-Meier and Cox regression; $p < 0.05$.

Results The final sample included 56 patients (33 females, 58.9%) with a median age of 81 years (range 46–94). Most had moderate comorbidity: 39 (66.6%) were ASA (American Society of Anaesthesiologists) 1–2, and 17 (30.4%) were ASA 3. Performance status was 1–2 in 39 patients (69.6%) and 3 in 17 (30.4%). Regarding TNM stage at diagnosis, 15 patients (26.9%) were stage 0–I, 14 (25%) stage III, and 24 (42.9%) stage IV.

Overall, biliary drainage (BD) was successful in 42 patients (75%). ERCP was attempted in 46 (82.1%) and was successful in 40 (86.9%), with three requiring up to three sessions. Two underwent alternative techniques after failed ERCP (one EUS-guided, one percutaneous). Complications occurred in 7 patients (12.5%): 1 PEP, 5 cholangitis, and 1 UGIB. The 30-day mortality in the drainage group was 23.8% (10 patients). There was no association with a complication. All had advanced TNM stage, which was statistically significant ($p = 0.016$).

Drainage significantly relieved symptoms: jaundice decreased from 97.6% to 33.3% ($p = 0.001$), pruritus from 40.5% to 9.5% ($p < 0.001$), and dyspepsia from 69% to 42.9% ($p = 0.021$), while pain remained unchanged (64.3%, $p = 1.000$). Bilirubin levels decreased significantly overall and when stratified by tumour stage (Median 212 vs 55, $p = 0.001$).

Patients without BD were older than those with BD ($p = 0.04$). Early TNM stage patients (0–2) were more frequently drained (93%) than advanced stage (3–4; 68%), showing a trend toward access to drainage in early disease ($p = 0.058$). No other differences in gender, comorbidities, serologic markers, or performance status were observed.

Overall, the median survival was 11 weeks (range 0–56). Patients with successful BD had higher median survival (14 vs 7 weeks) without reaching statistical significance ($p = 0.370$). Survival was significantly longer in early TNM stages (0–2) compared to advanced TNM (3–4) (median 28 vs 6 weeks, $p = 0.008$). In multivariate analysis, advanced TNM stage was the only independent predictor of shorter survival in the overall cohort ($HR = 3.17$, $p = 0.011$) and drainage group ($HR = 2.80$, $p = 0.029$). The development of complications trended toward worse survival, but this difference was not statistically significant. Higher CA 19-9 levels predicted shorter survival in univariate analysis, but were excluded from multivariate models due to missing data.

Conclusions Although BD showed a trend toward longer survival, this benefit was minimal in patients with advanced-stage disease, who accounted for most early mortality post-procedure. Overall, disease stage—not drainage—was the main predictor of survival, and patients with advanced disease are unlikely to gain meaningful benefit from the BD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tavakkoli A, Elmunzer BJ, Waljee AK, Murphy CC, Pruitt SL, Zhu H, Rong R, Kwon RS, Scheiman JM, Rubenstein JH, Singal AG. Survival analysis among unresectable pancreatic adenocarcinoma patients undergoing endoscopic or percutaneous interventions. *Gastrointest Endosc* 2021; 93 (1): 154–162.e5
- [2] Dumonceau JM, Tringali A, Papanikolaou IS, Blero D, Mangiavillano B, Schmidt A, Vanbiervliet G, Costamagna G, Devière J, García-Cano J, Gyököres

T, Hassan C, Prat F, Siersema PD, van Hooft JE. Endoscopic biliary stenting: indications, choice of stents, and results: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline – Updated October 2017. *Endoscopy*. 2018; 50 (9): 910–930

eP1007 EUS-guided fine-needle biopsy of solid pancreatic lesions: technical success and diagnostic accuracy in a single-center cohort

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DOI 10.1055/s-0046-1822272

Aims Pancreatic cancer represents a growing global health burden, making early and reliable diagnosis crucial. Solid pancreatic lesions require histological sampling to confirm diagnosis and guide treatment. Endoscopic ultrasound-guided fine needle biopsy (EUS-FNB) is now essential for this purpose.

We aimed to evaluate the technical success, histological yield, and diagnostic performance of EUS-FNB for solid pancreatic masses in a single tertiary center.

Methods We conducted a retrospective study of all patients who underwent EUS-FNB for suspected solid pancreatic lesions between 2018 and 2025. Cystic lesions and chronic pancreatitis were excluded. Malignancy was defined by histological identification of malignant cells (EUS-FNB or surgical specimens) or clinico-radiological follow-up demonstrating tumor progression and/or metastases. Technical failure was defined as obtaining insufficient sample or other normal tissue.

Results Overall, 380 patients were included (236 men, 144 women; mean age 62.8 years [29–88]). Mean lesion size was 34.2 mm [6–88]. Lesions were located in the pancreatic head (67.9%), uncinate process (11.8%), body (11.7%), neck (6.4%), and tail (2.2%). Vascular contact and frank invasion were observed in 55% and 11.8% respectively. The approach was predominantly transduodenal, with transgastric approach in 24 patients (6.3%). A 22-gauge needle was used in nearly all procedures.

Technical success was achieved in 367/380 cases (96.6%) and significantly correlated with lesion size ($p = 0.02$). Malignancy was confirmed in 353 patients (93%). Pancreatic adenocarcinoma accounted for 92% of malignant tumors, predominantly ductal subtype (88%). Signet-ring cell and mucinous components were identified in 17% and 4.6% respectively. Other malignancies included 16 pancreatic neuroendocrine tumors (4.2%), two mucinous cystadenocarcinomas, two undifferentiated carcinomas, one sarcomatoid carcinoma, one solid pseudopapillary neoplasm, one degenerated intraductal papillary mucinous neoplasm, and ten pancreatic metastases from other primary sites. Thirteen lesions (3.4%) represented mass-forming chronic pancreatitis.

EUS-FNB demonstrated excellent diagnostic performance: sensitivity 97% (95% CI 94.6–98.5), positive predictive value 99.3%, and diagnostic accuracy 96.6% (95% CI 94.2–98.2). Second biopsy was performed in 6 patients (1.6%), yielding neoplasia in 5 cases (four adenocarcinomas, one neuroendocrine tumor) and one benign lesion, with cumulated sensitivity and accuracy remaining essentially unchanged. A single hemorrhagic complication (0.3%) occurred in a patient on antiplatelet therapy.

Conclusions EUS-FNB demonstrates excellent technical success (96.6%) and diagnostic accuracy (96.6%) for solid pancreatic lesions in routine practice. It provides high-quality histological cores with minimal needle passes and a low complication rate.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1008 Pancreatic metastases from extra-pancreatic solid tumors: diagnostic contribution of endoscopic ultrasound in a single-center series

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DOI 10.1055/s-0046-1822273

Aims Pancreatic metastases from extra-pancreatic solid tumors are rare, accounting for approximately 3–15% of solid pancreatic masses in the absence of other detectable distant metastases. The pancreas is an uncommon metastatic site for renal cell carcinoma, breast and lung cancers, melanoma, colorectal cancer, sarcomas and gastrointestinal stromal tumors. These secondary lesions are often incidentally discovered during oncologic follow-up or may mimic primary pancreatic ductal adenocarcinoma. Endoscopic ultrasound (EUS) plays a key role in their detection and characterization. We aimed to evaluate the prevalence and characteristics of pancreatic metastases diagnosed by EUS in our center.

Methods We conducted a retrospective single-center study including all consecutive patients who underwent pancreatic EUS with tissue acquisition between 2018 and 2025. The diagnosis of pancreatic metastasis was based on histological examination of EUS-guided biopsy samples, complemented by immunohistochemical staining. Diagnostic criteria relied on correlation of morphological and immunohistochemical findings with the patient's oncologic history and cross-sectional imaging. Lesions were classified according to primary tumor origin, pancreatic location and histological features.

Results Among 380 patients who underwent pancreatic EUS with biopsy (236 men, 144 women; male-to-female ratio 1.63; mean age 62 years [29–88]), ten pancreatic metastases were identified, corresponding to a prevalence of 2.6%. Primary tumors were: four clear cell renal cell carcinomas (36%), two small-cell lung cancers (18%), one colonic adenocarcinoma (9%), one breast carcinoma (9%), one gastric stromal tumor recurring in the pancreas (9%) and one shoulder chondrosarcoma recurring in the pancreas (9%). Pancreatic involvement was located in the head/uncinate process in six cases (60%), the body in three (30%) and the tail in one (10%). Lesions were solitary in eight patients (80%) and multiple in two (20%). Immunohistochemistry was systematic and decisive, showing PAX8 expression in renal metastases and GATA3 in breast cancer metastasis, thereby excluding a primary pancreatic ductal adenocarcinoma.

Conclusions In our series, pancreatic metastases accounted for 2.6% of solid pancreatic masses. EUS with guided tissue acquisition represents the reference diagnostic tool, allowing precise histological and immunohistochemical characterization. Pancreatic metastases should be systematically considered in any pancreatic mass occurring in patients with a history of malignancy, even remote, as prognosis and management differ fundamentally from primary pancreatic ductal adenocarcinoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1009 Cholangioscopy-guided intraductal electrohydraulic and laser lithotripsy for complex common bile duct stones: a single-center experience

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DOI 10.1055/s-0046-1822274

Aims Common bile duct stones complicate 10–20% of gallstone disease. Endoscopic retrograde cholangiopancreatography (ERCP) with sphincterotomy and balloon or basket extraction is standard treatment, but 10–15% of stones resist conventional techniques. In such cases, cholangioscopy-guided intraductal laser lithotripsy (LL) or electrohydraulic lithotripsy (EHL) achieves high success rates with low morbidity. We aimed to evaluate the efficacy and safety

of cholangioscopy-guided LL and EHL for complex common bile duct stones in our center.

Methods We conducted a retrospective single-center study from January 2023 to October 2025, including patients with complex bile duct stones defined by failed conventional ERCP extraction. Complexity criteria included stone > 15 mm, multiple stones, impacted stones, hard consistency, "packed" choledocholithiasis, or difficult location (intrahepatic or cystic duct). The primary endpoint was complete bile duct clearance, analyzed per patient and per procedure. Proportions were reported with 95 % confidence intervals (Clopper–Pearson method), with comparisons using Fisher's exact test.

Results Twenty patients (10 men, 10 women; mean age 57 years [16–85]) underwent 22 procedures (19 LL, 3 EHL). Stone complexity related to size in 16 patients (mean 18.1 mm [15–40]), multiplicity (n = 12), impaction (n = 5), hard consistency (n = 1), or difficult location (n = 6). Packed stones were present in the common bile duct in 7 cases and cystic duct stump in 2 cases.

Complete duct clearance was achieved in 12/20 patients (60 %, 95 % CI 38–80) and 12/22 procedures (54.5 %, 95 % CI 34–74). Eleven patients were successfully treated in a single session and one after three sessions. Ten patients had unsuccessful LL/EHL. Three failures were technical: one referred for surgery, one ultimately cleared after three sessions, and one failed probe advancement due to duodenal diverticulum (not reattempted). In two patients, extraction was impossible: one persistent large stone awaiting second session and one suspicious papilla case (macrodilatation not performed, papillary biopsies revealing ductal adenocarcinoma, referred for surgery). Five additional patients had difficult extraction; all were scheduled for second sessions, but two were lost to follow-up.

The procedure demonstrated excellent safety with only one minor adverse event (self-limited mild bleeding), representing 1/22 procedures (4.5 %). Mean hospital stay was 1.3 days [1–3]. No significant association was found between extraction failure and sex (p = 1), stone size > 15 mm (p = 0.5), multiplicity (p = 0.6), impaction (p = 0.4), difficult location (p = 0.5), packed choledocholithiasis (p = 0.13), or cystic stump stones (p = 1).

Conclusions Cholangioscopy-guided intraductal EHL and LL is an effective and safe option for complex common bile duct stones. In this first Tunisian series, we observed 60 % patient success rate with minimal morbidity. This technique represents a valuable alternative in high-risk surgical candidates and elderly, comorbid patients, reducing the need for surgery and repeated ERCP with prolonged biliary stenting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1010 Successful Retrieval of BRTO Coils from Pulmonary Circulation – Successful Management of A Rare Complication

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DOI 10.1055/s-0046-1822275

Introduction: Balloon-occluded retrograde transvenous obliteration (BRTO) is used in the treatment of gastric varices because of its effectiveness as a curative procedure, and its role in both emergency and prophylactic settings. It is of utmost importance that the treating physicians are aware of potential procedure-related complications including fever, chest or epigastric pain, hemoglobinuria, and transient hypertension among others. We present an unusual post-procedure complication resulting in coil migration, which was promptly recognized and successfully treated [1].

Case Report: A 59-year-old gentleman with a history of alcohol-related chronic liver disease (Child A6) was seen in our clinic for further management. The patient was found to have fundal varices (IGV-1) at screening endoscopy, and he denied any history of liver decompensation or GI bleeding. MRI abdomen

was performed on the patient and showed changes of chronic liver disease in hepatic parenchyma and gastro-renal collaterals with gastric fundal varices. The main portal, splenic, and hepatic veins were attenuated but appear patent. After discussing with the patient, he was referred to interventional radiology (IR) for Balloon occluded and coil-assisted Retrograde Transvenous Obliteration (BRTO). CT angiogram was performed for the patient and showed Gastric varices with a prominent reno-gastric shunt measuring 15 mm in maximum diameter, having a tortuous course along with the lesser of the stomach and coursing down to join the splenic vein. The patient underwent IR guided BRTO procedure by injecting the mixture of sodium tetradecyl sulfate, Lipiodol, and air into the shunt and varix. After occlusion of the varix was confirmed by CT scan, Interlock coils were used to occlude the shunt. Six hours post-procedure, the patient started having left-sided pleuritic chest pain and tachycardia but no desaturation. XR chest showed migration of the coils seen overlying the heart shadow. Urgent CT chest showed a Migrated coil in the distal left main pulmonary artery, extending into the left lower lobe pulmonary artery. Successful retrieval of the coils was done using intraluminal biliary biopsy forceps (COOK medical), 7 F x 60 cm, to grasp the part of the coil WITHIN the sheath not reaching the pulmonary artery with the forceps. Post-retrieval Angiogram showed good opacification of the left inferior pulmonary artery with no filling defects. On day three, the patient was discharged from the hospital without further complications and had an uneventful follow-up.

Conclusion: BRTO remains a useful option for both emergency and prophylactic treatment of gastric varices. Patients need post-procedure monitoring, and prompt recognition of potential complications can result in timely institution of treatment and favorable outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pusateri AJ, Makary MS, Mumtaz K. Migration of Gastric Varix Coil After Balloon-Occluded Antegrade Transvenous Obliteration. ACG Case Rep J. 2020; 7 (10): e00472. doi:10.14309/crj.0000000000000472 PMID: 33134404 PMID: PMC7591116

eP1011V Real-Time Artificial Intelligence enhanced Cholangioscopy

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Abstract Text

A 90-year-old woman with an indeterminate hilar biliary stricture presented with jaundice, weight loss, and abdominal pain. MRCP showed irregular intrahepatic and common hepatic duct dilation suggesting Bismuth type IV stricture. AI-enhanced cholangioscopy enabled live estimation of neoplastic probability also identifying aberrant vessels supporting malignancy. Dynamic probability shifts helped define tumor extent, while overlapping heat maps suggested optimal biopsy sites. Targeted biopsies confirmed cholangiocarcinoma. When validated, AI may aid in differentiating biliary stenosis, defining tumor extent, and improving biopsy accuracy.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/87862110-edb2-4d09-91c7-532c6a11aaf4/Uploads/19978_video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1012 Endoscopic drainage of pancreatic pseudocysts: experience of a tertiary center

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Aims Pancreatic pseudocysts and walled-off necrosis are late pancreatic fluid collections that may complicate acute or chronic pancreatitis or pancreatic trauma. Endoscopic drainage has taken over as the reference technique due to its minimally invasive nature and high success rates reported in international studies.

The objective of our study was to evaluate the technical, clinical and radiological outcomes of endoscopic drainage of pancreatic pseudocysts in a tertiary center.

Methods We conducted a retrospective monocentric study at our endoscopy unit including patients who underwent endoscopic drainage of pancreatic pseudocysts between 2017 and 2024. Epidemiological, clinical, endoscopic, radiological data and follow-up outcomes were collected.

Results In total, 58 patients were enrolled with a mean age of 47 years [range 9–73] and a male predominance (sex ratio M/F = 1.5). Most pseudocysts were secondary to acute pancreatitis in 86% of cases (N = 50), followed by chronic pancreatitis in 10% (N = 6). The average size of the cysts was 92 mm [20–170]. These pseudocysts were mostly single in 79% (N = 46). Endoscopic ultrasound guided drainage was performed in 45% of cases (N = 26), while classical or cystostomy assisted techniques were used in the remainder. Plastic double pig-tail stents were placed in 65% of patients (N = 38) and lumen apposing metal stents in 15% (N = 9). Technical success was achieved in 94% (N = 47), clinical success in 80% (N = 40) and radiological success in 77.5% (N = 31). A moderate positive correlation was found between clinical and radiological success (Pearson $r = 0.50$, $p = 0.002$). Complications occurred in 6% of patients (N = 3), limited to minor events such as stent migration, secondary infection or minor intrakystic bleeding, with no severe adverse outcomes.

Conclusions Endoscopic drainage of pancreatic pseudocysts achieved high success rates in our cohort, comparable to international data. Endoscopic ultrasound guidance and dedicated stents improved safety and efficacy, and careful patient selection remains essential to minimize complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1013 Sleep tight, prep right and chill out: adequate boston bowel preparation among patients without sleep disruptions

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Aims Restlessness and poor sleep quality are common complaints among patients undergoing bowel preparation for colonoscopy. However, their effect on preparation quality is not well defined. Our aim was to evaluate which sleep variables are associated with an adequate bowel preparation. Adequate preparation was defined as a score of 6 or higher on the Boston Bowel Preparation scale.

Methods A multicenter, cross-sectional study was conducted in adult patients with an indication for colonoscopy. Bowel preparation was performed with a complete dose of polyethylene glycol (PEG). Face-to-face questionnaires were applied using dichotomous questions. Variables evaluated included falling asleep, trouble staying asleep, waking up during the night, sleeping more than 7 hours, and waking up restless. Those who showed no disturbances across all variables were defined as having good sleep quality. A multivariate logistic

regression analysis was performed to identify predictors related to good sleep quality and adequate bowel preparation (Boston ≥ 6).

Results A total of 316 patients were included: 195 female (61.7%), age 50 ± 14 . Adequate bowel preparation was in 140 (47.78%), and good sleep quality was in 32 (10.92%). In the logistic regression analysis, the only variable associated with adequate bowel preparation (Boston ≥ 6) was not having difficulty staying asleep (OR = 1.771; 95% CI: 1.125–2.787; $p = 0.013$) while in the multivariate analysis showed that those having difficulty maintaining sleep were significantly associated with having a junior-high education (OR = 3.395; 95% CI: 1.045–11.024; $p = 0.042$), and those patients who consumed cold PEG were more likely to report good sleep quality (OR = 0.593; 95% CI: 0.375–0.938; $p = 0.025$).

Conclusions Sleep quality appears to play an important role in achieving adequate bowel preparation, possibly reflecting how closely patients follow instructions. Our findings show that the absence of nighttime awakenings—particularly difficulty staying asleep—is associated with better preparation quality. Notably, consuming the PEG solution cold was positively associated with sleep quality across all evaluated domains, suggesting a simple, practical opportunity for future preparation recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1014 Who sleeps best? Evaluating patient characteristics linked to superior pre-colonoscopy sleep

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Aims Assess the characteristics of patients who experience pleasant sleep during preparation for a colonoscopy

Methods A multicenter, cross-sectional study was conducted in adult patients with an indication for colonoscopy. Face-to-face questionnaires used dichotomous (yes/no) questions to assess five specific variables of sleep quality during preparation: (1) whether the patient fell asleep easily, (2) trouble staying asleep, (3) avoidance of nighttime bathroom visits, (4) more than 7 hours of sleep, and (5) waking up feeling rested. Patients who reported no disturbances in any of these five variables were defined as having good sleep quality. Also, the Hospital Anxiety and Depression (HAD) Scale was administered. A multivariate logistic regression analysis was performed to identify characteristics of patients with good sleep quality [1].

Results Of 316 patients, 195 were female (61.7%). The average age was 50 ± 14 years. Pleasant sleep, meeting all five assessed variables, was reported by 32 patients (10.13%).

Patients more likely to sleep over 7 hours included those younger than 50 years old (OR = 1.923, CI = 1.196–3.091, $p = 0.007$), alcohol consumption (OR = 3.165, CI = 1.013–9.888, $p = 0.044$), and hemorrhoidal disease (OR = 1.687, CI = 0.999–2.851, $p = 0.049$). However, those who were over 50 years of age (OR = 0.542, CI = 0.346–0.850, $p = 0.007$), consumed NSAIDs (OR = 0.394, CI = 0.162–0.956, $p = 0.034$), were constipated (OR = 0.468, CI = 0.292–0.750, $p = 0.001$), or had anxiety per HAD (OR = 0.233, CI = 0.049–1.097, $p = 0.047$) were less likely to sleep over 7 hours. Difficulty waking up rested was more common in patients with elementary education, constipation, Bristol stool scores of 1–2, and use of specific PEG solutions. Those who woke up feeling rested had a diagnosis of hypothyroidism and were taking levothyroxine. In the multivariate analysis, those with elementary education (OR = 4.194, [CI = 1.036–16.985], $p = 0.045$) continued to feel rested upon waking. Difficulty falling asleep was associated with nephropathy (OR = 14.068, [CI = 1.055–187.582], $p = 0.045$), NSAID use (OR = 2.430, [CI = 1.018–5.789], $p = 0.045$), and PEG without sodium metabisulfite (OR = 2.222, [CI = 1.100–4.492], $p = 0.026$). However, those who were obese (OR = 0.344, [CI = 0.157–0.756], $p = 0.008$) were less likely to have diffi-

culty falling asleep. Trouble staying asleep was linked to patients with middle school education (OR = 3.525, [CI = 1.069-11.623], $p = 0.038$), although those who took the preparation cold (OR = 0.559, [CI = 0.350-0.891], $p = 0.015$) and those with hemorrhoidal disease (OR = 0.467, [CI = 0.264-0.824], $p = 0.009$) did not show trouble staying asleep. Nighttime bathroom visits were more common among patients aged 50 or older, with diabetes, prior abdominal surgery, diverticular disease, and the use of PEG containing sodium metabisulfite; meanwhile, PEG without sodium metabisulfite showed fewer nighttime bathroom visits. Only prior abdominal surgery (OR = 2.073, [CI = 1.244-3.455], $p = 0.005$) was the only characteristic that persisted in the multivariate analysis.

Conclusions Only a minority of patients reported pleasant sleep during bowel preparation. Sleep disturbances were more common in individuals with obesity, nephropathy, NSAID use, prior abdominal surgery, and lower educational attainment. Notably, consuming the preparation cold was independently associated with fewer sleep disruptions, particularly reduced difficulty staying asleep; this finding aligns with a recent population-based study demonstrating that beverage and food temperatures can influence sleep and gut health (Tianying Wu et al.). Incorporating cold bowel preparation may therefore represent a simple, practical strategy to improve sleep quality and overall tolerability of the preparation regimen

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Wu T, Ramesh N, Doyle C, Hsu F-C 2025 Cold and hot consumption and health outcomes among US Asian and White populations. *British Journal of Nutrition*. page 1 of 15. doi:10.1017/S000711452510514X

eP1015 Patient-reported symptoms associated with a successful peg full-dose bowel preparation: are all the symptoms really bothersome?

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DOI 10.1055/s-0046-1822280

Aims To identify which symptoms are significantly associated with patients who are able to complete the PEG full-dose high-volume bowel preparation. Unlike previous studies, which have largely focused on tolerance or completion rates using dichotomous symptom reporting, this study aimed to evaluate symptom intensity using a Likert scale to better characterize the severity of patients' most frequent complaints.

Methods A multicenter, cross-sectional study was conducted in adult patients indicated for colonoscopy. Sociodemographic data, comorbidities, medication use, history of prior colonoscopy, and specifics of colonoscopy preparation were collected via face-to-face questionnaires. Symptomatology during preparation was assessed, and the Hospital Anxiety and Depression (HAD) Scale was administered. Symptom intensity was evaluated on a 0-5 Likert scale, with scores of 3 or higher deemed significant.

Results Of 163 patients, 85 were female (61.7%). The average age was 50 ± 14 years. Patients with significant symptoms: Nausea (26/44) was associated with females (OR = 6.591, CI = 2.057-21.122, $p = 0.001$), and those with less than 50 years (OR = 8.834, CI = 2.55-30.580, $p = 0.048$). Vomiting (5/11) was associated with NSAID use (OR = 7.236, CI = 1.022-51.244, $p = 0.007$). Abdominal pain was associated with NSAID use (OR = 7.657, CI = 1.404-41.757, $p = 0.019$). Increase in bowel movements (67/99) was less frequent in those younger than 50 years (OR = 0.429, CI = 0.204-0.904, $p = 0.026$). Bloating (33/50) was most commonly associated with females (OR = 3.481, CI = 1.439-8.423, $p = 0.006$) and those with less than 50 years (OR = 4.762, CI = 1.595-14.215, $p = 0.005$). Postprandial fullness (47/65) was associated with a history of colon cancer (OR = 6.328, CI = 1.154-34.690, $p = 0.034$). Flatulence/burping (31/64) was mostly associated with females (OR = 4.694, CI = 1.794-12.284, $p = 0.002$). Anal itching (39/70) was related with history of anxiety (OR = 8.093, CI = 1.374-47.673,

$p = 0.021$), and abdominal surgery (OR = 5.634, CI = 1.650-19.239, $p = 0.006$). Chills (19/38) with females (OR = 10.997, CI = 1.260-96.003, $p = 0.030$). Cramping (2/15) more frequent in those with colorectal cancer history (OR = 24.787, CI = 1.124-546.476, $p = 0.042$). Weakness (27/50) was mostly associated with females (OR = 2.899, CI = 1.023-8.213, $p = 0.045$) and less associated with straw use to drink the preparation (OR = 0.337, CI = 0.128-0.891, $p = 0.028$). A cold or hot sensation (32/58) was associated with females (OR = 4.811, CI = 1.735-13.343, $p = 0.003$). Excessive thirst (23/41) was associated with postgraduate degree (OR = 6.764, CI = 1.419-32.237, $p = 0.016$) and anxiety per HAD (OR = 3.274, CI = 0.421-25.460, $p = 0.022$) remained significant.

Conclusions The severity of symptoms during bowel preparation was strongly associated with specific demographic, clinical, and psychological factors. Notably, being female, younger age, and anxiety or depression were consistently associated with more severe symptoms. In contrast, certain behaviors, such as drinking with a straw, were linked to reduced symptom burden. Recognizing these specific factor-symptom connections can help personalize preparation strategies

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1016 To Biopsy, Resect, or Refer? Rethinking the Pre-Referral Pathway and Decision-making for Large Non-Pedunculated Colorectal Polyps"

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DOI 10.1055/s-0046-1822281

Aims Studies report that almost 50 % of Large Non-Pedunculated Colorectal Polyps (LNPCP) have been subjected to heavy manipulation in form of prior attempts at resection or extensive biopsy sampling prior to referral to an expert centre. This significantly impacts several critical outcomes of endoscopic resection (ER). However, understanding of standardised classifications of LNPCP, endoscopic diagnosis and indications for ER has increased in general endoscopy practice which may have improved decision making prior to referral. We aimed to compare trends in patterns of prior injudicious manipulation and the significance of biopsy sampling over sequential time periods in a large cohort of patients referred to a tertiary referral centre for ER.

Methods Referral documentation, including clinic and referral letters, endoscopy reports, and histopathology result, were reviewed for evidence of prior resection attempts or biopsy sampling. Data included the number of biopsy samples taken and corresponding histological results. Patients referred between January 2011 and August 2024 were categorised into five time periods. Heavy manipulation was defined as either a prior resection attempt or ≥ 6 biopsy samples. Analyses included comparisons of resection attempts, heavy manipulation, biopsy sampling, and the detection of high-grade dysplasia on biopsies (as a marker of improved lesion assessment and targeted sampling). Trends in practice changes were assessed using the Chi-square test for trend

Results 1407 LNPCP were treated by ER. There was a significant trend toward fewer prior failed attempts at resection over sequential time periods with 30 % in Period 1 and only 11 % in Period 5 ($p < 0.001$); fewer LNPCP subjected to heavy manipulation with 61 % in Period 1 and 27 % in Period 5 ($p < 0.001$) and fewer LNPCP with prior biopsy sampling with 77 % in Period 1 and 47 % in Period 5 ($p < 0.001$). However, there was no trend found for an improvement in biopsy sampling yields of HGD with 18 % in Period 1 and 25 % in Period 5 ($p = 0.1$).

Conclusions In a large cohort of ER of LNPCP, this study demonstrates a significant reduction over time in failed resection attempts, heavy manipulation, and biopsy sampling of LNPCP before referral to a tertiary centre for endoscop-

ic resection (ER). This suggests an improvement in endoscopic lesion assessment and decision making by general endoscopists. However, heavy manipulation remains a significant problem. Although fewer LNCP are biopsied prior to referral, the yield of significant findings did not change, suggesting biopsies are not effectively targeted, and highlighting the need for further improvements in lesion assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1017 Time is visibility: factors associated with mucus production in patients with prolonged insertion time in water-exchange colonoscopy

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DOI 10.1055/s-0046-1822282

Aims The use of specific bowel preparation methods, such as water-exchange colonoscopy, has been associated with increased mucus production in the left colon, requiring supplementary clearing via suction or saline for optimal visualization. Given these procedural demands, further analysis is required to determine if a correlation exists between insertion time and the severity of mucus presentation.

Methods An observational analytical study was conducted in adult patients indicated for colonoscopy. Data of insertion time, endocuff device usage, Boston bowel preparation scale and Left Colon Mucus Scale (LCMS) were collected. LCMS: scored from 0 to 4. A score of 0 indicates absence of visible mucus; 1 indicates clear, visible mucus; 2 denotes opaque mucus in fine strands; 3 denotes opaque mucus in substantial clumps covering one side of the colonic surface; and 4 denotes opaque mucus in extensive clumps obscuring the majority of the lumen. LCMS scores were analyzed in relation to blind insertion time and patient age. Statistical analysis employed Spearman's rank correlation for continuous variables. Odds ratios (ORs) with 95% confidence intervals estimate the risk among stratified groups. A p-value < 0.005 defined statistical significance.

Results A total of 112 colonoscopy procedures, the mean patient age was 59 ± 13 years, and the mean Boston score was 5.53 ± 1.32. A weak-to-moderate but statistically significant positive correlation was identified between insertion time and mucus accumulation ($p = 0.252$; $p = 0.007$). Ordinal analysis determined that an insertion duration of 20 to 30 minutes significantly elevated the likelihood of LCMS grade 2 mucus (OR = 4.333 [CI = 1.434-13.095]; $p = 0.006$), whereas durations exceeding 30 minutes were significantly associated with LCMS grades 3 and 4 ($p = 0.014$). Concerning age, patients aged 18-34 years exhibited a significant association with LCMS grade 2 (OR = 6.714; [CI = 0.874 - 51.575], $p = 0.038$).

Conclusions It is noteworthy that younger patients tend to exhibit greater mucus accumulation, suggesting a senescent mechanism in the colonic mucosa where mucus production declines with age. This excess secretion significantly impacts procedural outcomes; inadequate bowel preparation caused by mucus impairs visualization and increases the risk of missing concealed lesions. Therefore, optimizing insertion and procedure times is essential to mitigate the risks associated with this accumulation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1018 Endoscopic Submucosal Dissection of Rectal Gastric Heterotopia: Report of Two Cases

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DOI 10.1055/s-0046-1822283

Introduction: Rectal gastric heterotopia (GHT) is extremely rare with less than eighty cases reported in the literature since it was first described by Ewell and Jackson in 1939. Two cases of malignant transformation have been reported, hence the need for resection. Most common methods of resection reported include surgery and endoscopic mucosal resection (EMR). Endoscopic submucosal dissection (ESD) for rectal GHT has been reported in few case reports in the literature. We present two cases of successful en-bloc resection with ESD of rectal GHT [1, 2].

Case 1: A 45-year-old gentleman had colonoscopy for chronic alternating bowel habit with urgency and mucus discharge and intermittent abdominal pain. The index colonoscopy revealed an unusual 40 millimetres Paris IIa + IIc annular lesion in the low rectum. Optically this had elongated round and tubular pits. The histopathological examination of the biopsies revealed gastric type mucosa intermingled with adjacent colonic mucosa which led to the diagnosis of rectal GHT. He was referred to our centre for resection. ESD was performed with successful en-bloc resection and there was no evidence of significant fibrosis despite previous biopsies. The final histology confirmed R0 resection and revealed large area of specialised type gastric tissue, consistent with rectal GHT. Six months follow up endoscopy showed no signs of residual gastric heterotopia and patient was clinically asymptomatic with return of normal bowel habit.

Case 2: A 36-year-old male underwent colonoscopy in view of rectal bleeding, chronic intermittent abdominal pain and change in bowel habits. The index colonoscopy revealed a five centimetres Paris IIa lateral spreading tumour (LST) granular type polyp in the lower rectum with surface pattern of elongated round and tubular pits. The histopathological examination of the biopsies revealed a mixture of colorectal and gastric body-type mucosae in keeping with rectal GHT. He then underwent ESD which safely achieved en-bloc resection. There was no significant fibrosis seen but the submucosal plane was heavily vascular. The final histology confirmed R0 resection and showed large bowel mucosa intermingled with predominantly oxyntic and body pattern gastric mucosa which involved full thickness of the mucosa, consistent with rectal GHT. Patient had normalisation of symptoms during his subsequent follow-up.

Conclusion: Rectal gastric heterotopia can be significantly symptomatic and ESD is a safe and effective resection modality to alleviate symptoms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Peng D, Qiu T, Chen S, Hu W, Fang T. A case report of heterotopic gastric mucosa in the rectum treated by endoscopic submucosal dissection and a systematic review. *Medicine* 2023; 102 (30): p e34491
- [2] Ewell G, Jackson R. Aberrant gastric mucosa in the rectum with ulceration and hemorrhage. *Wis Med J* 1939; 38: 641-3

eP1019 Burden of reflux disease after per-oral endoscopic myotomy: Single center real life prospective study

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DOI 10.1055/s-0046-1822284

Aims Peroral endoscopic myotomy (POEM) is now an established method for the treatment of achalasia cardia with superior outcomes compared to pneu-

matic balloon dilation and equivalent outcomes compared to laparoscopic Heller's myotomy. [1, 2] Post-procedure gastro-oesophageal reflux disease (GERD) is one of the main short comings of the procedure. Various retrospective studies have shown its incidence between 16% to 50%. [3] However, in view of paucity of prospective real world studies, we did a prospective study to know the prevalence of GERD in patients undergoing POEM procedure.

Methods We conducted a prospective open label study between November 2022 to June 2024 after obtaining an ethical approval. The baseline characteristics, procedure details, and post-procedure follow-up were recorded prospectively. At 12 months post-procedure, patients underwent detailed evaluation to know the prevalence of GERD in this group of patients. GERD was defined as per Lyon 2.0 criteria. [4] Esophagitis was classified as per Los Angeles criteria. Patients requiring > 3 PPI (proton pump inhibitor) intake per week were defined as PPI dependency. Patients reflux symptoms score was defined as per GERD-Q questionnaire. Pearson's correlation was performed between reflux symptoms score, PPI dependency, esophagitis grade and diagnosis of GERD. Multi-variate analysis was performed to identify risk factors for GERD.

Results Total of 75 patients included in the study. Mean age of the included patients was 40.75 ± 16.7 years with 61.3% patients were male. Majority of patients had type I achalasia (64%) and 28% of patients had prior endoscopic treatment in form of either pneumatic balloon dilation (20%) or laparoscopic Heller's myotomy (6.7%). Majority of patients underwent posterior POEM (90.7%) with mean oesophageal myotomy length of 10.49 ± 4.42 cm and gastric myotomy length of 2.75 ± 0.62 cm. 96% patients achieved clinical success. 28.8%, 32.8% and 34.2% patients had GERD-Q score > 8 at 3, 6 and 12 months follow-up respectively. At 12 months, 34.2% patients had PPI dependency, 11.8% of patients had significant esophagitis (Grade C/D) and 31.7% of patients had AET > 6%. 32.6% of patients were diagnosed as GERD as per Lyon 2.0 criteria. Presence of GERD-Q questionnaire > 8 (p = 0.002), having PPI dependency (p = 0.003) was correlated with diagnosis of GERD. However, on logistic regression, we could not find any baseline or intra-procedural risk factors for development of GERD.

Conclusions Around one third of patients develop GERD post-POEM at 12 months of follow-up. Reflux symptoms score and PPI usage are correlated with GERD diagnosis and which should be used to select the patients for further invasive investigations including endoscopy and pH-metry.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hurr TJ. The six-question Gastroesophageal Reflux Disease Questionnaire (GerdQ) cannot accurately quantify reflux and reflux-associated symptoms frequency. *Gastroenterol Rep* 2022; 10:goac043
- [2] Hurr TJ. The six-question Gastroesophageal Reflux Disease Questionnaire (GerdQ) cannot accurately quantify reflux and reflux-associated symptoms frequency. *Gastroenterol Rep* 2022; 10:goac043
- [3] Gyawali CP, Yadlapati R, Fass R et al. Updates to the modern diagnosis of GERD: Lyon consensus 2.0. *Gut* 2024; 73: 361–371
- [4] Nabi Z, Inavolu P, Duvvuru NR. Prediction, prevention and management of gastroesophageal reflux after per-oral endoscopic myotomy: An update. *World J Gastroenterol* 2024; 30: 1096–1107

eP1020 Endoscopic management of Boerhaave syndrome with a novel suturing device

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DOI 10.1055/s-0046-1822285

Abstract Text

We present the case of 35-year-old male patient with a medical history of Schatzki ring and eosinophilic oesophagitis. He presented in the ED with severe right side chest pain after choking on his chicken dinner. His partner had performed Heimlich manoeuvre & back slaps. During his stay at the ED, he deteriorated and was intubated. Patient was then transferred to ITU. An emergency

CT revealed an extensive pneumomediastinum closely related to the air fluid oesophagus. There was a large volume right sided hydropneumothorax (fluid accounting for more than 75% of the pleural collection), with associated compressive collapse of the right lung. There were a significant contralateral shift of the trachea and the entire mediastinum. Findings were strongly suggestive of Boerhaave's syndrome (BS). A chest tube drain was urgently inserted by the cardiothoracic team, and patient was started on broad – spectrum antibiotics. After multidisciplinary discussion an endoscopic approach was decided as first line approach and surgery reserved as second line. Treatment options were clearly communicated to the family members. During endoscopy several fibrotic mucosal rings/strictures were identified that prevented the use of a distal attachment (cap). There was a food bolus encountered at lower oesophagus, which was pushed into the stomach. At the lower oesophagus a 2cm full thickness wall defect with clean margins was identified. The wall defect was treated with a suturing device (X-Tack, Boston Scientific). A fully covered oesophageal metal (Niti-s) stent was then deployed under direct vision. Two haemoclips applied to anchor the stent. Patient eventually recovered and was successfully discharged home after 40 days. On follow up endoscopy, at 5 weeks, the stent had migrated distally and was found at the stomach. It was retrieved uneventfully. The perforation site appeared well healed with no stenosis. BS is a rare condition associated with high morbidity and mortality. Timely diagnosis is essential to improve outcomes. This condition has been traditionally managed with surgical intervention. However, recent advancements in endoscopic techniques have emerged as viable alternatives. Endoscopic management includes placement of OTCs, through-the-scope clips, partial or fully covered SEMS. Stenting has been favoured for larger defects (> 1cm). Recent, less – well studied, methods of closure include endoscopic suturing, vacuum-assisted closure or use of sealants (fibrin glue or cyanoacrylate). To our knowledge this is the first case treated with a defect > 1cm with a combination of a suturing device and stenting. The apposition of a larger defect that could theoretically impose on stent efficacy was managed by combining it with a suturing technique [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Wannhoff A et al. Endoscopic vacuum therapy for the treatment of Boerhaave syndrome: a multicenter analysis. *Gastrointestinal Endoscopy Volume* 101 (Issue 2): 365–374
- [2] Qureshi A, Mansuri U, Roknsharif M, Ghobrial Y, Asgeri A, Asgeri M. Endoscopic Management of Boerhaave Syndrome: Are Outcomes Better Than Surgery? A Case Report and Review of Literature. *J Community Hosp Intern Med Perspect* 2024; 14 (2): 104–108. doi:10.55729/2000-9666.1324. PMID: 38966501 PMID: PMC11221440

eP1021 Clinical Indication Is the Major Determinant of Colon Capsule Endoscopy Success: An Analysis of Real-World Data from the Irish National Registry

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DOI 10.1055/s-0046-1822286

Aims In 2023, colon capsule endoscopy (CCE) was introduced across 10 pilot centres in Ireland as part of a strategy to improve access to gastrointestinal diagnostics and reduce pressure on colonoscopy services. The major limitations

of CCE are issues with complete transit, inadequate preparation, and the requirement for post-CCE standard endoscopy. The aim of this study was to explore predictors of real-world CCE performance with a view to identifying patients most likely to benefit from a CCE.

Methods Data was prospectively collated from six colon capsule centres participating in the Irish Capsule Endoscopy Registry (ICaRe) over 2 years. Procedural data is voluntarily uploaded from each centre to an anonymised, web-based system on a continuous basis. Analysis was performed on available data captured on the registry. The key outcomes assessed were complete study rate (defined as adequate preparation and complete transit), the rate of significant findings, and the requirement for post-CCE endoscopy. Predictors assessed included age, gender, and indications for CCE. Indications were grouped as screening (FIT-positive or family history), polyp surveillance, symptomatic patients (high or low risk symptoms and/or anaemia), incomplete colonoscopy for any indication, and patient preference. Standard univariate analyses and multivariable logistic regression were used to identify factors associated with key CCE performance outcomes.

Results A total of 789 CCEs were included, 354/789 (45 %) male, mean age 55.3 years (range 22–87). The ranked CCE indications were symptomatic patients (44 %), incomplete colonoscopy (22 %), polyp surveillance (16.5 %), screening (15.5 %), and patient preference (2 %). Overall complete study rate was 73 % (573/789), adequate preparation rate 84 % (625/748), significant findings rate 56 % (445/788), and post-CCE endoscopy rate 40 % (319/789), including 243 (31 %) colonoscopies. Completion rates by indication ranged from 65 % for surveillance to 82 % for screening patients, while the post-CCE endoscopy rate (excluding the patient-preference group who were outliers at 7 %, likely due to small numbers) ranged from 33 % for the incomplete colonoscopy group to 50 % for surveillance patients. On multivariate analysis, the only independent predictor of outcomes was the indication for CCE. Specifically, those undergoing CCE for surveillance of previous polyps were significantly more likely to require a post-CCE endoscopy (50 %) (OR 1.61; 95 % CI 1.1–2.4; $p=0.01$), likely related to the higher significant finding rate also found in this group ($p=0.03$). Of interest, the surveillance group also had a higher incomplete study rate (35 %), possibly reflecting a selection bias in this cohort where they were referred for CCE surveillance rather than a colonoscopy. Unsurprisingly, as the distal colon would already have been examined, those undergoing CCE following an incomplete colonoscopy were less likely to require a post-CCE endoscopy (OR 0.7; 95 % CI 0.49–0.99; $p=0.05$). As expected, increasing age was associated with a higher diagnostic yield overall ($p=0.005$). However, older age (>70 years) was not associated with worse outcomes. The complete study rate was 27 % (174/645) in patients ≤ 70 years versus 29 % (40/138) in those >70 years, and the post-CCE endoscopy rate was 41 % (262/645) ≤ 70 versus 41 % (57/138) >70 . Similarly, gender had no impact on outcomes.

Conclusions Clinical indication significantly affects CCE performance and should be used as a tool to help select patients most likely to benefit from this procedure. Surveillance patients of any form appear to be less suited to CCE. Older patients, based on our data, should not be excluded from CCE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1022V Double EUS-guided luminal and biliary bypass in a patient with metastatic gastric cancer

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DOI 10.1055/s-0046-1822287

Abstract Text

We present an 83-year-old female with a history of metastatic gastric cancer and a surgical jejunostomy tube. She presented to our hospital 2 months earlier with complete gastric outlet obstruction and underwent a successful EUS-guided gastrojejunostomy, enabling resumption of oral intake. She returned on this admission with cholangitis secondary to a distal CBD obstruction (Bili: 3.7). An intrahepatic duct (3.5 mm) at segment 3 was punctured with a

19-gauge needle. A wire was navigated to the CBD, crossed the biliary stricture, and reached the duodenum. The tract was dilated with a 4 mm balloon. Two overlapping Gore stents were deployed at the hepaticogastrostomy. Her symptoms resolved, and her bilirubin normalized three days later.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/86024387-e46b-42a5-adfd-2d319606468a/Uploads/19978_EUS_HG%20after%20GJ.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1024 Retrospective Study on the Incidence and Risk Factors of Post-ERCP Pancreatitis

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DOI 10.1055/s-0046-1822289

Aims Post-ERCP pancreatitis (PEP) represents the most common complication of ERCP (Endoscopic Retrograde Cholangiopancreatography). This is a clinically relevant issue, given its non-negligible mortality rate and the substantial costs associated with the management of this complication. This study aims to retrospectively evaluate the risk and protective factors associated with post-ERCP pancreatitis (PEP) in a patient cohort, and to compare the findings with those reported in the literature [1].

Methods Patients who underwent ERCP between October 2020 and June 2022 at Maggiore Hospital (Bologna, Italy) were analyzed. PEP was defined according to the Cotton Consensus Criteria and graded for severity based on the revised Atlanta classification.

For each procedure clinical, laboratory, and procedural data were collected, as well as PEP incidence and its preventive strategies (rectal NSAIDs, intravenous hydration, pancreatic stenting). Variables were analyzed using univariate and multivariate logistic regression models.

Results In the period of analysis 600 ERCP were analysed. All procedures were performed by 4 experienced endoscopists. The main indications for ERCP were choledocholithiasis (50.67 %), malignant stricture of the main bile duct (16.33 %), and recurrent stones of the main bile duct (7 %). PEP incidence was 8.8 % with 0 % mortality. Cannulation of the pancreatic duct and the use of precut sphincterotomy emerged as significant risk factors for PEP (► **Table 1**), with odds ratios comparable to those reported by ESGE guidelines. Injection of contrast into the pancreatic duct showed a possible association with PEP risk but was not statistically significant. Other known risk factors, such as female sex, young age, and normal bile duct diameter, were not significant in our population. Preventive measures—rectal NSAIDs and aggressive IV hydration—also showed no significant protective effect, likely because they were widely and routinely used. Pancreatic stent placement did not significantly reduce PEP incidence, possibly because the complexity of procedures at our center often necessitated frequent stent use, diminishing statistical power.

► **Table 1**

Risk factor	Odds ratio (95 % IC)	p-value
Pancreatic duct cannulation	3.52 (1.57-7.90)	0.002
Precut sphincterotomy	2.41 (1.14-5.09)	0.021
Pancreatic duct injection	2.39 (0.84-6.71)	0.099
Pancreatic duct stenting	0.547 (0.15-1.88)	0.339

Conclusions Post-ERCP pancreatitis (PEP) still represents one of the most significant complications in the biliopancreatic field. Our retrospective analysis confirmed that the incidence of this complication in our patient population is comparable to that reported in the literature (3.5–15%). Moreover, in our cohort only certain procedural factors—such as pancreatic duct cannulation and the use of precut sphincterotomy—are associated with an increased risk of PEP. Further data and multicentric studies are needed to validate our results.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dumonceau J.-M et al. ERCP-related adverse events: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2020; 52: 127–149

eP938V A Case of EUS-guided Hepaticogastrostomy Performed With a Novel Access Needle System

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DOI 10.1055/s-0046-1822290

Abstract Text

Some therapeutic EUS procedures require multiple steps and exchanges and are technically demanding. Dedicated devices are desirable to improve reproducibility and safety. FNA needles, borrowed from tissue acquisition, are usually used for transmural access. In our case, an 84-year-old woman was referred for jaundice due to lymphoma-related lymphadenopathies. ERCP was not feasible due to duodenal infiltration; EUS-guided hepaticogastrostomy was performed using a new dedicated access needle system (SonoTip AccessPro, Medi-Globe, Germany). In the video, we describe limitations related to FNA needles, present the main features and potential advantages of the new needle system, and illustrate all procedural steps. In our case, guidewire manipulation was particularly challenging, with many back-and-forth movements required; the blunt-tipped cannula allowed smooth manipulation without shearing.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/6eb5d428-c157-44ed-b125-d8a65c367fd1/Uploads/19978_Video_ESGE%20Days%202026_def.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP939 Artificial Intelligence and Screening Colonoscopy: A Value of Information Analysis

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DOI 10.1055/s-0046-1822291

Aims To assess the cost-effectiveness of computer-aided detection (CADE) for screening colonoscopy and to quantify, through value-of-information (VOI) analysis, which uncertainties most critically affect decision-making and should be prioritized for further research.

Methods We adapted a Markov model of colorectal cancer (CRC) natural history to compare three strategies for average-risk 45-year-olds: no screening,

10-yearly colonoscopy, and 10-yearly CADE-assisted colonoscopy up to age 75, from a U.S. payer perspective. The model incorporated screening, post-polypectomy surveillance, and CRC treatment, using published data on adenoma detection rate (ADR), CRC risks, costs, and utilities. Outcomes were CRC incidence, CRC mortality, quality-adjusted life-years (QALYs), costs, and net monetary benefit (NMB) at a willingness-to-pay (WTP) of \$100,000/QALY. Probabilistic sensitivity analysis (10,000 simulations) informed the expected value of perfect information (EVPI) and expected value of partial perfect information (EVPII) for CADE performance, CRC natural history, and key cost parameters. Scenario analyses explored different magnitudes of CADE-driven ADR improvement, alternative background CRC incidence, and a non-linear relationship between ADR and CRC risk (risk plateau above 40% ADR).

Results Both screening strategies were cost-effective vs no screening. Compared with standard colonoscopy, CADE-assisted colonoscopy further reduced lifetime CRC incidence and mortality, yielding 75 additional QALYs per 10,000 individuals at an incremental cost of \$388 per person (ICER \$44,074/QALY). CADE was optimal in 71% of simulations at the \$100,000/QALY WTP. Per-patient EVPI was \$100, corresponding to a population EVPI of \$5.8 billion over a 10-year technology lifetime. The largest EVPII contributions came from CADE-related ADR effects, CRC natural history, and polypectomy costs. In conservative (4% ADR gain) and ADR-threshold scenarios, CADE remained potentially cost-effective but EVPI exceeded \$8 billion.

Conclusions CADE-assisted colonoscopy is likely to be cost-effective for CRC screening, yet substantial decision uncertainty persists. VOI analysis shows that high-value future research should focus on real-world CADE effects on ADR, CRC natural history, and the shape of the ADR–CRC relationship, to better support guideline and reimbursement decisions on CADE implementation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP940 Ductal Calculi in Pancreas Divisum

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DOI 10.1055/s-0046-1822292

Aims Pancreas divisum (PD) is a frequent congenital variant, yet its association with pancreatic duct calculi remains insufficiently described. This study evaluates the prevalence, characteristics, and endoscopic outcomes of ductal stones in patients with PD.

Methods We conducted a retrospective study including all patients managed for pancreatic duct stones between 2018 and 2025.

Among the 74 patients, 16 had PD. Clinical, anatomical, and therapeutic data were analyzed. Median follow-up was 29 months [1–3].

Results Among 74 patients referred for pancreatic duct calculi, 16 (21.6%) had PD. ERCP established the diagnosis in 8 cases (50%) and confirmed MRI findings in the remainder. Complete PD was identified in 10 patients (62.5%), and incomplete PD in 6 (37.5%). Seven patients had microlithiasis (<5 mm), eight had stones measuring 5–10 mm, and one had a stone >10 mm. Minor papilla sphincterotomy with duct clearance and stone extraction, followed by stent placement, was performed in all 16 patients. Clinical success was achieved in all cases (100%). One technical failure due to a severe stenosis required surgical bypass. No ERCP-related adverse events occurred.

Conclusions Pancreas divisum accounted for a substantial proportion (21.6%) of patients presenting with pancreatic duct calculi. Stone formation was frequent even in cases of small-caliber calculi. Minor papilla sphincterotomy with temporary stenting proved safe and highly effective in symptomatic PD. These data support considering PD in the differential diagnosis of ductal calculi

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Brugge WR. Endoscopic approach to the diagnosis and treatment of pancreatic disease. *Curr Opin Gastroenterol* 2013; 29 (5): 559–65. doi:10.1097/MOG.0b013e3283639342 PMID: 23872485

- [2] Yi JH, Li ZS, Hu LH. Pancreatic duct stents. *J Dig Dis*. 2022; 23 (12): 675–686. doi:10.1111/1751-2980.13158 Epub 2023 Mar 9 PMID: 36776138
- [3] Varshney S, Johnson CD. Pancreas divisum. *Int J Pancreatol* 1999; 25 (2): 135–41. doi:10.1385/IJGC:25:2:135 PMID: 10360226

eP941 Optimizing outcomes of EUS-Guided Choledochoduodenostomy with LAMS for Malignant Biliary Obstruction: insights from a Meta-Analysis of Prospective Studies

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Aims Endoscopic ultrasound–guided choledochoduodenostomy (EUS-CDS) is a minimally invasive procedure for the management of malignant biliary obstruction (MBO), achieved through transduodenal placement of a lumen-apposing metal stent (LAMS) into the extrahepatic bile duct. Despite the recent widespread adoption of the technique, the existing literature encompasses a heterogeneous case mix in terms of procedural and clinical settings, along with variable study quality, which limits the generalizability of previous meta-analyses. To more reliably identify factors associated with safe and effective EUS-CDS using LAMS, we pooled data exclusively from high-quality prospective studies.

Methods The methodology of our analysis was based on PRISMA recommendations. Electronic databases (Medline, Scopus, EMBASE) were searched up to September 2025 for prospective study including patients with distal malignant biliary obstruction who underwent EUS-CDS using LAMS. Meta-analysis was performed reporting pooled rates of technical success, clinical success, stent dysfunction, and adverse events (AEs) by means of a random model. Univariate meta-regression was performed to assess possible cause-effect associations between outcomes and both baseline, and procedural variables.

Results Thirteen studies comprising 662 patients were included in the meta-analysis. The pooled technical and clinical success rates were 95.0 % ($I^2 = 33.6\%$) and 89.7 % ($I^2 = 48.7\%$), respectively. Stent dysfunction occurred in 16.5 % ($I^2 = 73.3\%$) of cases over a mean follow-up period ranging from 30 to 360 days. Duodenal involvement and the use of a small-caliber LAMS (6 mm) were associated with an increased risk of stent dysfunction. Coaxial stent placement had no impact on the risk of stent dysfunction. The pooled adverse event rate was 19.2 % ($I^2 = 82.2\%$). Stent maldeployment was reported in 4.0 % ($I^2 = 0\%$) of cases, with smaller CBD diameter trending as a potential risk factor for this event ($p: 0.056$).

Conclusions EUS-CDS with LAMS is a safe and effective option for relief of MBO. Avoiding patients with duodenal involvement and selecting an appropriate stent size is crucial for minimizing stent dysfunction.

Conflicts of Interest Author: M.S. has received fees for serving as a consultant from Olympus Corp, and Boston Scientific. C.H has received fees for serving as a consultant from Fujifilm Co. and Medtronic Co, Author A.R has received fees for serving as a consultant from Fujifilm Co., Medtronic Co., and Boston Scientific. The other author declares no conflict of interest.

eP942V Gastroscope-assisted ERCP with duodenal retroversion for stent-in-stent biliary drainage in malignant duodenal bulb obstruction

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DOI 10.1055/s-0046-1822294

Abstract Text

Malignant jaundice with duodenal obstruction can prevent conventional transpapillary biliary access. EUS-HGS may be considered for jaundice palliation. A 54-year-old patient with locally advanced pancreatic head adenocarcinoma, previously treated with a biliary stent and gastroenterostomy for duodenal bulb stenosis, re-presented after one month with jaundice. CT showed left intrahepatic biliary dilatation. EUS-HGS was attempted but failed due to an inadequate EUS window. Duodenoscope passage across the stricture was not feasible. A therapeutic gastroscope (3.2-mm channel) reached the papilla, where the prior stent was obstructed by tumoral ingrowth. With duodenal retroversion, the main bile duct was achieved and a new metal stent was placed. Control fluoroscopy showed marked bilateral aerobilia [1–5].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/54e099b4-a6c0-4d7a-af58-7914d76a4671/Uploads/19978_esgefinal.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Binda C, Dajti E, Giuffrida P et al. Efficacy and Safety of Endoscopic Ultrasound-Guided Hepaticogastrostomy: A Meta-Regression Analysis. *Endoscopy* 2024; 56 (9): 694–705
- [2] Alsakneh S, Madi MY, Dahiya DS et al. Is Endoscopic Ultrasound-Guided Hepaticogastrostomy Safe and Effective After Failed Endoscopic Retrograde Cholangiopancreatography? A Systematic Review and Meta-Analysis. *Journal of Clinical Medicine* 2024; 13 (13): 3883
- [3] Marya NB, Pawa S et al. American Society for Gastrointestinal Endoscopy Guideline on the Role of Therapeutic EUS in the Management of Biliary Tract Disorders: Methodology and Review of Evidence. American Society for Gastrointestinal Endoscopy Standards of Practice Committee, *Gastrointestinal Endoscopy* 2024; 100 (6): e79–e135
- [4] Coşkun O, Ödemiş B. A Comparative Study of Side-Viewing Duodenoscope and Forward-Viewing Gastroscope to Perform Endoscopic Retrograde Cholangiopancreatography in Patients With Billroth II Gastrectomy. *Surgical Endoscopy*. 2021; 35 (8): 4222–4230
- [5] Lee KH, Yim GH, Han J, Jeong HT. Clinical Outcomes of Endoscopic Retrograde Cholangiopancreatography After Billroth II Anastomosis: A Comparison of Gastroscopy and Duodenoscopy. *BMC Gastroenterology* 2025; 25 (1): 373

eP943 Adenoma Detection Across the Clock: Do Younger Endoscopists Outperform?

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DOI 10.1055/s-0046-1822295

Aims The Adenoma Detection Rate (ADR) is a key quality indicator in colonoscopy and is strongly associated with the prevention of interval colorectal cancer [1–3]. In this study, we evaluated double-shift endoscopists, defined as attending physicians performing colonoscopies continuously during both the morning and afternoon sessions on the same day.

The primary aim was to determine whether fatigue accumulated over a continuous working day affects older endoscopists (≥ 40 years) more than younger ones (< 40 years). Specifically, we sought to compare ADR between morning

and afternoon procedures within each age group to identify whether older clinicians show a greater decline in detection performance as the day progresses.

Methods A retrospective study was conducted using colonoscopies performed during the year 2021, a period in which COVID-19–related backlogs led to an increased need for double-shift endoscopists. Only colonoscopies performed by attending physicians who worked continuously during both morning and afternoon sessions on the same day were included, ensuring within-endoscopist comparison and minimizing inter-operator variability.

Exclusion criteria were:

- Inadequate bowel preparation (Boston < 2 in any segment)
- Incomplete examinations
- Procedures performed on hospitalized or urgent/emergency patients
- Colonoscopies belonging to the organized colorectal cancer screening program
- Colonoscopies performed by a resident physician.

After applying these criteria, 307 colonoscopies remained for analysis performed by 18 endoscopists (7 younger than 40 and 11 aged 40 years or older). Adenoma Detection Rate (ADR) was compared between morning and afternoon procedures separately for younger (< 40 years) and older (≥ 40 years) endoscopists using contingency tables and chi-square testing, with statistical significance set at $p < 0.05$.

Results A total of 161 procedures were performed by younger clinicians. ADR remained stable throughout the day. Morning ADR was 38.6% (27/70) whereas afternoon ADR was 39.6% (36/91). No significant difference was observed ($p = 1.0$), indicating preserved performance across shifts (► **Table 1**).

► **Table 1**

Endoscopist Age	Morning ADR	N (Morning)	Afternoon ADR	N (Afternoon)	p-value
< 40 years	38.6%	70	39.6%	91	1.00
> 40 years	44.4%	54	23.9%	92	0.0167

Among 146 procedures performed by older clinicians, ADR varied markedly by time of day, morning ADR was 44.4% (24/54) while afternoon ADR was 23.9% (22/92). This twofold decrease in the afternoon was statistically significant ($p = 0.0167$) suggesting greater susceptibility to within day performance decline.

Conclusions The effect of procedure timing on adenoma detection appears to be age-dependent. Younger endoscopists maintained consistent ADR throughout the day, with similar performance in morning and afternoon sessions. In contrast, older endoscopists showed a significant decline in ADR during afternoon procedures, with markedly higher detection rates in the morning. Notably, older endoscopists achieved a higher ADR than younger endoscopists during morning sessions, suggesting that their peak performance occurs earlier in the day. Because only within-endoscopist double-shift days were analyzed, these results are unlikely to be confounded by differences in operator skill or technique. These findings highlight the potential value of age-informed scheduling and underscore the need for strategies aimed at mitigating afternoon performance decline in older clinicians.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Rex DK, Schoenfeld PS, Cohen J, Pike IM, Adler DG, Fennerty MB et al. Quality indicators for colonoscopy. *Gastrointest Endosc* 2015; 81: 31–53

[2] Kaminski MF, Regula J, Kraszewska E, Polkowski M, Wojciechowska U, Didkowska J et al. Quality indicators for colonoscopy and the risk of interval cancer. *N Engl J Med* 2010; 362: 1795–803

[3] Corley DA, Jensen CD, Marks AR, Zhao WK, Lee JK, Doubeni CA et al. Adenoma detection rate and risk of colorectal cancer and death. *N Engl J Med* 2014; 370: 1298–306

eP944 Saline-Optimized Waveforms Versus Conventional Modes for Controlled Energy Delivery in Saline-Immersion Therapeutic Endoscopy

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Aims Saline-immersion therapeutic endoscopy (SITE) exposes electrosurgical generators to a highly conductive environment, with loss of voltage stability, marked power escalation, and a shift from spark-mediated cutting to conduction-mediated coagulation. Dedicated saline-optimized waveforms have been developed to counteract these effects, but comparative data versus conventional cutting and coagulation modes across different knives is limited.

Methods Using the same ex-vivo porcine gastric platform, three knives (1.5, 0.5, and 0.4 mm electrodes) were evaluated in air and saline under seven waveforms. These were grouped as conventional cutting, coagulation, and dissection modes, including blended cut and dissection algorithms designed for saline use. For each knife–mode–environment combination, six standardized cuts were performed (252 in total). Electrical parameters, cutting success, and lateral thermal spread were quantified.

Results In air, all cutting and dissection waveforms produced complete incisions in 100% of activations, whereas coagulation modes did not generate a full channel, as expected. Under saline, cutting success with the thick knife fell from 57% in air to 43% in saline, indicating a loss of cutting efficiency despite a nearly 20-fold rise in delivered power. Thin knives, by contrast, maintained ≥ 71% overall success in saline; when paired with saline-adapted cutting or dissection waveforms, cutting success reached 100%. Coagulation modes in saline produced the greatest lateral spread with the thick electrode, with increases up to 167% versus air, and mean spread reaching 1.35 mm. In contrast, blended cut and dissection waveforms used with thin knives confined lateral spread to ≤ 0.8 mm. One voltage-controlled dissection mode was the only configuration in which saline did not enlarge, but slightly reduced spread for both thin knives (≈ 9–13% decrease versus air), while preserving full cutting efficacy.

Conclusions In a saline-immersion setting, conventional coagulation modes combined with thick electrodes lead to pronounced power escalation and excessive thermal spread; whereas, saline-optimized cutting and dissection waveforms used with thin electrodes maintain reliable cutting and keep lateral injury within submillimetric limits. Effective and safe SITE therefore depends on deliberate pairing of thin-tip knives with saline-adapted algorithms, and on substantial down-titration of coagulation currents when larger electrodes must be used.

Conflicts of Interest AC is a consultant for ERBE, Boston Scientific RM is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific CH is a consultant for Alpha-Sigma, Fujifilm, Medtronic, Norgine, Olympus and Pentax AR is a consultant for Medtronic, ERBE, Fujifilm and Olympus Others authors nothing to declares

eP945 Urgent EUS for incidentally detected subepithelial lesions—A 3-year single-centre registry

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DOI 10.1055/s-0046-1822297

Aims Evidence on urgent endoscopic ultrasound (EUS) for subepithelial lesions (SELs) is limited. ESGE guidelines recommend EUS-guided fine-needle biopsy (FNB) or mucosal-incision-assisted biopsy (MIAB) for SELs ≥ 20 mm or when histology is required to guide therapy, while allowing imaging-based management for clearly benign lesions. We evaluated the feasibility, diagnostic yield and impact on management of urgent EUS for unclear lesions detected during urgent endoscopy in a tertiary emergency hospital [1].

Methods We retrospectively reviewed all EUS procedures performed between 01.01.2023 and 20.11.2025 (524 total) and selected only urgent EUS performed after emergency endoscopy failed to clarify the diagnosis (incidentally detected SELs, mucosal thickening, suspected masses). For each case we collected lesion location, size (largest diameter), EUS features, real-time elastography, contrast-enhanced EUS (CEH-EUS), performance of EUS-FNB, final histology/diagnosis, management decision and follow-up. Primary endpoints were: (1) proportion of lesions characterized by multimodal EUS and (2) rate of management change after EUS and/or tissue diagnosis. Secondary endpoints were diagnostic yield of FNB and procedural complications.

Results Thirty-five urgent EUS procedures were analysed (57.1 % males; median age was 65 years, IQR: 56–70). Lesions were predominantly gastric and duodenal (24/35 = 68.6 %). Additional cases included esophageal, jejunal and mediastinal lesions. Median lesion size was 28 mm (IQR: 18–40) and 23/35 (65.7 %) lesions were ≥ 20 mm. EUS allowed characterization of layer of origin and echogenic pattern in all cases, and real-time elastography supported the diagnosis of soft lesions such as lipomas, while CEH-EUS highlighted tissue vascularization by contrast uptake pattern. EUS-FNB was performed in 9/35 (25.7 %) cases, mainly in suspected GIST/NET or indeterminate solid masses (7/23 lesions ≥ 20 mm and 2/12 < 20 mm). Of these, 5/9 (55.6 %) FNBs were diagnostic, while 4/9 (44.4 %) were inconclusive due to insufficient material. Final diagnoses included 15 GISTs, 3 neuroendocrine tumors, 3 lipomas, 3 cystic lesions, and several other benign or inflammatory conditions; five cases remained histologically or etiologically inconclusive. EUS findings and/or histology led to a change in management in 85 % (30/35 of cases), with surgery planned mainly for GIST, NET, carcinoma, lymphoma and significant stenosis, and surveillance / conservative management for lipomas, cysts, focal nodular hyperplasia, inflammatory lesions and extrinsic compressions. No EUS-related complications or deaths were recorded.

Conclusions In this 3-year emergency hospital registry, urgent EUS with selective use of FNB, in lesions where histology could change management, was feasible and safe, frequently clarified uncertain findings after emergency endoscopy and supported tailored decisions between surgery or conservative management. The selective use of FNB by avoiding random sampling of clearly benign or non-mass lesions, appears consistent with ESGE size and risk-based recommendations. Larger prospective series with standardized data collection will be useful to refine predictors of which SELs benefit most from urgent tissue diagnosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Deprez P.H., Moons L.M.G., O'Toole D., Gincul R., Seicean A., Pimentel-Nunes P., Fernández-Esparrach G., Polkowski M., Vieth M., Borbath I., Moorels T.G., Nieveen Van Dijkum E., Blay J.Y., Van Hooft J.E. 2022; Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 54 (4): 412–429. doi:10.1055/A-1751-5742

eP946 The use of Cholangioscopy in the Assessment for those undergoing Liver transplantation in Primary Sclerosing Cholangitis

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DOI 10.1055/s-0046-1822298

Aims Primary Sclerosing Cholangitis (PSC) is a common indication for liver transplantation. However, PSC is a recognised risk factor for cholangiocarcinoma (CCA) and the investigation of concerning strictures in PSC is a significant part of focus of investigations in to PSC. This is vitally important in those undergoing transplantation, where currently, in the UK, having CCA is an exclusion criterion for transplantation. Cholangioscopy is a recognised tool used in this scenario. Studies have shown that cholangioscopy is the most useful tool in the detection of CCA in PSC but it still only has a sensitivity of 65 % [1]. This is significant lower than when compared to non PSC indeterminate biliary strictures assessment which has a sensitivity as high as 94 % [2]. These studies show the specificity is similar between PSC and non PSC groups at 95-97 %.

This study evaluates the diagnostic performance of cholangioscopy-guided assessment in patients with concerning biliary strictures undergoing assessment for liver transplantation on the background of PSC. To the authors knowledge there is no published data addressing this specific question.

Methods This was a retrospective, single-centre study including consecutive patients, who had PSC as the underlying liver disease, who underwent Liver transplantation assessment. The study looks at patients under assessment from January 2020 to September 2025. All patients had biliary strictures considered suspicious for malignancy based on cross-sectional imaging. Cholangioscopy was performed using the SpyGlass DS II system (Boston Scientific), and all biopsies were obtained under direct visual guidance.

Results 108 patients with PSC were worked up for liver transplantation during this time. 26 patients had an ERCP as part of their assessment and 15 of these had cholangioscopy. 2 (13.3 %) were found to have CCA and so not listed. 1 was delisted for another reason. 1 (8.3 %) is currently on the waiting list and 11 have been transplanted. Of these 1/11 (9.3 %) was found to have CCA on their explant. Of the 93 patients who did not have cholangioscopy 6 (6.5 %) had CCA on their explant and only 1 of these had had an ERCP, which did not detect the CCA.

In this cohort pre-transplant cholangioscopy has a sensitivity of 66.7 % and a specificity of 100 %. Its positive predictive value is 100 % and its negative predictive value is 91.7 %. This is compared to a negative predictive value of 93.5 % for those patients being assessed for transplant who were deemed not to need cholangioscopy. The similar negative predictive value for patients who are deemed to need cholangioscopy and those who are deemed not to need cholangioscopy is evidence of the benefit of cholangioscopy in this settings.

Due to the rarity of this scenario and the ethical difficulties involved conducting a randomised controlled study will be challenging to power. Therefore, moving forward there is a need for the liver transplant centres to pool their data on this cohort of patients to further assess the role of cholangioscopy in the assessment of potential liver transplant recipients with PSC.

Conclusions These results indicate that cholangioscopy is a useful tool to help minimise the risk of transplanting patients with PSC who have a concurrent CCA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Mauro A et al The Role of Cholangioscopy in Biliary Diseases. *Diagnostics* (Basel) 2023; 13 (18): 2933
[2] Njei B et al Systematic review with meta-analysis: endoscopic retrograde cholangiopancreatography-based modalities for the diagnosis of cholangiocarcinoma in primary sclerosing cholangitis. *Aliment Pharmacol Ther.* 2016; 44 (11/12): 1139–1151

eP947V Non traumatic intrathoracic liver herniation: An Unusual Finding on EUS

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DOI 10.1055/s-0046-1822299

Abstract Text

Our patient presented with an acute worsening of chronic gastrointestinal symptoms. A non-contrast CT showed colonic wall thickening and a homogeneous mass near the distal esophagus, initially suspected to be a leiomyoma. Endoscopy was unremarkable, but EUS proved crucial: it revealed an intrathoracic mass composed of hepatic parenchyma extending across the cardia, raising suspicion of hepatic herniation. MRI subsequently confirmed herniation of the left hepatic lobe. Only few cases of non-traumatic intrathoracic hepatic herniation have been reported, and none included an EUS assessment. This case illustrates how EUS, with its dynamic nature and high-resolution assessment of deep structures, represents a valuable diagnostic tool even in rare clinical scenarios. The case highlights also that hepatic herniation may be an incidental finding and should be considered in the differential diagnosis of thoracic masses [1–4].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1561b08b-fb57-4020-8580-8b942b403fb9/Uploads/19978_video_HH%20finale.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sagar AS, Faiz SA, Shannon VR. Cough-induced Transdiaphragmatic and Intercoastal Herniation of the Liver. *Am J Respir Crit Care Med* 2019; 200 (11): e145–e146. doi:10.1164/rccm.201810-1862IM PMID: 31251656 PMID: PMC6884036
- [2] Phillips J, Brigode WM, Svahn J. Rapid evolution of a Morgagni hernia with herniation of the left hepatic lobe: case report and review of the literature. *J Surg Case Rep* 2022; 2022 (1):rjab616 doi:. doi: 10.1093/jscr/rjab616 PMID: 35070265 PMID: PMC8769898
- [3] Huang IH, Kashyap S, Dang KN, Sweidan AJ. Non-Traumatic Diaphragmatic Hepatic Hernia: A Rare Case of Liver Herniation Into the Lung. *Respirol Case Rep*. 2025; 13 (6): e70250. doi:10.1002/rcr2.70250 PMID: 40535726 PMID: PMC12175014
- [4] Ouyang HG, Zhao ZD, Lu WJ, Wu HT. A report on the congenital hepatic diaphragmatic hernia. *Chin Med J (Engl)*. 2020; 134 (2): 252. doi:10.1097/CM9.0000000000001164 PMID: 33086335 PMID: PMC7817341

eP948 Diverse applications for a new slim therapeutic gastroscope with large 3.2mm diameter working channel in challenging cancer patients: a case series

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DOI 10.1055/s-0046-1822300

Problem to solve The use of smaller diameter gastroscopes often comes at the expense of functionality which may limit their use in anatomically challenging situations.

Innovation A new slim therapeutic channel gastroscope (Fujifilm EG-840TP) with expanded flexibility was recently introduced. The scope was principally designed to support the growing field of third space endoscopy. In this case series, we highlight the diverse applications for this remarkably agile and slim 7.9mm diameter gastroscope with large 3.2mm working channel. This single-center case series performed at a tertiary cancer center highlights seven patients with malignancy who underwent endoscopy with the slim scope for various indications (► **Table 1**).

► **Table 1** Summary of cases highlighting applications for a new slim therapeutic channel gastroscope.

Case	Age	Sex	Diagnosis	Endoscopic intervention
1	82	F	Metastatic pancreatic cancer with bile duct obstruction and pyloric stenosis	ERCP with placement metal biliary stent
2	65	M	Metastatic gastric cancer with bile duct obstruction and duodenal stenosis	ERCP with exchange of plastic for metal biliary stent
3	59	M	Metastatic gallbladder cancer with sigmoid colon obstruction	Placement metal colonic stent
4	58	F	Squamous cell cancer tongue with esophageal stenosis and non-healing gastro-cutaneous fistula	Closure of gastro-cutaneous fistula with through-the-scope clips
5	87	M	Recurrent laryngeal cancer with high-grade pharyngoesophageal anastomotic stricture	Rendezvous balloon dilation of stricture via gastrostomy tube site
6	82	F	Metastatic pancreatic cancer and gastric outlet obstruction	Facilitate EUS-GJ by traversing duodenal stricture to directly instill the jejunum with water
7	72	M	Fistulizing pancreatic head cystic mucinous neoplasm	Direct exploration with diagnostic biopsy / aspiration

Results We included seven patients who underwent endoscopic interventions using the slim therapeutic gastroscope for various conditions. The diagnoses included metastatic gastric and pancreatic cancer with gastric outlet and distal bile duct obstruction, metastatic gallbladder carcinoma with large bowel obstruction, squamous cell cancer of the tongue with esophageal stenosis and chronic non-healing gastro-cutaneous fistula, recurrent laryngeal cancer with high-grade pharyngoesophageal anastomotic stricture, metastatic gastric cancer with gastric outlet obstruction, and a fistulizing pancreatic cystic lesion incidentally found on CT. Endoscopic procedures performed included: ERCP with biliary stent placement and biliary stent exchange in the setting of gastric outlet obstruction; colonic stent placement; closure of gastro-cutaneous fistula using through-the-scope endo-clips; rendezvous balloon dilation of a high grade pharyngoesophageal anastomotic stricture via a gastrostomy tube site; facilitating endoscopic ultrasound-guided gastrojejunostomy in the setting of severe duodenal stricture; and direct endoscopic evaluation of a fistulizing pancreatic head cystic mucinous neoplasm. These diverse applications demon-

strate the gastroscope's flexibility in managing a variety of complex gastrointestinal oncologic conditions.

Conclusions The Fujifilm EG-840TP slim treatment gastroscope has significant advantages when compared to standard and therapeutic gastroscopes due to its small 7.9mm outer diameter, large 3.2mm working channel and expanded flexibility. These cases highlight the versatility and utility of the slim therapeutic gastroscope in navigating anatomically challenging and previously inaccessible locations, offering enhanced therapeutic potential where standard and therapeutic endoscopes may fall short.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP949 Efficacy and Tolerability of Colon Wash Compared to Oral Laxatives for Bowel Preparation: A Propensity Score-Matched Analysis

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DOI 10.1055/s-0046-1822301

Aims Adequate bowel preparation is crucial for high-quality colonoscopy. Although oral laxative-based regimens remain the standard, they are often poorly tolerated by frail patients. Colon Wash, a retrograde colonic irrigation technique, has emerged as a potential alternative. This study aimed to compare the efficacy and tolerability of Colon Wash with standard oral low-volume osmotic preparations [1–16].

Methods In this single-center observational study, adults undergoing colonoscopy were included. Overall, 160 patients received Colon Wash and 250 received standard oral low-volume osmotic preparations. After 1:1 nearest-neighbor propensity score matching for age, sex, BMI, abdominal surgery, and performance status, 150 patients per group were analyzed. Bowel cleansing quality was assessed using the Boston Bowel Preparation Scale (BBPS). Adequate preparation was defined as a total BBPS ≥ 6 with ≥ 2 in all segments.

Results Adequate bowel cleansing was achieved in 86% of Colon Wash patients and 88% of those receiving standard oral low-volume osmotic preparations ($p = 0.732$). Colon Wash was associated with significantly fewer preparation-related side effects (0% vs. 22%, $p < 0.001$) and a higher cecal intubation rate (100% vs. 92%, $p < 0.001$). No complications occurred in the Colon Wash group. Nausea was the most frequent adverse event with standard oral low-volume osmotic preparations (22%).

Conclusions Colon Wash provided comparable efficacy and superior tolerability versus standard oral low-volume osmotic preparations. It represents a valid alternative for bowel cleansing and warrants consideration for wider clinical adoption.

Conflicts of Interest A. Repici is a consultant for Boston Scientific and has received consulting fees from Fujifilm Co., Medtronic Co., and Olympus Corp. B. Mangiavillano is a consultant for Taewoong Co. Hassan has received consulting fees from Fujifilm Co. and Medtronic Co. M. Spadaccini is a consultant for Boston Scientific and honorarium speaking for Olympus Corp

References

- [1] Dong MH, Kalmaz D, Savides TJ. Missed work related to mid-week screening colonoscopy. *Dig Dis Sci* 2011; 56: 2114–9. doi:10.1007/s10620-010-1545-2
- [2] Fuccio L, Collatuzzo G, Frazzoni L et al. Impact of colonoscopy on working productivity: a prospective multicenter observational study. *Gastrointestinal Endoscopy* 2022; 95: 550–561.e8. doi:10.1016/j.gie.2021.11.039
- [3] Kingston-Smith H, Gunaratne AW, Saxon J et al. A Comparative Clinical Study of a Novel Pre-colonoscopy Bowel Capsule Preparation Against Two Commercially Available Liquid Preparations. *Front Med Technol* 2021; 2: 622252. doi:10.3389/fmedt.2020.622252
- [4] Strauss AT, Yeh J, Martinez DA et al. A patient-centered framework for health systems engineering in gastroenterology: improving inpatient colonoscopy bowel preparation. *BMC Gastroenterol* 2021; 21: 89. doi:10.1186/s12876-021-01661-4
- [5] Chambers K, Whiteman K, Stephens K, Goodloe L, Kirsteen H. Improving Inpatient Colonoscopy Preparation in a University Hospital: An Evidence-Based Practice Project. *Gastroenterology Nursing* 2016; 39: 86–94. doi:10.1097/SGA.0000000000000205
- [6] Keswani RN, Crockett SD, Calderwood AH. AGA Clinical Practice Update on Strategies to Improve Quality of Screening and Surveillance Colonoscopy: Expert Review. *Gastroenterology* 2021; 161: 701–11. doi:10.1053/j.gastro.2021.05.041
- [7] Kaminski M, Thomas-Gibson S, Bugajski M et al. Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2017; 49: 378–97. doi:10.1055/s-0043-103411
- [8] Anderson JC. Use of Total Underwater Colonoscopy to Navigate Endoscopic Challenges. *Clinical Gastroenterology and Hepatology* 2020; 18: 1427–30. doi:10.1016/j.cgh.2020.02.042
- [9] Scaffidi MA, Grover SC, Carnahan H et al. Impact of experience on self-assessment accuracy of clinical colonoscopy competence. *Gastrointestinal Endoscopy* 2018; 87: 827–836.e2. doi:10.1016/j.gie.2017.10.040
- [10] Pullens HJ. Quality indicators for colonoscopy: Current insights and caveats. *WJGE* 2014; 6: 571. doi:10.4253/wjge.v6.i12.571
- [11] Baile-Maxia S, Amlani B, Martínez RJ. Bowel-cleansing efficacy of the 1L polyethylene glycol-based bowel preparation NER1006 (PLENVU) in patient subgroups in two phase III trials. *Therap Adv Gastroenterol* 2021; 14: 17562848211020286. doi:10.1177/17562848211020286
- [12] Ahmad A, Marshall S, Bassett P, Thiruvilangam K, Dhillion A, Saunders BP. Evaluation of bowel preparation regimens for colonoscopy including a novel low volume regimen (Plenvu): CLEANSE study. *BMJ Open Gastroenterol* 2023; 10:e001070. doi:10.1136/bmjgast-2022-001070
- [13] Hassan C, East J, Radaelli F et al. Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2019. *Endoscopy* 2019; 51: 775–94. doi:10.1055/a-0959-0505
- [14] Jacobson BC, Anderson JC, Burke CA et al. Optimizing Bowel Preparation Quality for Colonoscopy: Consensus Recommendations by the US Multi-Society Task Force on Colorectal Cancer. *Am J Gastroenterol* 2025; 120: 738–64. doi:10.14309/ajg.00000000000003287
- [15] Hassan C, Bretthauer M, Kaminski M et al. Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2013; 45: 142–55. doi:10.1055/s-0032-1326186
- [16] Sharma P, Burke CA, Johnson DA, Cash BD. The importance of colonoscopy bowel preparation for the detection of colorectal lesions and colorectal cancer prevention. *Endosc Int Open* 2020; 08: E673–83. doi:10.1055/a-1127-3144

eP950 **Blinded full-thickness histopathological analysis of gastric fibrosis in endoscopic sleeve gastroplasty vs laparoscopic sleeve gastrectomy**

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DOI 10.1055/s-0046-1822302

Aims The primary objective of this study was to histologically validate the assumption that Endoscopic Sleeve Gastroplasty (ESG) induces full-thickness scarring and long-term fibrosis similar to surgical Sleeve Gastrectomy (SG). While Laparoscopic Sleeve Gastrectomy (LSG) creates a high-pressure system via irreversible anatomical restriction, recent physiological data suggest ESG functions as a compliance-sparing "low-pressure" system that preserves esophageal motility. Consequently, we hypothesized that the restrictive mechanism of ESG relies on delayed emptying rather than the structural rigidity seen in surgery. This study analyzed gastric wall fibrosis and muscular thickness in patients undergoing SG after previous ESG versus primary SG to determine if ESG induces the tissue remodeling necessary for permanent distensibility reduction (► **Table 1**).

► **Table 1**

Parameter ESG-SG Group (n = 11)	SG Group (n = 11)	P-value
Submucosal Fibrosis (Mean ± SD) 3.29 ± 1.21 mm	3.18 ± 1.37 mm	0.895 *
Submucosal Fibrosis (Median) 2.9 mm	3.3 mm	–
Muscularis Propria Thickness (Mean ± SD) 1.58 ± 0.63 mm	1.45 ± 0.48 mm	0.84
Fibrosis Extension (Pattern/Depth) Identical distribution Identical distribution 1.00†; *Mann–Whitney U test; †Fisher’s exact test		

Methods This study was designed as a blinded, comparative histopathological evaluation of gastric specimens. The study population consisted of patients undergoing rescue SG after a prior ESG (ESG-SG group) and a control group undergoing primary SG (SG group). All specimens were evaluated by a pathologist blinded to group allocation to ensure objective assessment. Key histological metrics included submucosal fibrosis thickness (mm), muscularis propria thickness (mm), and fibrosis extension (classified as submucosa only vs. submucosa + muscle). Statistical analysis included the Shapiro–Wilk test for normality, with group comparisons performed using Mann–Whitney tests, Welch t-tests, and Fisher’s exact test.

Results A total of twenty-two patients were included in the analysis (11 in the ESG-SG group and 11 in the SG group). The histopathological analysis revealed no significant structural differences between the two groups. Submucosal fibrosis thickness was comparable, with a negligible mean difference of +0.11 mm (95% CI –1.04 to +1.26 mm). Similarly, muscularis propria thickness did not differ significantly between groups (p = 0.84), and fibrosis extension patterns were identical (p = 1.00), showing no qualitative differences in depth or architecture.

Conclusions This blinded histopathological analysis demonstrates that gastric wall architecture after ESG does not exhibit increased submucosal fibrosis, greater muscular thickness, or deeper fibrosis extension compared to primary SG. These findings challenge the widespread assumption that ESG mimics the full-thickness scarring of surgical resection. Instead, the absence of structural stiffening supports the classification of ESG as a "low-pressure" system where clinical efficacy is likely driven by motility modulation (decelerated gastric emptying) rather than the irreversible reduction of distensibility characteristic of high-pressure surgical sleeves. This distinction positions ESG as a mechanistic entity separate from resection-based surgery, aligning with recent evidence of preserved esophageal physiology.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP951 **Duodenal ESD Achieves 100 % En-Bloc Resection with Zero Perforations: A 5-Year Western Experience**

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Aims Duodenal endoscopic submucosal dissection (ESD) is historically considered one of the highest-risk endoscopic resections in Western practice due to thin wall anatomy and high perforation rates reported in earlier studies. As a result, Western adoption remains limited. We aimed to evaluate the feasibility, safety, and oncologic performance of duodenal ESD compared with EMR over a 5-year period in a Western expert center.

Methods We retrospectively analyzed all non-ampullary duodenal lesions resected between 2019–2024. Patients were treated with EMR (n = 8) or ESD (n = 7). Demographics (age, sex, comorbidities), lesion size, D1–D3 location, morphology, and Vienna classification were recorded. Mean lesion size was comparable between EMR and ESD (31.0 vs 26.1 mm; p = 0.77). Sex distribution (62.5 % vs 57.1 % male) and comorbidities (62.5 % vs 42.8 %; p = 0.62) were similar, indicating no selection bias. Paris classification included predominantly superficial elevated (0-IIa) and flat mixed patterns (0-IIa/Is). Statistical analysis included Fisher’s exact test and Mann–Whitney U. Correlation between lesion size and en-bloc resection was assessed via Spearman’s coefficient. Procedural time could not be analyzed due to incomplete documentation.

Results ESD achieved 100 % en-bloc resection (7/7) compared with 42.8 % for EMR (p = 0.028). R0 resection rates were identical (83.3 %) when margins were assessable. Safety outcomes were excellent: no perforations (0 %), no delayed bleeding, and no patient required surgery. One immediate intraprocedural bleed occurred in the ESD group (14.2 %), successfully controlled endoscopically.

Critically, most ESDs were performed in D2 (6/7), the anatomically highest-risk duodenal segment. ESD achieved a 100 % en-bloc rate in D2, with zero perforations and zero delayed bleeding, demonstrating exceptional safety even in the most challenging location.

Paris classification contributed to meaningful selection differences. EMR was used mainly for superficial elevated 0-IIa or Is lesions suited for lifting–snare resection. ESD was preferentially used for flat or mixed 0-IIa/0-IIa + Is lesions, which traditionally carry higher risks of incomplete resection with standard EMR. Despite this, ESD maintained 100 % en-bloc across all Paris morphologies. Lesion size did not correlate with en-bloc success (Spearman ρ = –0.26, p = 0.34), indicating that ESD maintained stable technical performance across increasing lesion dimensions. Recurrence occurred in one ESD patient, while none was observed after EMR.

Patient factors (age, sex, comorbidities), lesion size, and anatomical location did not influence technique selection or outcomes, supporting the robustness of ESD performance in this cohort.

Conclusions In this 5-year Western cohort, duodenal ESD demonstrated perfect en-bloc performance and zero perforations, overturning long-standing concerns about duodenal ESD safety in Western practice. The ability to achieve 100 % en-bloc resection even in D2—while maintaining a 0 % perforation rate—represents a major technical achievement and aligns with high-quality Asian data. ESD should be strongly considered for large or complex non-ampullary duodenal lesions requiring definitive histologic assessment. EMR remains appropriate for small, low-risk lesions; however, for curative-intent resections, ESD offers clearly superior technical and oncologic performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP952 Diagnostic Utility Of Endoscopic Ultrasound Shear Wave Elastography In Predicting Chronic Pancreatitis

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DOI 10.1055/s-0046-1822304

Aims Progressive fibrosis in chronic pancreatitis (CP) alters the mechanical properties of the pancreatic parenchyma which results in increased tissue stiffness. Endoscopic ultrasound shear-wave elastography (EUS-SWE) quantifies pancreatic stiffness that may help distinguish fibrotic from normal pancreatic tissue. This prospective study aimed to compare pancreatic shear-wave velocity (Vs) and elasticity (E) values between patients with CP and individuals with a normal pancreas.

Methods In this single centred study of 7 months duration, 42 consecutive adults undergoing EUS for evaluation of CP or for non-pancreatic indications were enrolled. Participants were classified into a CP group (n = 20) based on imaging and tests of pancreatic insufficiency and a control group (n = 22) with normal pancreatic morphology. During EUS, Vs was measured in metres/second (m/s) and E in kilopascals (kPa) using the Olympus EUS ME3 system. Mean values were compared between groups, and diagnostic performance was assessed using receiver operating characteristic (ROC) analysis and statistical significance was considered with a p value less than 0.05.

Results The mean age of the CP group was 41.35 years and the control group was 43 years. Majority of the CP cases were males (n = 13). The mean Vs of the CP group was 2.46 ± 0.3 m/s which was significantly higher than that of the control group which was 1.89 ± 0.37 (p < 0.05). A Vs value of 2.2 m/s was 95 % sensitive and 82 % specific for predicting CP with area under ROC (AUROC) of 0.88. Similarly, mean E value of CP group 19.03 ± 1.59 kPa was also significantly higher than the control group which was 12.16 ± 5.30 kPa (p < 0.05). An E value of 17.5 kPa was 85 % sensitive and 82 % specific for predicting CP with AUROC of 0.87.

Conclusions In the present study EUS-SWE reliably distinguished chronic pancreatitis from normal pancreas by demonstrating significantly higher levels of tissue stiffness in CP thereby emphasising the role of EUS-SWE as a useful adjunctive tool for quantification of pancreatic fibrosis in patients of CP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP953 Endoscopic Ultrasound-Guided Fine Needle Biopsy of Solid Gastrointestinal Mass Lesions Using Cell Block Method Yields Equivalent Diagnostic Accuracy Compared to Core Biopsy with Macroscopic On-Site Evaluation

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DOI 10.1055/s-0046-1822305

Aims Despite the utility of rapid on-site cytological examination (ROSE) in Endoscopic Ultrasound-Guided Tissue Acquisition (EUS-TA), it is not uniformly performed in all centers because of limited availability. Macroscopic on-site examination (MOSE) is an alternative method that improves diagnostic ability depending on the visible whitish core length. Cell Block method is suitable for

evaluating histological architecture, immunostaining, and molecular studies. We evaluated diagnostic performance of MOSE with core biopsy and Cell Block method using core biopsy needles

Methods EUS guided Fine Needle Biopsy (FNB) was performed using cell block method and MOSE with core biopsy. The primary and secondary outcome measures were diagnostic accuracy, diagnostic yield, sensitivity, specificity, positive and negative predictive values, and the number of passes, respectively. The optimum length for macroscopic visible core (MVC) by MOSE to achieve accurate diagnosis was evaluated.

Results Ninety-six patients (48 cell block and 48 MOSE) were enrolled. Mean lesion size was larger in MOSE group (33.23 ± 24.35 mm vs 27.88 ± 12.32 mm P = 0.692). Diagnostic accuracy (93.75 %), diagnostic adequacy (79.17 %), sensitivity (92.68 % vs 92.86 %), specificity (100 %), positive predictive value (100 %), negative predictive value (70 % vs 66.67 % P = 0.612) of the two methods were similar. Mean number of needle passes in MOSE was significantly lower (1.77 vs 2.44, p value < 0.001). Mean core length in MOSE group was 12.31 mm ± 7.67 mm. Area under receiver operating characteristic curve analysis showed that core length of ≥ 5 mm gives a high sensitivity (93 %) for specific diagnosis. Immunohistochemistry results were also obtained in both the groups when required (12.5 % in MOSE group vs 18.75 % in Cell Block group, P = 0.399).

Conclusions Cell block and MOSE method in EUS FNB both yields comparable results but number of passes required are less in MOSE group. Obtaining longer core length increase sensitivity for specific diagnosis in MOSE group. If adequate core can't be obtained, cell block method also gives comparable results. Besides, it also useful for preserving architectural composition and for immunohistochemistry studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP954 Hidden barriers in endoscopy training: experiences of discrimination among gastroenterologists in Germany

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DOI 10.1055/s-0046-1822306

Aims Gastroenterology in Germany increasingly relies on physicians with a migration background, many of whom are actively involved in endoscopy. In a nationwide survey among members of the German Society of Gastroenterology (DGVS), over 90 % of gastroenterologists with and without migration background reported at least one incident of hostility within 24 months; first-generation migrant physicians showed higher cumulative exposure and more often changed workplace because of these experiences, while still reporting high work-related thriving. Quantitative data, however, provide limited insight into how such hostility and discrimination translate into everyday clinical routines, hierarchical training structures and access to endoscopy training. This qualitative study aimed to explore how gastroenterologists perceive and interpret racism and discrimination in their professional lives, with a specific focus on hidden barriers in endoscopy training and career development.

Methods We analysed free-text responses from a nationwide, anonymous online survey among members of the German Society of Gastroenterology (DGVS). In addition to standardised items on work-related well-being, hostility and migration background, participants were invited to describe experienc-

es and views on racism and discrimination in open comment fields. Two researchers conducted a reflexive thematic analysis following Braun and Clarke, iteratively generating and refining themes and comparing narratives from respondents with and without a migration background.

Results Five themes were identified: (1) Interpersonal sources of workplace discrimination – including racist harassment, devaluation and questioning of competence by superiors, colleagues, patients and relatives; (2) Feeling left behind in training – perceived systematic disadvantage of physicians with migration background in access to endoscopy training, supervised procedures and promotion; (3) Intersecting identities – overlapping effects of migration background, gender, skin colour and visible religiosity, particularly in patient-facing endoscopy settings; (4) Perceived irrelevance and externalisation – voices that downplayed racism as a professional issue or shifted responsibility to “others”; and (5) Strategies for a fair training culture – calls for transparent, competency-based allocation of endoscopy training, clear institutional positions against discrimination and low-threshold, preferably anonymous reporting structures.

Conclusions Discrimination and hostility are experienced as hidden structural barriers within endoscopy training and career progression, especially for physicians with a migration background. Addressing these barriers through transparent training pathways and organisational accountability is likely essential for workforce retention, team functioning and high-quality endoscopic care. Professional societies such as ESGE and DGVS can play a key role in defining and promoting inclusive endoscopy training standards.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP955 Pneumatic Dilation for Primary Achalasia: Clinical Effectiveness at 12 Months

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DOI 10.1055/s-0046-1822307

Aims Despite major endoscopic advances in the treatment of primary achalasia, particularly with peroral endoscopic myotomy (POEM), pneumatic dilation remains an important therapeutic option. Assessing its real-life outcomes in local clinical practice is essential to optimize patient management [1, 2]. The aim of this study was to evaluate the clinical results of pneumatic dilation in primary achalasia.

Methods Prospective single-center study including patients with confirmed primary achalasia and Eckardt score > 3, treated with 30-mm pneumatic balloon dilation between January 2023 and September 2024. Clinical follow-up was performed at 2 weeks, 1, 3, 6, and 12 months. Additional dilation sessions were performed for persistent symptoms (Eckardt score > 3). Treatment success was defined as clinical remission (Eckardt score < 3) without need for POEM or surgery at one year.

Results Twenty-eight patients were included (mean age 51 years, range 17–79; M/F = 0.4). Achalasia type: I (n = 24), II (n = 3), III (n = 1). Twelve patients (44%) achieved remission after a single session, 7 (26%) after two sessions, and 8 (30%) after three sessions. At one year, 21 patients (75%) were in clinical remission. One patient required surgery, and two underwent POEM. One esophageal perforation occurred; no other major complications were reported.

Conclusions In our single-center experience, pneumatic dilation with a 30-mm balloon proved to be an effective and safe method for treating primary achalasia, achieving clinical remission in nearly three-quarters of patients at one year.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ciomperlik H, Dhanani NH, Mohr C, Hannon C, Olavarria OA, Holihan JL, Liang MK. Systematic Review of Treatment of Patients with Achalasia: Heller Myotomy, Pneumatic Dilation, and Peroral Endoscopic Myotomy. *J Am Coll Surg.* 2023; 236 (3): 523–532. doi:10.1097/XCS.0000000000000484 Epub 2022 Nov 16 PMID: 36382896

[2] Van Hoeij FB, Prins LI, Smout AJPM, Bredenoord AJ. Efficacy and safety of pneumatic dilation in achalasia: A systematic review and meta-analysis. *Neurogastroenterol Motil.* 2019; 31 (7): e13548. doi:10.1111/nmo.13548 Epub 2019 Jan 30 PMID: 30697952 PMID: PMC6849773

eP956 Three-year experience with EUS-guided cystogastrostomy at a tertiary referral center: a retrospective cohort study

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DOI 10.1055/s-0046-1822308

Aims Endoscopic ultrasound (EUS)-guided cystogastrostomy is a key minimally invasive approach for treating pancreatic fluid collections (PFCs), offering high success rates with lower morbidity than surgery. While lumen-apposing metal stents (LAMS) have become widely used—particularly for walled-off necrosis—double pigtail plastic stents (DPPS) remain a safe, cost-effective option, especially for uncomplicated pseudocysts requiring simple drainage. Despite their broad use, real-world outcome data on DPPS remain variable, and evidence from Central and Eastern Europe is limited.

This study aimed to assess the real-world performance of EUS-guided cystogastrostomy using DPPS over a nearly three-year period at a high-volume tertiary pancreatic center.

Methods We conducted a retrospective review of all EUS-guided cystogastrostomy procedures performed with DPPS at our institution between November 2022 and July 2025. Data were collected from electronic medical records and endoscopy reports, including patient demographics, indications, cyst characteristics, procedural steps, stent size and number, and peri-procedural details. Technical success, clinical outcomes, and procedure-related adverse events were assessed according to standard definitions. All variables were analyzed using descriptive statistics.

Results A total of 50 EUS-guided cystogastrostomy procedures were performed during the study period. Most interventions (48/50) targeted pancreatic fluid collections, while 2 were performed for duodenal collections. The cohort included 58% male patients with a mean age of 56 years. The mean procedure time was 33 minutes. Cyst puncture was performed using a 19G fine-needle aspiration needle, followed by tract dilation with either an 8.5 Fr or 10 Fr cystotome. DPPS (8.5–10 Fr, 2–10 cm) were placed in all cases; two stents were inserted in 6 procedures. Cyst size data were available for 32 patients, the majority of whom had collections measuring > 6 cm.

Technical success was achieved in 48 of 50 cases (96%). Clinical improvement was observed in most successfully treated patients during follow-up. Four procedure-related adverse events occurred: one perforation requiring urgent surgical management and three bleeding events, all of which were managed endoscopically without further intervention.

Conclusions EUS-guided cystogastrostomy with DPPS proved to be feasible and effective, with high technical success and an acceptable safety profile. While LAMS may be beneficial in more complex cases, our results support DPPS as a cost-effective and reliable option for uncomplicated PFCs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP957 Endoscopic Cystgastrostomy with Lumen Apposing Metal Stents and Necrosectomy for Large Pancreatic Walled off Necrosis – A UK District General Hospital Experience

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DOI 10.1055/s-0046-1822309

Aims Endoscopic Cystgastrostomy and Necrosectomy with Lumen Apposing Metal Stents (LAMS) for Large Pancreatic Walled Off Necrosis: A UK District General Hospital Experience

Methods This retrospective study was conducted at a district general hospital in South London between October 2024 and October 2025. Patients with large WON (≥ 10 cm) were identified and reviewed. Management consisted of endoscopic cystgastrostomy using LAMS, followed by endoscopic necrosectomy when required. Data collected included demographics, aetiology of pancreatitis, indications for drainage, procedural outcomes, complications, and recurrence. Continuous variables were summarised using mean, median, and range; categorical variables were expressed as frequencies and percentages. Ethical approval was obtained from the local institutional review board, and all data were anonymised [1, 2].

Results 10 patients were included (mean age 51.8 years; range 22–66 years; 7 males, 3 females). The predominant causes of pancreatitis were alcohol related (50%) and gallstone pancreatitis (30%), with autoimmune and post ERCP pancreatitis each accounting for 10%. Pseudocyst/WON size on initial CT ranged from 10 to 20 cm (median 15 cm; mean 15.4 cm).

Drainage was indicated primarily for sepsis (90%) and less commonly for abdominal pain (10%). Clinical success was achieved in all cases (100%), with a technical success rate of 90%. Complications occurred in 20% of patients, mainly stent migration; no bleeding or severe infections were observed. One patient experienced recurrence of fluid collection 8 weeks after stent removal (5 cm in diameter).

Three patients (30%) required endoscopic necrosectomy, with a mean of 2.7 sessions and a median of 2 sessions among those treated. While most patients did not require necrosectomy, those who did typically needed 2–3 sessions. WON resolution ranged from 8 to 32 weeks (median 14 weeks; mean 16.2 weeks). LAMS sizes used were 15 × 10 mm in 70% of cases and 20 × 10 mm in 30%. Double pigtail stents were used in 30% of patients.

Conclusions Endoscopic cystgastrostomy with LAMS, supplemented by endoscopic necrosectomy when required, is a safe and effective treatment for large pancreatic walled off necrosis and pseudocysts (≥ 10 cm), even in a district general hospital setting. This approach demonstrated high clinical and technical success rates with positive patient outcomes. Careful patient selection standardised follow up with imaging and outpatient review, and timely targeted endoscopic therapy are essential to optimise outcomes and sustain long term resolution.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] The role of endoscopy in the diagnosis and treatment of inflammatory pancreatic fluid collections. . doi:10.1016/j.gie.2015.11.027
- [2] Endoscopic tissue sampling – Part 1: Upper gastrointestinal and hepatopancreatobiliary tracts. European Society of Gastrointestinal Endoscopy (ESGE) Guideline. doi:10.1055/a-1611-5091 Endoscopy 2021; 53:

eP958 Romanian Colorectal Cancer Screening Insights: Quality Metrics from 1038 Colonoscopies in the South Muntenia Region Pilot Program

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DOI 10.1055/s-0046-1822310

Aims Population-based Colorectal cancer (CRC) screening using faecal immunochemical testing (FIT) followed by colonoscopy is recommended across the EU. Romania initiated the ROCCAS program in 2019, with pilot implementation in four administrative regions. Our aim was to evaluate the quality metrics and key performance indicators (KPIs) of the ROCCAS pilot program in the South Muntenia region.

Methods A cohort of 50,000 average-risk individuals aged 50–74 years was invited between January 2021–December 2023. Screening was based on biennial FIT (positivity ≥ 20 µg/g). FIT-positive participants were invited for colonoscopy at the regional screening centre. Prospectively collected registry data were analysed. Multivariable logistic regression was used to identify predictors of adenoma, advanced adenoma (AA), sessile serrated lesion (SSL), and CRC detection.

Results : FIT completion rate was 89%, with 6% positivity (n = 2576). Colonoscopy uptake was 40% (n = 1038). Caecal intubation (96%) and adenoma detection (55%) exceeded international benchmarks. Advanced adenomas and CRC together represented 38% of detected lesions. Multivariable analysis showed male sex predicted adenoma (OR 2.72, 95%CI 2.11–3.51) and AA detection (OR 1.85, 95%CI 1.41–2.44), while female sex was associated with right-sided SSLs (OR 0.34, 95%CI 0.14–0.81). FIT values correlated with lesion severity and independently predicted CRC (aOR 1.53 per 100 µg/g, p < .001). CRC was diagnosed in 11% (n = 114) of scoped individuals. Colonoscopy waiting time was above recommended limits, and uptake was lower than expected.

Conclusions The ROCCAS pilot demonstrated high-quality colonoscopy performance and clinically relevant detection rates. However, colonoscopy participation requires significant improvement before national roll-out. Awareness campaigns, and tailored communication strategies could optimize program effectiveness.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP959 From Incidental Finding to Diagnosis: EUS-FNB Identifies a Rare CoGNET

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DOI 10.1055/s-0046-1822311

Background: Composite gangliocytoma/neuroma and neuroendocrine tumor (CoGNET) is a rare neoplasm typically arising in the second portion of the duodenum. [1, 2] Its occurrence in young adults and its association with pancreatic anatomical variants are poorly documented. We report the case of a young woman with Neurofibromatosis type I (NF1), pancreas divisum, and recurrent pancreatitis who was incidentally found to have a duodenal CoGNET.

Case Presentation: A 22-year-old woman with NF1 had been followed for recurrent acute pancreatitis. Secretin-enhanced MRCP demonstrated pancreas divisum, and she underwent multiple ERCPs.

Serial imaging years later showed a mildly dilated but stable dorsal duct with features of chronic pancreatitis and no focal lesions. Follow-up contrast-enhanced MRI revealed the new onset of a well-circumscribed, hypervascular solid nodule (23 × 25 mm) between the pancreatic uncinate process and the third duodenal portion.

Endoscopic ultrasound confirmed a 25-mm oval, hypoechoic, hypervascular lesion on eFlow, showing a distinct compressive effect on the uncinate process on endosonographic evaluation and mild endoluminal deformity on endoscopic inspections. EUS-guided fine-needle biopsy was performed using a 22-gauge needle with three passes. Histopathologic analysis demonstrated a well-differ-

entiated neuroendocrine neoplasm with mixed spindle–epithelioid morphology and strong SST2A expression, consistent with a CoGNET.

Discussion: CoGNET is an uncommon entity with very few cases reported, and nearly all published diagnoses have historically been made on surgical specimens. Its coexistence with pancreas divisum and NF1 has not previously been described. Importantly, the role of EUS-guided tissue acquisition in diagnosing CoGNET is virtually absent from current literature, with no dedicated studies or standardized criteria. This case highlights that EUS-FNB may represent a valuable, under-recognized tool for early diagnosis of CoGNET.

Conclusion: This case illustrates a rare duodenal CoGNET identified incidentally during long-term follow-up for chronic pancreatitis in a young woman with NF1 and pancreas divisum. The effective use of EUS-guided FNB to obtain a definitive histologic diagnosis underscores a diagnostic pathway largely absent from the current literature. Increasing awareness of this entity and recognition of its key EUS and FNB characteristics can significantly influence clinical decision-making, surgical planning, and long-term outcomes.

Conflicts of Interest Ivo Boskoski is a consultant for Apollo Endosurgery, Boston Scientific, Nitinotes, Pentax, Cook Medical, Microtech, ERBE, Siemens, Myka labs and Endo Tools Therapeutics S.A., gives sponsored lectures for Apollo Endosurgery, Boston Scientific, Cook Medical and Microtech, is the recipient of research grants from Apollo Endosurgery, Endo Tool Therapeutics, and ERBE, and is on the scientific advisory boards of Nitinotes and Myka labs. All other authors declare no conflicts of interest. Cristiano Spada is a consultant for Medtronic and AnX Robotics and has received speaker's fees from Olympus and Pentax.

References

- [1] Zhang ML, Meredith DM, Bellizzi AM et al. Composite gangliocytoma/neuroma and neuroendocrine tumor: a clinicopathologic, immunohistochemical, and molecular genetic study of 11 cases. *Virchows Arch*. Published online 2025. doi:10.1007/s00428-025-04167-6
- [2] Zhang ML, Meredith DM, Bellizzi AM, Nowak JA, Papke DJ Jr. Composite gangliocytoma/neuroma and neuroendocrine tumor: a clinicopathologic, immunohistochemical, and molecular genetic study of 11 cases. *Virchows Arch*. Published online 2025. doi:10.1007/s00428-025-04167-6

eP960 Endoluminal vacuum-assisted therapy for colorectal anastomotic leaks: early intervention drives success

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DOI 10.1055/s-0046-1822312

Aims Anastomotic leak represents an important complication following colorectal resection (3–19% frequency) with a mortality rate varying from 1.7% to 16.4%. The endoluminal vacuum-assisted therapy (EVT) was introduced to treat presacral anastomotic abscesses. The principle is based on the application of negative pressure to drain, to clean, to induce granulation tissue and to prevent the development of chronic sinus [1–3].

Methods Between January 2023 and November 2025, 11 patients with anastomotic leakage following low anterior resection were treated with EVT. We investigated potential factors related to the development of clean leading to cavity closure.

Results Colorectal anastomoses were located at a variable distance from the anal verge, ranging from 3 to 5 cm. All patients had a diverting ileostomy. The diagnosis of leakage was performed after a median interval of 2 weeks, the median size of the cavity was 8 cm.

The median duration of therapy was 35 days with a mean number of 10 EVT replacements.

No complications were recorded.

Interval between the diagnosis of the complication and the start of EVT is the main determinant of outcome, with a strong negative correlation with complete

orifice closure ($r = -0.886$, $p < 0.001$). Age, BMI, distance from the anal verge, cavity length, and number of sponge replacements exhibited weak correlations. A slight positive correlation was observed between initial orifice diameter ($r = +0.266$, $p < 0.05$).

Conclusions EVT seems an effective, minimally invasive procedure to treat anastomotic leakage. The treatment timeliness is crucial for achieving complete closure, underscoring the importance of an early approach of leaks.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Abdalla S, Cotte E, Epin A, Karoui M, Lefevre JH, Berger A et al. Short-term and long-term outcome of endoluminal vacuum therapy for colorectal or coloanal anastomotic leakage: results of a nationwide multicenter cohort study from the French GRECCAR group. *Dis Colon Rectum* 2020; 63 (3): 371–380
- [2] de Lacy FB, Talboom K, Roodbeen SX, Blok R, Curell A, Tanis PJ, Bemelman WA, Hompes R. Endoscopic vacuum therapy and early surgical closure after pelvic anastomotic leak: meta-analysis of bowel continuity rates. *Br J Surg* 2022; 109 (9): 822–831
- [3] Shalaby M, Emile S, Elfeki H, Sakr A, Wexner SD, Sileri P. Systematic review of endoluminal vacuum-assisted therapy as salvage treatment for rectal anastomotic leakage. *BJS Open* 2019; 3 (2): 153–160

eP961V A cecal lesion hiding a secret: Underwater EMR revealed an occult appendiceal neuroendocrine tumor

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DOI 10.1055/s-0046-1822313

Abstract Text

A 49-year-old woman with a family history of colorectal cancer underwent screening colonoscopy, which revealed a 35 mm non-granular laterally spreading tumor (LST-NG) in the cecal fundus. Owing to her previous appendectomy, underwater-EMR was scheduled. After resection, another lesion emerged through the appendiceal stump, prompting us to opt for full-thickness resection (FTR). Post-resection histology unexpectedly identified a high-grade neuroendocrine neoplasm (NEN) with characteristics of large-cell neuroendocrine carcinoma (LCNEN), Ki67 > 60%, and pT1 in the appendiceal stump. The cecal lesion was a sessile serrated lesion with intramucosal low-grade adenocarcinoma foci. Endoscopic resection achieved R0. Right hemicolectomy was performed, and no evidence of nodal metastases was observed. After radical surgical treatment, patient started adjuvant therapy with somatostatin analogs.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/6c90d0e1-02de-4044-8df2-836368a838b5/Uploads/19978_ESGE_DEF_SCHEPIS_.mp4

Conflicts of Interest No conflict of interest to declare

eP962V Treatment of Colonic Varices by Multimodal Therapy on Colonoscopy

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DOI 10.1055/s-0046-1822314

Abstract Text

65 year old female with steatosis associated cirrhosis of liver on beta blockers for primary prophylaxis for non bleeding small esophageal varices. She presented with painless hematochezia. After initial fluid resuscitation, intravenous terlipressin and antibiotics and blood transfusion, upper endoscopy revealed small esophageal varices with normal stomach. Colonoscopy done after bowel preparation showed a large colonic varix in the transverse colon with signs of recent hemorrhage. Glue was injected in 2 aliquots (1.5 ml each time) using

sclerotherapy needle. Immediately after withdrawal of needle, bleeding started from the varix. 2 Hemoclips were applied on the bleeding colonic varix to achieve hemostasis. Post procedure, she recovered gradually with medical management with no recurrence. Followup colonoscopy done after 3 months showed resolution of varix (Video 1)

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/e67bb936-c578-4366-a928-86db6e42acc/Uploads/19978_colonic_varices%20video.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP963 Complete Remission of Neoplasia After Endoscopic Therapy for Barrett's-Related Dysplasia and Early Esophageal Adenocarcinoma : A Retrospective Analysis

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DOI 10.1055/s-0046-1822315

Aims The current standard Endoscopic Therapy (ET) for Visible Dysplastic Lesions (VDL) and Early Adenocarcinoma (EAC) in Barrett's Esophagus (BE) is Submucosal Dissection (ESD) or Mucosal Resection (EMR) followed by Radiofrequency Ablation (RFA). However, data on long-term Complete Remission of Neoplasia (CRN) after radical endoscopic resection (R0 – defined as free deep margin) are limited [1–3].

CRN is defined as the complete absence of endoscopic and histological evidence of dysplasia/EAC after ET during the follow up.

Recent studies indicate a substantial long-term risk of neoplastic recurrence, necessitating indefinite surveillance for patients previously treated for High-Grade Dysplasia (HGD) or EAC.

The study aim was to assess the long-term dysplasia/EAC recurrence rate after achieving CRN with ET.

Methods From 2019 to November 2025 (median follow-up 24 months, range 9–74 months), 29 consecutive patients (25 M, 4 F) underwent ET for VDL or EAC in BE. Data on the baseline characteristics of BE and arising lesions, the endoscopic techniques employed and the post-resection histopathological findings were analyzed, along with the number of recurrences during the follow-up according to endoscopic European BE's guidelines.

Results Among the 29 patients, 16 had EAC, 13 had VDL (8 Low-Grade Dysplasia – LGD; 5 High-Grade-Dysplasia – HGD). ESD was performed in 12 cases and EMR in 17 cases. En-bloc R0 resection was achieved in 28/29 of procedures (96.5%). The endoscopic resection wasn't curative in 2 patients: one for a positive deep resection margin and the other for lymphovascular invasion and poorly differentiated EAC. The first patient underwent surgery with histopathological evidence of EAC, the second oncological treatment for age and comorbidities. 27 patients with R0 endoscopic resection underwent to follow up. At first endoscopic follow-up before RFA, one EAC visible lesion was detected (metachronous EAC?) and 4 invisible dysplastic lesions (3 LGD, 1 HGD) at random biopsies. The patient with metachronous EAC underwent surgery.

Two local recurrences of early cancer developed on previous positive lateral margin at first endoscopic resection were detected. One patient was managed with radical surgery and the second with another EMR.

Excluding the two patients who required surgery after non curative endoscopic resection and other two patients who underwent surgery for disease recurrence unfit for ET, CRN rate was achieved in 25/27 patients (92.6%).

Conclusions These preliminary data, according to the last European Endoscopic BE's guidelines, confirm ET as an effective treatment option for VDL and EAC on BE with a high mid-term CRN rate either as first line or as a rescue strategy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Löfdahl P, Edebo A, Wolving M, Bratlie SO. Endoscopic Resections for Barrett's Neoplasia: A Long-Term, Single-Center Follow-Up Study. *Medicina (Kaunas)*. 2024; 60 (7): 1074. doi:10.3390/medicina60071074 PMID: 39064503 PMID: PMC11278854
- [2] Weusten BLAM, Bisschops R, Dinis-Ribeiro M, di Pietro M, Pech O, Spaander MCW, Baldaque-Silva F, Barret M, Coron E, Fernández-Esparrach G, Fitzgerald RC, Jansen M, Jovani M, Marques-de-Sa I, Rattan A, Tan WK, Verheij EPD, Zellenrath PA, Triantafyllou K, Pouw RE. Diagnosis and management of Barrett esophagus: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2023; 55 (12): 1124–1146. doi:10.1055/a-2176-2440 Epub 2023 Oct 9 PMID: 37813356
- [3] Fujiyoshi Y, Khalaf K, Tham D, Fujiyoshi MRA, Streutker CJ, Calo NC, Mosko JD, May GR, Marcon NE, Teshima CW. Endoscopic mucosal resection for Barrett's neoplasia: Long-term outcomes from the largest Canadian single-center experience. *Endosc Int Open* 2025; 13:a26028961. doi:10.1055/a-2602-8961 PMID: 40611834 PMID: PMC12223934

eP964 Advancing Paediatric Care in Gastroenterology: Role of Endoscopic Ultrasound in Paediatrics at a Referral Center in Pakistan

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DOI 10.1055/s-0046-1822316

Aims Endoscopic ultrasound (EUS) emerged as a revolutionary intervention, serving both diagnostic and therapeutic purposes for more than four decades among adult patients, however utility in paediatric patients remained limited due to EUS endoscope design e.g. rigidity, diameter, traumatic distal tip, furthermore complicated by need of Monitored Anesthesia Care (MAC) or General Anesthesia (GA). Fewer studies with smaller data have been conducted for EUS effectiveness and safety among children. This article aims to describe the utility of EUS for diagnostic and therapeutic purposes among children at one of the largest referral endoscopy units in Pakistan [1, 2].

Methods Retrospective analysis of EUS for patients ≤ 18 years of age, performed at single referral endoscopy center over 18 years, from 2007 to 2024. Data was collected from the institute's database.

Results All the procedures were performed by endoscopist who bear certified training of endoscopic ultrasound. Linear array Echoendoscope and Radial Echoendoscopes were used. A total of 124 patients ≤ 18 years age had EUS, the youngest was 5 years old with mean age of 14.75 ± 3.21 years. 54% were male gender. Primary indications for EUS examination included: 18 chronic pancreatitis, 38 pancreatic pseudocyst, 12 pancreatic mass, 4 suspected choledochal cyst, 7 patients with abdominal lymph nodes, 2 retroperitoneal lesions and 1 lesser sac lesion, 21 gastrointestinal tract lesions., 90 EUS were performed for diagnostic purpose, 17 patients underwent FNB and 4 underwent FNA. Among Therapeutic EUS, 23 patients underwent EUS guided pseudocyst drainage, 2 patients underwent celiac plexus block referred for pain management of chronic pancreatitis, one patient underwent EUS guided pancreatic duct cannulation with stent placement and one patient underwent EUS guided anterograde rendezvous' technique- choledocoduodenostomy for choledochal cyst. All therapeutic procedures were performed under general anesthesia whereas diagnostic EUS were performed under monitored anesthesia care. No immediate or early complications were seen.

Conclusions In this modern era of advanced diagnostic tools and minimally invasive interventions, EUS related procedures are safe and effective in pediatric group of patients too. However, this procedure should be performed at specialized centers with experienced pediatric anesthesia team.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Thomson M., Tringali A., Dumonceau J.-M., Tavares M., Tabbers M.M., Furlano R., Spaander M., Hassan C., Tzvinikos C., Ijsselstijn H., Viala J., Dall'Oglio L., Benninga M., Orel R., Vandenplas Y., Keil R., Romano C., Brownstone E., Hlava Š., Gerner P., Dolak W., Landi R., Huber W.D., Everett S., Vecsei A., Aabakken L., Amil-Dias J., Zambelli A. 2017; Paediatric Gastrointestinal Endoscopy. *Journal of Pediatric Gastroenterology and Nutrition* 64: 133–153. doi:10.1097/MPG.0000000000001408
- [2] Eugene P., Dimagno, Patrick T., Regan, David A., Wilson, James L., Buxton, Robert R., Hattery, Jose R., Suarez, Phillip S., Green. ULTRASONIC ENDOSCOPE. *The Lancet* Volume 315 (Issue 8169): 1980; 629–631. ISSN 0140-6736. doi:10.1016/S0140-6736(80)91122-8. <https://www.sciencedirect.com/science/article/pii/S0140673680911228>

eP965 A retrospective single-centre analysis of investigations and management of checkpoint inhibitor colitis

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DOI 10.1055/s-0046-1822317

Aims Checkpoint inhibitor colitis (CIC) is considered to be the most severe adverse effect for patients on immune checkpoint inhibitor (ICI) medications and is the most common cause for discontinuing immunotherapy. However, there is a scarcity in the literature on its investigations and management [1].

Methods All patients at a large district general hospital receiving ICI medications were screened between 01/01/24 – 31/12/24 for CIC. Baseline demographics, cancer diagnosis, and gastroenterology investigations and treatment variables were collected. A p-value <0.05 was considered statistically significant.

Results Of 424 patients that received ICI medications, 67 (16%) patients with CIC were identified. The median time from ICI to CIC was 88 days (IQR 59–214). The most common immunotherapy treatment were phosphodiesterase-1 inhibitors (49.3%).

Cancer treatment common adverse events (CTCAE) grades 1-3 for colitis was 48.2%, 16.1% and 35.7%, respectively. Thirty-two patients (48%) required treatment with steroids, whilst the remainder settled with supportive measures only. In patients with grade 3 colitis, 90% required steroid treatment compared to 11.1% with grade 1 (p<0.001). Of patients requiring steroids, 19% required biologic treatment, all of whom were CTCAE grade 3 for colitis (p=0.001). Twenty-three (34%) patients underwent endoscopic evaluation. Erythema was the most common endoscopic finding in 57% of patients, with 42% requiring biologics compared to 0% without erythema (p=0.027). Histologically, 9 patients had acute inflammation, 6 increased apoptosis and 6 crypt distortion with other features including collagenous colitis seen less commonly. Increased apoptosis was associated with the most significant risk factor for requiring biologics (50% versus 11.8% without, p=0.051).

Conclusions Our data demonstrates that patients with CTCAE grade 1-2 settle either spontaneously or with steroid treatment. Endoscopic findings of erythema and histological findings of increased apoptosis were associated with the need for biologic initiation. Further work is needed to explore treatment efficacy and treatment prophylaxis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dougan M et al. AGA Clinical Practice Update on Diagnosis and Management of Immune Checkpoint Inhibitor Colitis and Hepatitis: Expert Review Gastroenterology. Volume 160 (Issue 4): 1384–1393

eP966V Unusual Cause of Upper Gastrointestinal Bleeding

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DOI 10.1055/s-0046-1822318

Abstract Text

58 year old male patient presented with hematemesis. He was suffering from systemic hypertension, dyslipidemia. After initial resuscitation, intravenous fluids, pantoprazole infusion and blood transfusion, he underwent upper endoscopy, which showed an ulcer in the posterior wall of the esophagus with unhealthy margins and fresh blood noted in the lumen. A CT aortogram showed contrast extravasation from descending thoracic aorta into esophageal lumen confirming presence of aorto-esophageal fistula. He underwent catheter aortogram which showed contrast leak in the descending thoracic esophagus into oesophagus. A fully covered aortic stent was placed in the descending thoracic aorta to control leak. He recovered with medical management and repeat endoscopy after 3 days showed signs of healing. There were no features of malignancy upon narrow band imaging and biopsy on followup.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/b2731ad3-e8e2-46c1-a1f1-60dbab1f2d7a/Uploads/19978_AE_fistula%20final%20video%20.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP967 Endoscopic ultrasound-guided gastroenterostomy to treat patients with benign gastric outlet obstruction: a multicenter series

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DOI 10.1055/s-0046-1822319

Aims Besides malignant, gastric outlet obstruction (GOO) may develop for different benign diseases, including post-inflammatory stenosis of distal stomach/duodenum or duodenal involvement in groove pancreatitis. A novel Ultrasound-guided gastroenteroanastomosis (EUS-GE) was introduced to allow creating a direct anastomosis between the stomach and a jejunal loop through the placement of a metal stent (LAMS). This procedure is currently suggested to solve GOO in patients unfit for surgery. Consistent data are available on EUS-GE in neoplastic GOO, whilst data are still limited for patients with benign GOO. We aim to assess technical and clinical outcomes of EUS-GE in benign GOO.

Methods This was a retrospective study including patients with benign GOO treated with EUS-GE procedure in 11 tertiary Endoscopy centers. Data about patients, procedure and outcomes were recovered and collected in a single,

anonymized database for analysis. Technical success was defined as the successful placement of a stent across the site of obstruction, and clinical success as at least 1 point increase in the gastric outlet obstruction score (GOOS) system.

Results A total of 31 (67.7% male; Median age: 69 yrs) patients were included. The main indications for the EUS-GE procedure were: 13 (41.9%) post peptic/caustic inflammatory stenosis, 9 (29%) groove/chronic pancreatitis, and 4 (12.9%) post-surgical stenosis, and 5 (16%) post more rare causes. In 19 (61.3%) patients, previous pneumatic dilations (N = 10) or stent placement (N = 9) were unsuccessfully attempted. EUS-GE was the first-line treatment of GOO 12 cases, more than half (58.4%) of which were pancreatitis. Technical success of EUS-GE was achieved in 30 of 31 (96.7%) patients in a median procedural time of 45 minutes (30-90). The only case of technical failure with stent misplacing has been solved with endoscopy. In 5 (16.6%) cases (3 bleeding and 2 stent obstruction) endoscopy reintervention was needed within 30 days. In 2 cases clinical resolution of GOO was not obtained requiring surgical intervention whereas in 93% of patients a stable benefit was maintained after median follow-up of 4 months (1-18).

Conclusions This report seems to suggest that the EUS-GE, when performed from skill operator, is a very effective procedure with an acceptable rate of complication manageable without surgery. To extend the application of EUS-GE also in benign chronic GOO, larger and prospective studies are needed especially for what concerns the long-term management of LAMS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP968 Advanced endoscopic multidisciplinary team meeting: a tertiary centre experience in the management of complex endoscopic cases

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DOI 10.1055/s-0046-1822320

Aims Multidisciplinary team (MDT) meetings are established as the standard of care in clinical pathways, ensuring that each patient receives the best management through a coordinated and evidence-based multidisciplinary assessment. This study aimed to assess the influence of MDT discussions on care pathways and their effect on patient outcomes.

Methods The Advanced-Endoscopy MDT was introduced in our Institution in 2021 to review complex luminal endoscopic cases. Weekly meetings are attended by a core consultant body including 2 interventional endoscopists, 1 GI radiologist, 1 colorectal surgeon, 1 histopathologist and 1 MDT coordinator. Endoscopic and radiological images, as well as histopathological specimens, are reviewed to recommend the best management plan. Patients are reviewed in the outpatient clinic after MDT review to discuss the benefit and risk of MDT recommendation and again after the intervention to discuss the results and further management. All cases discussed between 16th of September 2024 – 16th of September 2025 were reviewed. Demographic, clinical, endoscopic findings, and outcome data were analysed.

Results 300 cases (136 patients) were discussed over 45 meetings; 86.7% of these were discussed at least twice. Patients were referred for colonic lesions (84 patients, 61.8%), small bowel disease (29 patients, 21.6%), gastric lesions (9 patients, 6.6%) or second opinion for GI assessments (14 patients, 10%). Most referrals (88.9%) originated internally from the Royal Free Hospital, while 11.1% referred from other hospitals.

Colonic lesions discussed in the MDT were treated in 93.9%, mostly with endoscopic submucosal dissection (ESD, 82.9%), achieving an R0 resection of 92.6%. 6.1% of the patients that were not treated (one seeks a second opinion in another centre, one had a synchronous metastatic bowel cancer, and conservative management due to advanced age and complex previous medical history was adopted in other 2 cases).

Nine patients referred with gastric lesions were discussed and referred for endoscopic resection, either by ESD (5) or EFTR (2) or en-bloc EMR (2); R0 resection was achieved in all cases. Twenty-nine complex small bowel cases were discussed at the MDT and 72.4% were referred for double balloon enteroscopy (DBE): 71.4% for suspected small bowel lesions, 14.3% for small bowel bleeding, 9.5% for anaemia, and 4.8% for a capsule retention. 24% required additional evaluation with SBCE or further radiological imaging.

After endoscopy MDT discussion, eleven patients were referred from the endoscopy MDT to other MDTs: six cases were referred to the NET MDT, one to the Anal MDT, one to the Respiratory Team, one to the Upper GI Cancer MDT (UCLH), and two to genetic assessment. In addition, two further patients were referred straight for surgery: one with a gastric neuroendocrine tumour not amenable to endoscopic resection and one patient with sigmoid cancer and liver metastases.

No major complications were recorded. No complaints related to any of these patients were reported.

Conclusions These results suggest that the Advanced-Endoscopy-MDT improves patient care and safety through a stronger hospital governance. In addition, dedicated luminal therapeutic endoscopic pathway, promotes an efficient flow of patients both internally with other MDTs and externally with other Institutions. The MDT structure ensured appropriate referrals and coordinated care, offering a safe and satisfactory experience for patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP969 Type-II pancreatitis and eosinophilic disease: two different coexisting entities or same disease?

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DOI 10.1055/s-0046-1822321

Abstract Text

Background: type II and eosinophilic pancreatitis are two rare etiologies of pancreatitis, with an uncertain pathophysiology. The diagnosis may be challenging, especially because no clear cut-off of eosinophilic infiltration has been identified for the differential diagnosis, and it is still debated if they can be considered two separate diseases [1–5].

Case report: This is a case of a 19-year-old male who was admitted to our hospital for acute pancreatitis (acute abdominal pain, serum lipase up to 6857 mg/dl, and an enlarged edematous pancreatic gland at transabdominal ultrasound). The patient had a history of pollen allergy, recurrent episodes of diarrhea, a perforated duodenal ulcer with a need for a surgical resection two months earlier, and a recent diagnosis of eosinophilic esophagitis with an ongoing treatment of proton pump inhibitors (PPI) twice a day.

The patient underwent a CT-scan 72 hours later, which showed a diffuse edema of the pancreatic gland without signs of necrosis. Therefore an MRI and CP-MRI were performed, confirming an enlargement of the body-tail of the pancreas, with an inhomogeneous contrast capture and an area of hypo-perfusion at the tail. There was no dilation of the biliary tree, no gallbladder stones. Serum eosinophils, triglycerides, Ig-G4, and anti-nucleus antibody (ANA) were negative, while elevated values of fecal calprotectin (790 g/g) were found.

Therefore, we decided to perform an endoscopic ultrasound (EUS) showing a diffuse enlargement of the pancreatic parenchyma, with a diffusely hypoechoic echotexture, with hyperechoic strands and dilation of secondary ducts,

without evidence of cystic or solid lesions. A heterogeneous enhancement was observed at contrast agent evaluation. A fine needle biopsy (FNB) was performed by using a 19 G needle. The histological examination was suggestive of type 2 autoimmune pancreatitis (perilobular fibrosis and parenchymal and periductal and perivascular lymphomonocytic and plasmacell inflammation, rare granulocytic epithelial lesion), although a significant eosinophilic infiltration was also observed.

The diagnostic work-up was completed with an esophagogastroduodenoscopy (EGDS), which showed signs of esophagitis and a diffuse gastritis, and a colonoscopy that demonstrated the presence of right-sided colitis. At histological examinations an eosinophilic infiltration extending to the esophagus, duodenum, and colon was found, providing a diagnosis of eosinophilic enteritis.

A multidisciplinary evaluation, including Immunologists, in a referral Center was done, concluding that this may represent a case of association of type II autoimmune pancreatitis and eosinophilic gastroenteritis, rather than a eosinophilic pancreatitis. A systemic therapy with steroids was started with a rapid clinical and biochemical amelioration.

Conclusions: this is a rare case of association of type II pancreatitis and eosinophilic gastro-enteritis. However, more defined criteria are needed for a better establishment of eosinophilic pancreatitis and type II pancreatitis.

Conflicts of Interest Cecilia Binda: Boston Scientific, Fujifilm, Olympus, Canon-Carlo Fabbri: Boston Scientific, Olympus, CanonChiara Coluccio: Mediglobe, Boston Scientific, Olympus

References

- [1] Pinte L, Băicuș C. Eosinophilic pancreatitis versus pancreatitis associated with eosinophilic gastroenteritis – a systematic review regarding clinical features and diagnosis. *Rom J Intern Med* 2019; 57 (4): 284–295. doi:10.2478/rjim-2019-0012
- [2] Shimosegawa T, Chari ST, Frulloni L, Kamisawa T, Kawa S, Mino-Kenudson M, Kim MH, Klöppel G, Lerch MM, Lühr M, Notohara K, Okazaki K, Schneider A, Zhang L. International Association of Pancreatology. International consen-

sus diagnostic criteria for autoimmune pancreatitis: guidelines of the International Association of Pancreatology. *Pancreas* 2011; 40 (3): 352–8. doi:10.1097/MPA.0b013e3182142fd2

[3] Sun Y, Pan D, Kang K, Sun MJ, Li YL, Sang LX, Chang B. Eosinophilic pancreatitis: a review of the pathophysiology, diagnosis, and treatment. *Gastroenterol Rep (Oxf)*. 2020; 9 (2): 115–124. doi: 10.1093/gastro/goaa087 PMID: 34026218 PMID: PMC8128011

[4] Abraham SC, Leach S, Yeo CJ, Cameron JL, Murakata LA, Boitnott JK, Albores-Saavedra J, Hruban RH. Eosinophilic pancreatitis and increased eosinophils in the pancreas. *Am J Surg Pathol* 2003; 27 (3): 334–42. doi:10.1097/00000478-200303000-00006

[5] Manohar M, Verma AK, Venkateshaiah SU, Mishra A. Role of eosinophils in the initiation and progression of pancreatitis pathogenesis. *Am J Physiol Gastrointest Liver Physiol* 2018; 314 (2): G211–G222. doi:10.1152/ajpgi.00210.2017

eP970 Predictors of Stent Dysfunction in Malignant Esophageal Strictures: A 10-Year Multicenter Retrospective Study

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DOI 10.1055/s-0046-1822322

Aims Malignant esophageal strictures are frequently managed using self-expanding metal stents (SEMS). Stent-related adverse events, especially stent dysfunction, pose a significant challenge and often require reintervention. The aim of this study was to determine predictors of stent dysfunction in malignant esophageal strictures (► **Table 1**).

► **Table 1**

Factors	Univariable Analysis		Multivariable Analysis	
	OR (95 % CI)	p-value	OR (95 % CI)	p-value
Age ≥ 65 Years	2,2 (1,2–4,4)	0,016	2,4 (1,1–5,2)	0,023
Female Sex	0,7 (0,3–1,5)	0,397		
Cardiac Comorbidity	2,3 (1,2–4,4)	0,008		
Pulmonary Comorbidity	0,8 (0,4–1,8)	0,637		
Hepatic Comorbidity	2,3 (0,6–8,3)	0,208		
Renal Comorbidity	1,4 (0,5–3,6)	0,495		
Dysphagia Score > 1	0,7 (0,3–1,3)	0,180		
Adenocarcinoma	1,8 (1,0–3,5)	0,057		
Upper Esophagus	0,9 (0,3–2,5)	0,875		
Middle Esophagus	0,6 (0,3–1,3)	0,196		
Lower Esophagus	1,6 (0,9–3,2)	0,129		
GE Junction	2,1 (1,1–4,0)	0,019		
Esophagogastrostomy	0,5 (0,1–2,5)	0,426		
Esophagojejunostomy	5,8 (1,1–31,0)	0,039	9,5 (1,6–57,9)	0,014
Stricture Length ≤ 20mm	0,8 (0,3–2,4)	0,682		
Stricture Diameter ≥ 9mm	2,2 (1,2–4,2)	0,012	2,2 (1,1–4,5)	0,024
Fully Covered SEMS	2,4 (1,3–4,5)	0,008	2,5 (1,2–4,9)	0,011
Stent Length ≤ 110 mm	1,6 (0,8–3,0)	0,181		
Stent Diameter ≤ 22mm	2,3 (1,1–4,8)	0,033		

Methods This multicenter, retrospective study included patients with malignant esophageal strictures who were treated with SEMS at three university hospitals between January 2014 and December 2023. The clinical endpoint was the occurrence of stent dysfunction, defined as impairment of lumen patency due to ingrowth, overgrowth, bolus, or dislocation. Patient characteristics, stricture features, and procedural factors were analyzed.

Results In total, 187 patients were included in the study. The mean age was 67 ± 11 years, and 78 % of the patients were male. The overall complication rate was 43 %, stent dysfunction occurred in 32 % of patients.

Univariable logistic regression analysis showed that patients over 65 years (OR 2.2; 95 % CI 1.2–4.4; $p = 0.016$) or with cardiac comorbidity (OR 2.3; 95 % CI 1.2–4.4; $p = 0.008$) experienced stent dysfunction significantly more often.

Stents placed at the gastroesophageal (GE) junction (OR 2.1; 95 % CI 1.1–4.0; $p = 0.019$) or an esophagojejunal anastomosis (OR 5.8; 95 % CI 1.1–31.0; $p = 0.039$) were more prone to dysfunction.

The risk of stent dysfunction was higher with a stricture diameter ≥ 9 mm (OR 2.2; 95 % CI 1.2–4.2; $p = 0.012$), and also when fully covered (OR 2.4; 95 % CI 1.3–4.5; $p = 0.008$) or small-diameter SEMS ≤ 22 mm (OR 2.3; 95 % CI 1.1–4.8; $p = 0.033$) were used.

In multivariable analysis, age ≥ 65 years (OR 2.4; 95 % CI 1.1–5.2; $p = 0.023$), the presence of an esophagojejunostomy (OR 9.5; 95 % CI 1.6–57.9; $p = 0.014$), a stricture diameter ≥ 9 mm (OR 2.2; 95 % CI 1.1–4.5; $p = 0.024$), and the use of a fully covered SEMS (OR 2.5; 95 % CI 1.2–4.9; $p = 0.011$) were significantly associated with an increased risk of stent dysfunction.

Conclusions A stricture diameter ≥ 9 mm, the use of fully covered SEMS, the presence of an esophagojejunostomy, and older age were identified as independent predictors of stent dysfunction in malignant esophageal strictures. These factors should guide stent choice and individualized therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP971 Post-ERCP Pancreatitis: A Single-Center Experience from Bab El Oued University Hospital, Algiers

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DOI 10.1055/s-0046-1822323

Aims Post-ERCP pancreatitis (PEP) remains the most frequent and potentially severe adverse event of ERCP. Identifying patient and procedure related risk factors is essential to improve practice and reduce morbidity. We aimed to describe our institutional experience and assess potential predictors of PEP [1–7].

Methods We conducted a retrospective single-center study over 12 months (January–December 2024). All hospitalized patients undergoing ERCP were included. PEP was diagnosed according to clinical and biochemical criteria. Collected variables comprised patient-related data (age, sex, prior pancreatitis, bilirubin level, suspected sphincter of Oddi dysfunction) and procedure-related factors (papillary anatomy, difficulty of cannulation, inadvertent pancreatic duct opacification, prophylactic measures). Severity was assessed using SIRS criteria and CT (Balthazar classification).

Results Among 209 ERCPs, 13 PEP cases were identified (incidence 6.22 %). Mean age was 38 years (23–53), with a predominance of females (sex ratio 3.3). A history of acute pancreatitis was absent in 89.7 %. Bilirubin levels were normal in 50 %. Peri-diverticular papilla was present in 23.07 %. Difficult biliary cannulation occurred in 46.15 %, and pancreatic duct opacification in 38.46 %. Prophylactic pancreatic stenting was used in 30.76 %. All patients received rectal

NSAIDs. SIRS was observed in 30.76 % of cases (Balthazar grade E). Clinical outcome was favorable in all patients, with 82.9 % hospitalized for 4–10 days.

Conclusions PEP remains unpredictable but potentially preventable. Optimized patient selection, improved technical proficiency, and systematic use of evidence-based prophylaxis including rectal NSAIDs and pancreatic stents may significantly reduce its incidence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dumonceau JM, Kapral C, Aabakken L et al. ERCP-related adverse events: ESGE Clinical Guideline. *Endoscopy*. 2020; 52 (2): 127–149
- [2] ASGE Standards of Practice Committee Elmunzer BJ et al. Post-ERCP pancreatitis prevention strategies: evidence-based recommendations. *Gastrointestinal Endoscopy* 2023; 97 (3): 470–489
- [3] Elmunzer BJ. Reducing the risk of post-ERCP pancreatitis. *New England Journal of Medicine* 2024; 390: 1124–1132
- [4] Cahyadi O, Tehami N, de-Madaria E, Siau K. Post-ERCP Pancreatitis: Prevention, Diagnosis and Management. *Medicina (Kaunas)*. 2022; 58 (9): 1261. doi:10.3390/medicina58091261 PMID: 36143938 PMID: PMC9502657
- [5] Risques et complications de la CPRE. *FMC POST'U* 2016;
- [6] Incidence, severity, and mortality of post-ERCP pancreatitis: a systematic review by using randomized, controlled trials. *Gastrointestinal Endoscopy*. Volume 81 (Issue 1): 2015;
- [7] Risk factors for post-ERCP pancreatitis: A systematic review and meta-analysis. *The Surgeon*. Volume 13 (Issue 4): 2015; Pages 218–229

eP972 Patients' experiences and attitudes toward the use of real-time artificial intelligence-assisted colonoscopy

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DOI 10.1055/s-0046-1822324

Aims There is limited knowledge about how patients experience artificial intelligence (AI) in healthcare. Concerns regarding safety and quality could be a barrier between patients and the healthcare system when implementing AI. It is crucial to understand patients' attitudes, and how they may react to AI being implemented when aiming to preserve their trust. We investigated patients' attitudes toward AI-assisted colonoscopy to gain insights that can be used when introducing this new technology to future patients.

Methods This is a qualitative study based on semi-structured focus group interviews. Habile, Danish-speaking adults who had received an AI-assisted colonoscopy were invited. We conducted six focus group interviews, with 20 participants in total. All interviews were recorded and transcribed. Data was analysed using thematic analysis.

Results Patients described a sense of vulnerability in relation to undergoing a colonoscopy. Within this context four main themes were identified. The first theme is "Machine over man – concerns about the potential consequences of AI use during colonoscopy". The second theme is "Empathy and professionalism – Trust in AI assistance depends on human factors", and the third and fourth are "Information about AI should be proportional to the consequences" and "Trying to make sense of AI during colonoscopy – balancing curiosity, irrelevance, and vulnerability".

Conclusions Trust in AI-assistance is dependent of the healthcare providers. While AI has many strengths, it cannot provide empathy, which patients need in distressing moments, such as during a colonoscopy. If written information about AI is provided, it should be informative but concise, avoiding details that generate more confusion than clarity.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP973 EUS-guided gallbladder drainage (EUS-GD) in elderly patients with acute cholecystitis (AC): a retrospective cohort study matched comparison with surgical cholecystectomy (SC)

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DOI 10.1055/s-0046-1822325

Aims In elder patients with AC, SC is associated with a higher rate of adverse events (AEs), even in patients with low comorbidity. EUS-GD has emerged as a minimally invasive alternative for non-surgical candidates. The primary aim of this study was to compare clinical success between EUS-GD and SC in patients over 80 years old with AC. The Secondary aims included comparison of overall AEs rate, procedure-related AEs and biliary readmission (BR) between DVUSE and SC.

► **Table 1**

Variable	SC (n = 85)	DVUSE (n = 94)	p-value
Age	84.8 (82.8–87.1)	89.3 (87.1–92.7)	<0.001
Charlson comorbidity index (without age)	2 (1–4)	3.5 (2–5)	<0.001
Heart failure (CHF)	34.1 %	52.1 %	0.015
Stroke / TIA	9.4 %	26.6 %	0.003
Hemiplegia	0 %	5.3 %	0.031
Anticoagulation / antiplatelet therapy (ACO/AAS)	22.3 %	41.5 %	0.023
Tokyo grade (I–III)	2.19	2.11	0.423

► **Table 2**

	SC (n = 18)	DVUSE (n = 94)	p
Clinical success (%)	94.4 %	92.6 %	0.775
Overall adverse events (%)	44.4 %	22.6 %	0.053
Procedure-related adverse events (%)	75.0 %	24.0 %	0.004
Severe complications (AGREE IV–V)	20.0	13.0	0.144
Most frequent adverse events	Bleeding (27.7 %) Bile duct injury (16.6 %)	Stent obstruction (31.5 %) Migration (15.7 %)	0.038

Methods We design a multicenter retrospective cohort study including patients over 80 years old with AC who underwent either EUS-GD or SC between January 2020 and December 2024. To reduce bias due to differences in baseline characteristics (age, Charlson index) between groups, propensity score matching (PSM) was performed. The clinical success was defined as improvement in clinical symptoms and laboratory test. BR was defined as any hospital readmission due to biliary colic, recurrent cholecystitis, cholangitis, choledocholithiasis, or acute pancreatitis. AEs were classified according to AGREE classification.

Results A total of 179 patients were included (94 DVUSE vs. 85 SC). Initially, there were significant differences in baseline characteristics between groups in age (89.5 years DVUSE vs. 85.3 years SC), comorbidity (Charlson 3.6 vs. 2.4; $p < 0.001$), and associated conditions such as heart failure, cerebrovascular accident, dementia, and hemiplegia ($p < 0.05$) (► **Table 1**). To adjust for these differences, PSM was applied, yielding 112 comparable patients (94 DVUSE vs. 18 SC). After matching (► **Table 2**), clinical success was similar between groups (94.4 % SC vs 92.6 % DVUSE). The rate of adverse events was not statistically different between the two groups, although the SC group showed a higher tendency (44.4 % vs 22.6 %). However, the rate of procedure-related AEs was significantly higher in the SC group (75 % vs 44 %). There were no differences in severe or fatal AEs (AGREE IV–V) between groups. The cumulative BR after 12 months was 6 % in SC and 16 % in EUS-GD ($p = 0.27$).

Conclusions EUS-GD provides similar clinical success compared to SC but is associated with fewer procedure-related adverse events. EUS-DGD should be considered a valid, safe, and effective alternative in patients over 80 years old with significant comorbidity (Charlson without age ≥ 3 , according to our study results).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP974 Endoscopic Submucosal Dissection of Appendiceal Lesions: Retrospective Study Comparing Adaptive Versus Conventional Traction Techniques

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DOI 10.1055/s-0046-1822326

Aims Endoscopic submucosal dissection (ESD) of lesions involving the appendix remains challenging due to the complex anatomy and high risk of complications, and many patients are still referred for surgery. This study aimed to compare the efficacy and safety of ESD performed with conventional traction techniques versus the adaptive traction strategy with the ATRACT device for appendiceal lesions.

Methods We conducted a retrospective analysis of consecutive patients who underwent ESD for appendiceal lesions between November 2019 and November 2024. Patients were divided into two groups: those treated with conventional traction techniques (T-ESD) and those treated with the ATRACT device according to an adaptive traction strategy (A-ESD). The primary endpoint was lateral R0 resection at the appendiceal margin, the most critical and technically demanding component of R0 achievement because it requires dissecting as deeply as possible into the appendiceal orifice. A multivariate analysis was performed on the primary outcome, adjusting for lesion surface area, operators' mean dissection speed, lesion location, and degree of fibrosis. Secondary endpoints included overall R0 resection rate, perforation rate, and need for additional surgery.

Results A total of 137 patients were included (59 in the A-ESD group, 78 in the T-ESD group). The proportion of lesions in patients with prior appendectomy (Toyonaga 3A) was 22 % in the A-ESD group (13/59) and 32.5 % in the T-ESD group (25/77). Lateral appendiceal R0 resection was achieved more frequently in the A-ESD group (93 % vs 84 %, $p = 0.26$), although the difference did not

reach statistical significance. In the multivariate analysis, the A-ESD group showed a marked increase in lateral appendiceal R0 resection (OR 2.168 [0.702–7.760], $p = 0.183$), although the study lacked sufficient power for this effect to reach statistical significance. Overall R0 resection was also slightly higher with A-ESD (82.5 % vs 80.5 %, $p = 1.00$). The rate of secondary surgery was 5.3 % in the A-ESD group (3/57: 2 for perforation, 1 for invaded appendiceal margin) compared with 7.8 % in the T-ESD group (6/76: 1 for perforation, 5 for invaded appendiceal margin). Perforation rates were similar (12 % vs 10 %, $p = 0.95$). These findings suggest that adaptive traction may improve exposure of the appendiceal margin, thereby reducing the need for rescue surgery, without increasing perforation risk.

Conclusions The findings suggest that the ATRACT device may increase lateral appendiceal R0 resection rates and reduce the need for additional surgery for involved appendiceal margins, without increasing perforation risk. However, the study lacks statistical power due to its limited sample size. Adaptive traction may therefore be particularly advantageous for ESD in this technically challenging location.

Conflicts of Interest All authors are co-founders of ATRACT device & co

eP975 A Rare Cause of Diarrhea in a Patient with Severe Scoliosis

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DOI 10.1055/s-0046-1822327

Case Presentation A 34-year-old male with severe scoliosis, neurodisability, immobility, and significant weight loss was admitted to our hospital with six weeks of profuse diarrhea and subsequent hypokalemia. Prior stool cultures were negative for common infectious pathogens. The patient had been receiving enteral nutrition via a PEG tube placed three years earlier without complications, and confirmed intragastric position of the PEG plate. Enteral feeding had been well tolerated since that time.

Index esophagogastroduodenoscopy (EGD) and colonoscopy demonstrated complete intraluminal migration of the PEG into the colon. Computed tomography (CT) confirmed colonic migration of the PEG, showing contrast filling the descending colon. The PEG tube was removed, and the colonic fistulous opening was closed using multiple through-the-scope clips (TTSCs). Owing to an unfavorable anatomic configuration resulting from severe scoliosis (specifically, a retrohepatic/retrocardiac stomach with interposed colon), replacement of the PEG was deemed unsafe by both endoscopic and radiologic assessment. A nasogastric tube was inserted for temporary enteral access. Subsequently, a surgical fine-needle catheter jejunostomy (FKJ) was placed for permanent enteral access. Due to persistent intolerance of enteral nutrition, long-term parenteral nutrition via an implanted port was initiated.

During follow-up, recurrent feculent drainage from the stomach prompted repeat endoscopic evaluation. Combined EGD and colonoscopy revealed a re-opened gastrocolic fistula with migration of the nasogastric tube into the colon. The fistula was successfully closed using TTSCs on the colonic side and an over-the-scope clip (OTSC) on the gastric side. Post-intervention imaging confirmed complete closure of the fistula without contrast leakage. Retrospectively, it must be assumed that at initial PEG placement an interposed colon was punctured and traversed by the PEG tube, despite correct intragastric positioning of the PEG plate.

Conclusion In patients with severe scoliosis, PEG placement should prompt consideration of adjunctive imaging to verify appropriate anatomical positioning and prevent unrecognized transcolonic placement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP976 Screening colonoscopy in the elderly – when to stop?

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DOI 10.1055/s-0046-1822328

Aims To analyze the association between detected lesions at colonoscopy, cancer related death and all-cause mortality in individuals < 75 and ≥ 75 years of age.

Methods We analyzed colonoscopies performed within a national colorectal cancer screening program in Austria.

Results 448,606 colonoscopies were analyzed, 394,917 in individuals < 75, and 43,689 in individuals ≥ 75 years. Sex distribution in both groups were almost equal. The distribution of negative colonoscopies, colonoscopies with low-risk and high-risk lesions, according to the ESGE post-polypectomy surveillance guidelines, were distributed as follows: 62.1 %, 32.5 %, and 5.4 % overall, 62.3 %, 32.5 %, and 5.2 % in individuals < 75, and 59.6 %, 32.9 %, and 7.5 % in individuals ≥ 75 years of age. Colorectal cancer related mortality was significantly increased in individuals ≥ 75 years with high-risk lesions while overall mortality was similar in all risk groups.

Conclusions Colorectal cancer screening in the elderly should focus on individuals with high-risk lesions in prior colonoscopies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP977 Is the double-wire cannulation technique superior to precut or transpancreatic sphincterotomy for difficult biliary access? A real-life multicenter registry study

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DOI 10.1055/s-0046-1822329

Aims Common bile duct cannulation can be achieved with various techniques, depending on factors such as ampulla anatomy, technical difficulties, and endoscopist preference. Advanced cannulation techniques (eg transpancreatic sphincterotomy/precut sphincterotomy and the double-wire technique) are mostly used in cases of difficult cannulation. Our aim was to compare advanced cannulation techniques in terms of cannulation success and adverse event rates using real-life data from the Greek ERCP registry.

Methods We conducted a multicenter observational study with prospectively collected data from the Greek national ERCP database. The registry was searched for ERCP cases performed January 2023 – September 2025, in patients with naïve ampulla of Vater. We performed univariate and multivariate analyses.

Results A total of 1693 ERCP procedures in patients with naïve ampulla of Vater were included (mean age 73 yo (SD 15.7), 69.4 % with bile duct stones, 36.4 % jaundice, 15.7 % cholangitis/sepsis, 11.5 % biliary stricture). The most frequent-

ly used cannulation technique was conventional guide-wire guided cannulation (n = 1283, 80.4%), followed by transpancreatic sphincterotomy (n = 140, 8.8%), double-wire (n = 97, 6.1%), precut sphincterotomy (n = 72, 4.5%) and "rendez-vous" (n = 4, 0.3%). Overall, 51.3% of the cases were performed electively, most patients had an ASA score of 2 (42.5%, 27.9% score 1, 25.7% score 3, 3.8% score 4 and 0.2% score 5) and the most common type of sedation was conscious sedation (82.9% followed by 16.4% deep sedation and 0.7% general anesthesia). The overall deep bile duct cannulation success rate was 94.1%. The cannulation success rate was higher in the double wire technique (100%) compared to transpancreatic/precut sphincterotomy (89.6%, $p < 0.01$). The overall adverse event rate was 9.8% (post ERCP pancreatitis 6.5% and post ERCP cholangitis 5.8%). The overall adverse event rate did not differ significantly between the double-wire (6.2%) and the transpancreatic/precut sphincterotomy group (11.3%, $p = 0.1$), and the same was true for post ERCP cholangitis, perforation, bleeding, respiratory or cardiovascular adverse events ($p > 0.05$ for all). However, the post ERCP pancreatitis rate was higher with the double-wire technique (17.5%) compared to the transpancreatic/precut sphincterotomy group (8.5%, $p = 0.02$). In multivariate analysis the use of transpancreatic or precut sphincterotomy vs double wire technique was not an independent predictive factor of cannulation failure ($p = 0.9$).

Conclusions In a real-life multicenter registry study, there do not appear to be major differences in cannulation success among different advanced cannulation techniques. Further randomized trials are warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP978 Endoscopic Therapy for Post-Cholecystectomy Biliary Strictures: Multiple Plastic Stents Versus Fully Covered Self-Expandable Metal Stents – A Scoping Review

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DOI 10.1055/s-0046-1822330

Aims Post-cholecystectomy benign biliary strictures (PCBS) represent a significant clinical challenge, occurring in 0.3–0.7% of laparoscopic cholecystectomies. Despite their clinical impact, the optimal endoscopic management strategy remains ill-defined, particularly regarding the choice between multiple plastic stents (MPS) and fully covered self-expanding metal stents (FCSEMS). This scoping review therefore aimed to synthesize the current evidence on PCBS management and identify areas requiring further research.

Methods We conducted a systematic search of PubMed, Embase, Scopus, and ClinicalTrials.gov for all publications through 14 October 2025, following Joanna Briggs Institute (JBI) and PRISMA-ScR guidance. The search strategy combined database-specific subject headings (e.g., MeSH, Emtree) and free-text keywords related to PCBS and their endoscopic management with MPS and FCSEMS. Two authors independently screened all titles, abstracts, and full-text articles for eligibility, with discrepancies resolved by consensus.

Results Following deduplication, 3,231 records were screened, with 3,063 excluded at the title and abstract stage. The remaining 168 articles underwent full-text review, of which 64 met the inclusion criteria and were incorporated into the synthesis. Conference abstracts meeting criteria were also included but are presented separately.

Among studies reporting outcomes for PCBS patients treated with MPS, most cohorts comprised predominantly homogeneous PCBS populations, with restenosis rates ranging from 0% to 33.3% (median 10.2%, IQR 5.3%–18.5%). In contrast, substantially fewer studies reported sufficient numbers of PCBS patients treated with FCSEMS, with reported restenosis rates ranging from 10.7% to 15.4% (median 13.1%).

Only one randomized comparative trial (Coté et al., JAMA 2016) directly compared FCSEMS with MPS; however, outcomes were not stratified by stricture etiology, precluding extraction of PCBS-specific data. Several additional studies

evaluated heterogeneous postoperative benign biliary stricture cohorts without separately reporting outcomes for the PCBS subgroup.

Conclusions Available evidence suggests that MPS therapy provides favorable long-term outcomes for PCBS. Although FCSEMS may demonstrate comparable long-term results, the evidence is less well established owing to the scarcity of PCBS-specific data. Heterogeneous definitions of restenosis, inconsistent follow-up, and the absence of rigorous comparative trials further limit evidence-based stent selection. These gaps highlight the need for prospective, etiology-specific studies using standardized outcome definitions to guide optimal endoscopic management of PCBS.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP979 Predictive Factors of Inadequate Bowel Preparation

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DOI 10.1055/s-0046-1822331

Aims Despite significant technological progress in endoscopic imaging and device performance, the usefulness of these advances remains highly dependent on bowel preparation quality. The aim of this study was to identify **predictive factors of inadequate bowel preparation**

Methods This was a prospective study conducted as part of a professional practice evaluation in the digestive endoscopy unit of the Hepato-Gastroenterology Department at **Bab El Oued University Hospital**, during the period from January to July 2024. Polyethylene glycol (PEG) was used as the bowel preparation agent. Preparation quality was assessed using the **Boston Bowel Preparation Scale (BBPS)**, with inadequate preparation defined as a total score **strictly below 7**. Data were analyzed using SPSS v20, including univariate analyses (Chi-square test, ROC curve) and multivariate logistic regression [1–3].

Results A total of **227 patients** were included. The mean age was **52.39 ± 18.85 years** and the sex ratio was **0.91**. The complete colonoscopy rate was **74.9%**. A split-dose regimen was used in **77.5%** of cases, and good tolerance to preparation was reported in **63%** of patients. Inadequate bowel preparation was observed in **47.6%** of cases.

Multivariate analysis identified three independent predictors of inadequate preparation: **Constipation** (OR = 0.4; $p = 0.008$), **History of abdominal or uterine surgery** (OR = 0.46; $p = 0.027$), **Interval > 5 hours** between the last PEG intake and the colonoscopy (OR = 0.4; $p = 0.005$).

Conclusions This prospective study identified three independent predictors of inadequate bowel preparation, mainly related to patient factors: **constipation, previous abdominal/uterine surgery, and a delay exceeding 5 hours** between the last PEG dose and the colonoscopy. Optimizing these factors could improve preparation quality and enhance colonoscopy outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Abu Baker F, Mari A, Nafrin S et al. Predictors and colonoscopy outcomes of inadequate bowel cleansing: a 10-year experience in 28,725 patients. *Ann Gastroenterol* 2019; 32 (5): 457–462. doi:10.20524/aog.2019.0400 Large cohort, shows association with constipation, prior surgery, timing, inpatient status, age, etc
- [2] Mahmood S, Farooqui SM, Madhoun MF et al. Predictors of inadequate bowel preparation for colonoscopy: a systematic review and meta-analysis. *Eur J Gastroenterol Hepatol* 2018; 30 (8): 819–826. doi:10.1097/MEG.0000000000001175
- [3] Hassan C, East J, Radaelli F et al. Bowel preparation for colonoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Guideline — Update 2019. *Endoscopy* 2019; 51 (8): 775–794. doi:10.1055/a-0959-0505

eP980V Cholangioscopy-guided multimodal treatment of a complex postsurgical biliary stricture with embedded suture material

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DOI 10.1055/s-0046-1822332

Abstract Text

A 65-year-old woman with right hepatectomy for hydatidosis and history of ERCPs in other center for biliary stricture was referred to our hospital. Cholangiography revealed a stricture at the hepatic hilum with a 30 mm-dilatation of intrahepatic duct. An attempt to cannulate the intrahepatic ducts with a guide-wire and sphincterotome was unsuccessful. Cholangioscopy identified the stricture with an impacted stone. Electrohydraulic lithotripsy was carried out, after which a bundle of suture material was visualized. Using SpyBite, part of the suture was grasped and removed. Subsequently, guidewire passage across the stricture was achieved. The stricture was dilated with a 6-mm Hurricane balloon, and a 10 Fr × 15 cm straight plastic stent was placed. Post-surgical biliary strictures represent a diagnostic and therapeutic challenge. Cholangioscopy is very useful for the diagnosis and management of complex biliary strictures.

Video http://data.process.y-congress.com/ScientificProcess/Data/1106/660/1670/2f2493b8-0e21-4d29-b2a9-7f2034d5c798/Uploads/19978_rita_final.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP981 Perceived Stress and Its Influence on Procedural Performance Among Interventional GI Endoscopists

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DOI 10.1055/s-0046-1822333

Aims Interventional gastrointestinal endoscopy requires advanced technical expertise, rapid problem-solving, and sustained cognitive focus. These demands expose operators to significant acute stress, yet its prevalence, determinants, and impact on clinical performance remain insufficiently characterized. Understanding stress within this high-stakes specialty is essential for optimizing patient safety, supporting practitioner well-being, and guiding institutional training policies.

Methods We conducted a cross-sectional, anonymous global survey of practicing interventional gastrointestinal endoscopists (IGE). The questionnaire comprised five domains: demographics and workload, perceived stress (including an adapted work-related Perceived Stress Scale), impact on procedural performance, coping strategies, and professional views on training. Descriptive and inferential statistics were applied to assess stress prevalence and explore associations between stress scores and practitioner characteristics.

Results A total of 100 IGE participated. Most respondents were male (84%), aged 30–50 years (82%), and had more than 5 years' interventional endoscopy experience (53%). Despite this seniority, 56% reported experiencing stress "sometimes," 19% "often," and 2% "always." The mean work-related PSS score was 20.75 (SD 3.36), indicating moderate procedural stress, with similar levels for general perceived stress. Stress was perceived to impair concentration mildly (61%) or moderately (24%), and 11% reported substantial performance

impairment. Nearly half (48%) attributed at least some procedural failures to stress, and 39% reported stress-related delays within the previous month. Only 15% had received formal stress-management training, yet 74% believed such strategies could enhance performance, and 78% supported simulation-based training under controlled stressful conditions. No significant associations were observed between stress scores and demographic variables.

Conclusions Acute stress is prevalent among interventional gastrointestinal endoscopists and is widely perceived to detrimentally affect concentration and procedural performance. The paucity of structured stress-management training and the strong practitioner support for simulation-based approaches highlight an important opportunity to implement targeted interventions aimed at improving both operator well-being and procedural safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP982 Incidence and Risk Factors of Post-Colonoscopy Infections in Liver Transplant Candidates: A Retrospective Cohort Study

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DOI 10.1055/s-0046-1822334

Aims Liver transplant candidates, especially those with cirrhosis are more prone to infections, which may be precipitated by semi-invasive procedures like colonoscopy. Limited data exist on infection rates post-colonoscopy and risk factors in this population. This study aimed to determine the incidence of post-colonoscopy infections and identify associated risk factors in patients awaiting liver transplantation.

Methods A retrospective single-centre cohort study included 141 adult liver transplant candidates who underwent screening colonoscopy at a Belgian tertiary hospital (2019–2023). Inclusion required ≥24h post-procedural observation. Infection was defined as fever ≥38 °C, leucocytosis (>12,000/μL), need for antibiotics or bacteraemia within 72 hours. Data on demographics, liver disease severity (MELD/Child-Pugh), comorbidities and procedural characteristics such as bowel preparation adequacy, sedation type, polypectomy were analysed. Both univariate, as well as multivariate backward logistic regression analysis was performed to identify risk factors for infections.

Results The overall infection rate was 6.4% (9/141), rising to 8.9% (9/101) in cirrhotic patients. Documented infections included bacteraemia, spontaneous bacterial peritonitis, and pneumonia. In univariate analysis significant risk factors were higher Child-Pugh score ≥9 (p = 0.04), ascites grade ≥2 (77.8% vs. 36.4%; p = 0.028), and diverticulosis (55.6% vs. 18.2%; p = 0.018). In multivariate analysis MELD score (p = 0.032), Child Pugh ≥9 (p = 0.01), INR (p = 0.024), ascites grade ≥2 (p = 0.068) and diverticulosis (p = 0.027) were independent risk factors for infections. Inadequate bowel preparation occurred in 29.1% but was not associated with infection. No significant associations were found for antibiotic/immunosuppressive use, polypectomy, or sedation type and risk for infection.

Conclusions Liver transplant candidates, particularly those with advanced cirrhosis (higher MELD score and Child-Pugh ≥9), increased INR, ascites grade ≥2 or diverticulosis, face substantial infection risk (6.4–8.9%) after screening colonoscopy. Heightened clinical vigilance and optimized preventive strategies are warranted in this high-risk population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP983 Global Trends in the Diagnosis of Gastric Premalignant Conditions, and Cancer Screening: An International Survey

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Aims Gastric cancer (GC) presents with variable incidence across the globe, which is translated to different screening approaches. Various guidelines attempt to present the optimal strategies for GC and premalignant conditions management; however, it is not recorded whether endoscopists comply with these recommendations. This study aimed to illustrate the current screening practices, adherence to guidelines, and variability in GC management among different countries.

Methods A web-based cross-sectional survey of 28 items was distributed to various countries by individuals who were members of either World Endoscopy Organization (WEO) Emerging Stars or European Society of Gastrointestinal Endoscopy Young Endoscopists (EYE) Committee through September 2025. Questions about endoscopists' status, screening and sampling for GC and premalignant lesions during esophagogastroduodenoscopy (EGD), post-diagnosis surveillance, counseling and treatment policies were included. Data were analyzed using descriptive statistics, and potential associations were investigated using chi-square test and multi-nominal regression analysis. Statistical significance was set at a p-value ≤ 0.005 .

Results Eight hundred and twenty physicians from 20 countries participated in this questionnaire-based survey. The majority of them were Europeans (62.8%), but endoscopists from every continent were included. Age-standardized rate (ASR) of GC was < 10 per 100,000 person-years in all of the included countries, except for Japan, according to the GLOBOCAN 2022 records. In South America, a variety of answers about the existence of formal GC screening programs was recorded, ranging from 20% to 35%. EGD is performed at a high rate (18.2-50%) regardless of a clear indication in several countries (Italy, Kenya, Brazil). Considering the quality of service, although high-definition equipment with virtual chromoendoscopy is available in every country, in some of them (Kenya, Serbia, Greece, Brazil and other Latin American countries) a high per-

centage of endoscopists (20-75%) only has access to conventional white light endoscopes. Likewise, expert upper GI pathologist is readily available for less than 50% of endoscopists in 11 out of 20 countries. Chi-square test indicated that the regional ASR, level of training, professional status and working place were associated with the different practices of physicians in GC surveillance. In the multi-nominal analyses, the country of practicing and the dedicated training in EGD and chromoendoscopy were more commonly associated with the differences in screening strategies, adherence to guidelines, endoscopy process and quality indicators. Contrariwise, endoscopists' age, current status (supervised or independent trainee or fully competent endoscopist) and institution of practicing (public, academic or private sector) were not significantly associated with the investigated parameters.

Conclusions Despite the existence of established guidance on GC screening and premalignant lesions management, there is a broad heterogeneity in the applied practices across the globe mainly associated with the country of practicing and the specialized training in upper GI endoscopy. These findings might be affected by the design of the study and the different number of physicians per country who answered the questionnaire. Therefore, national endoscopy societies are encouraged to record their internal variances to achieve uniform policies and compliance to the guidelines for GC and premalignant conditions management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP984 Virtual Chromoendoscopy with Linked Color Imaging versus Dye Chromoendoscopy in the surveillance of Patients with Long-standing Colonic Inflammatory Bowel Disease

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DOI 10.1055/s-0046-1822336

Aims The aim of the study is to compare the performance of virtual chromoendoscopy (VCE) using Linked Color Imaging (LCI) and dye-chromoendoscopy (DCE) with methylene blue for the detection of colonic neoplastic lesions during surveillance colonoscopy in patients with inflammatory bowel disease (IBD), since currently data on LCI performances for detecting dysplasia specifically among IBD patients undergoing surveillance remain scarce compared to other virtual chromoendoscopy technology including Narrow Band Imaging (NBI, Olympus, Japan) or i-SCAN (Pentax, Japan).

Methods This is a single-centre retrospective cohort study including patients with colonic IBD undergoing colorectal cancer (CRC) surveillance colonoscopy between June 2018 and December 2024. The primary outcome was the detection of total neoplastic lesions, defined as the mean number of neoplastic lesions detected per colonoscopy, including colitis-associated dysplasia, adenocarcinoma, sporadic adenoma, serrated lesions, by targeted biopsies or polypectomy with either DCE or LCI in subjects with long-standing colonic IBD. The secondary outcome was the neoplastic lesions detection rate, defined as the proportion of colonoscopies with at least one neoplastic lesion over the total number of colonoscopies.

Propensity-score matching and multivariable Poisson and logistic regression were used to adjust for baseline differences and identify independent predictors.

Results A total of 404 patients underwent surveillance colonoscopy during the study period, 135 with DCE and 269 with LCI. After exclusion of 93 patients because of inadequate bowel preparation or endoscopically active disease (23

in the DCE group, 70 in the LCI group, Figure 3), 311 were included in the final analysis (112 DCE, 199 LCI). Due to the retrospective design, baseline characteristics were not fully balanced between the two groups. Compared with the LCI group, patients in the DCE group had a longer disease duration (19.58 vs 17.12 years, $p=0.021$), a higher prevalence of extensive (E3) UC, a higher frequency of concomitant primary sclerosing cholangitis, and a greater proportion with a personal history of colonic lesions. A first-degree family history of colorectal cancer (CRC) was also more common in the DCE arm. After the 1:1 propensity-score matching, 208 procedures (104 DCE and 104 LCI) were available for analysis.

Neoplasia detection did not differ significantly between DCE and LCI. The mean number of neoplastic lesions identified per colonoscopy was 0.116 with DCE and 0.085 with LCI ($p=0.472$). Similarly, the neoplasia detection rate was comparable between techniques (8.03% for DCE vs 7.53% for LCI; OR 1.07, 95% CI 0.45–2.54, $p=0.874$). After 1:1 propensity score matching, the chromoendoscopy modality (LCI vs DCE) was not associated with the total number of neoplastic lesions (IRR 0.77; 95% CI 0.34–1.78; $p=0.543$) and with the neoplastic lesions detection rate (OR 0.58; 95% CI 0.21–1.65; $p=0.310$).

Conclusions LCI-based VCE provides a neoplastic yield comparable to traditional DCE in patients with long-standing colonic IBD undergoing surveillance colonoscopy. As with other VCE modalities, LCI may be adopted as an acceptable alternative to DCE for dysplasia surveillance in IBD.

Conflicts of Interest C.B.: served as a consultant or received lecture fees from AbbVie, Alfasigma, Celltrion, Eli Lilly, Ferring, Fresenius Kabi, Galapagos, Lionhealth, Johnson & Johnson, MSD, Pfizer, and Takeda. C. H.: has provided services to Fujifilm and Medtronic Co. A. R.: has provided services to Fujifilm, Olympus Corp., Medtronic Co., and Boston Scientific; A.A.: has served as speaker, consultant, and/or advisory member or has received research funding from AbbVie, Abivax, AG Pharma, Alfa Sigma, Astra Zeneca, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Celltrion, Eli Lilly, Ferring, Galapagos, Gilead, Giuliani, Janssen, Lion Health, Merck, Nestlé, Novartis, Pfizer, Protagonist Therapeutics, Roche, Sanofi, Samsung Bioepis, Sandoz, Takeda, Teva Pharmaceuticals, Tillotts Pharma.

eP985 Endoscopic Management of Upper Gastrointestinal Foreign Bodies: A Single-Center Series

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DOI 10.1055/s-0046-1822337

Aims To describe the **epidemiological, clinical, and therapeutic characteristics** of foreign bodies in the upper GI tract

Methods This is a **retrospective, single-center descriptive study** including patients admitted for management of upper GI tract foreign bodies between January 2018 and August 2025 at **Bab El Oued University Hospital**. Patients managed in the emergency department were excluded. Data analysis was performed using **SPSS v24**

Results A total of **80 patients** were included, with a sex ratio of 0.9. The mean age was **44 years** (range: 15–60). In **72.5%** of cases, the context of ingestion was known, of which **70% were accidental** and **2.5% intentional**. The main presenting symptoms were **dysphagia** and **hypersalivation** [1–3]. Standard radiological exams were performed in **100%** of cases, whereas **only one patient** underwent a CT scan, which did not reveal complications. Upper endoscopy (esophagogastrroduodenoscopy) was performed in **70%** of cases. The foreign body was located in the **esophagus** in **50%** of cases, and **pre-existing esophageal lesions** were found in **22.5%** of these patients. Endoscopic removal was successful in **75%** of cases. **Only 3.3%** of patients required surgical intervention.

Conclusions In our experience, Foreign body ingestion was predominantly **accidental**. Diagnosis relies primarily on **endoscopy**, which allows visualization and removal in most cases. However, **surgical intervention** may be required in selected situations

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sugawa C, Ono H, Taleb M et al. Endoscopic management of foreign bodies in the upper gastrointestinal tract: a review. *World J Gastrointest Endosc* 2014; 6 (10): 475–481. doi:10.4253/wjge.v6.i10.475
- [2] Liao Y, Zou D, Li Z et al. Endoscopic management of foreign bodies in the upper gastrointestinal tract: A retrospective review of 1,088 cases. *World J Gastroenterol* 2013; 19 (34): 5977–5983. doi:10.3748/wjg.v19.i34.5977
- [3] Birk M, Bauerfeind P, Deprez PH et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: ESGE Clinical Guideline. *Endoscopy* 2016; 48 (5): 489–496. doi:10.1055/s-0042-100456

eP986 Endoscopic quality indicators compliance among Greek endoscopists

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DOI 10.1055/s-0046-1822338

Aims Quality assessment is a priority in the field of gastroenterology. However, limited data are available from Greece regarding adherence to quality standards in gastrointestinal endoscopy. This study aims at assessing the knowledge and compliance of Greek gastroenterologists with established quality standards for upper and lower digestive endoscopy, while exploring factors that may influence compliance [1].

Methods This prospective study recorded data on the quality of upper and lower digestive endoscopy performed in Greece from October 2024 to January 2025. All members of the Hellenic Society of Gastroenterology ($n=668$) were invited to participate via an electronic survey. The survey included a questionnaire designed specifically for this study, covering demographic and professional characteristics, as well as quality indicators for gastroscopy and colonoscopy.

Results A total of 164 gastroenterologists participated (response rate 24.55%), of whom 107 (65.24%) were male, and 102 (62.2%) working in public or academic hospitals. The duration of gastroscopy was not recorded by 116 (70.73%) participants, while 102 (62.2%) systematically used photodocumentation. Most participants utilized the Prague and Los Angeles classifications (156, 95.12% and 159, 96.95%, respectively). Additionally, 140 (85.37%) followed the Seattle protocol, and 158 (96.34%) conducted biopsies according to ESGE guidelines for precancerous gastric lesions. However, 83 (50.61%) don't use a registry for patients with Barrett's esophagus. Complications were systematically recorded after gastroscopy by 103 (62.8%) and after colonoscopy by 90 (54.88%). In colonoscopy, 149 (90.85%) use the BBPS scale, and 158 (96.34%) reported successful cecal intubation. Withdrawal times exceeded six minutes for 151 (92.07%) participants. An adenoma detection rate of over 25% was achieved by 117 (71.78%), while 103 (62.8%) consistently used the Paris classification. Proper polypectomy techniques were employed by 111 (67.68%), but 100 (60.98%) recommended follow-up intervals shorter than guidelines suggest. Patient experience following gastroscopy and colonoscopy was not

recorded by 126(76.83 %) and 116(70.73 %) participants, respectively. Overall, compliance with quality indicators for upper and lower digestive endoscopy was observed in 87(53.05 %) and 75(45.73 %) participants, respectively. Multivariate analysis revealed that greater experience ($p = 0.05$), the use of video recording ($p = 0.01$), and use of high-resolution endoscopes ($p < 0.01$) were associated with improved compliance.

Conclusions In this study, discrepancies were observed in the compliance of Greek endoscopists with endoscopic quality indicators, highlighting the need for further improvement. The systematic recording of these quality indicators is essential, highlighting the important role of scientific societies in this process.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bisschops R, Rutter MD, Areia M, Spada C, Domagk D, Kaminski MF, Veitch A, Khannoussi W, Gralnek IM, Hassan C, Messmann H, Ponchon T, Fockens P, Dignass A, Dinis-Ribeiro M. Overcoming the barriers to dissemination and implementation of quality measures for gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) and United European Gastroenterology (UEG) position statement. *Endoscopy*. 2021; 53 (2): 196–202

eP987 Cap-assisted colonoscopy increases polyp detection rate but does not affect the adenoma detection rate

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DOI 10.1055/s-0046-1822339

Aims Evaluation of the use of CAP in lower digestive tract endoscopies in terms of polyp detection rate (PDR) and adenoma detection rate (ADR).

Methods Prospective registration of consecutive patients with lower GI endoscopy with or without the use of CAP. Demographic, clinical and endoscopic data (cleanliness, cecal catheterization, polyp detection) as well as the pathological result were recorded. Bowel cleanliness was assessed with the BBPS scale (Optimal: 9, Suboptimal: 6–8). All endoscopies were performed under conscious sedation by residents with supervision and/or assistance from specialists using high-resolution endoscopes (Olympus CF-H185L, CF-HQ190L) and CO₂ insufflation [1, 2].

Results 440 endoscopies were analyzed [(260F/180M, median age 63 years [(IQR 55–70)]]. 87 (19.8 %) without the use of CAP and 353 (80.2 %) with the use of CAP. The mean BBPS value was 8.32 ± 1.01 and there was no difference between optimal and suboptimal preparation between the 2 groups (with or without CAP). In total, polyps were found in 350 endoscopies with PDR 79.5 % while in 228 endoscopies adenomas were found with ADR 51.8 %. In the 353 endoscopies with the use of CAP, polyps were found in 289 (PDR:81.8 %) and adenomas in 185 (ADR 52.4 %) while in the 87 without the use of CAP, polyps were found in 61 (PDR 70.1 %) and adenomas in 44 (ADR 50.6 %). Statistical analysis (χ^2 test) revealed that the use of CAP helped in the detection of polyps by significantly improving the PDR (OR = 1.92, 95 %CI: 1.13–3.28; $p = 0.015$) but did not contribute to the detection of adenomas and therefore did not improve the ADR to statistically significant levels (OR 1.12, 95 %CI: 0.7–1.8; $p = 0.61$). In the univariate analysis, age was also significantly associated with PDR ($p = 0.001$), whereas sex, bowel preparation quality, and endoscopist experience (senior vs fellow) showed no significant associations. In the multivariable model adjusting for age, sex, bowel preparation quality, endoscopist experience, and bisacodyl use, cap-assisted colonoscopy remained an independent predictor of improved PDR (OR = 0.56, 95 %CI: 0.34–0.95; $p = 0.030$). Bisacodyl use was also associated with higher PDR ($p = 0.034$), while sex, preparation quality, and endoscopist level showed no significant associations (► **Table 1**).

► **Table 1**

	Use of CAP (353 colonos- copies)	No CAP (87 colonosco- pies)	p
Polyps	289	61	0.015
Adenomas	185	44	0.61

Conclusions The use of CAP significantly improves polyp detection and remains an independent predictor of higher PDR after adjustment for key confounders, whereas it does not improve the ADR

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pohl H, Bensen SP, Toor A et al. Cap-assisted colonoscopy and detection of Adenomatous Polyps (CAP) study: a randomized trial. *Endoscopy*. 2015; 47: 891–7

[2] Rzuouq F, Gupta N, Wani S, Sharma P, Bansal A, Rastogi A. Cap assisted colonoscopy for the detection of serrated polyps: a post-hoc analysis. *BMC Gastroenterol* 2015; 15: 11

eP988 Risk and Protective Factors for Postoperative Recurrence in Crohn's Disease: A Single-Center Retrospective Study

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Aims Endoscopic recurrence after ileocecal or ileocolic resection in Crohn's disease occurs in up to 70 % of patients within one year without prophylactic therapy. Identifying risk and protective factors is crucial for patient management. This study aimed to assess recurrence rates and associated factors in a single-center cohort [1, 2].

Methods Retrospective study including Crohn's disease patients undergoing ileocecal or ileocolic resection between 2000 and 2023, with endoscopic follow-up. Primary endpoint: endoscopic recurrence (Rutgeerts score). Statistical analysis was performed using SPSS 23.

Results Among 181 patients (113 women, 68 men; mean age 31 years), 56.9 % had ileal disease and 43.1 % had ileocolic disease; 43.1 % had penetrating phenotype. Indications for surgery included stenosis (40 %), penetrating disease (35 %), obstruction (23 %), and perforation (2 %). Anastomosis was mainly end-to-side (84 %), side-to-side in 4 %. Preventive therapy was given to 78.5 % (thiopurines 59.9 %, anti-TNF 24.6 %). Endoscopic recurrence occurred in 60.8 % (i2 17.1 %, i3 19.3 %, i4 25.4 %). Clinical recurrence was observed in 37 %, and surgical recurrence in 18 % after a median of 6 years.

Penetrating phenotype was identified as a risk factor, while side-to-side anastomosis ($P = 0.009$) and early prophylactic therapy with thiopurines ($P = 0.027$) or anti-TNF ($P = 0.011$) were protective.

Conclusions Endoscopic recurrence after ileocolic resection is frequent. Penetrating phenotype increases recurrence risk, whereas side-to-side anastomosis and early preventive therapy reduce it. Early endoscopic monitoring and tailored prophylaxis are essential to improve outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bernstein CN, Regueiro M. Postoperative Crohn's Disease. *J Clin Gastroenterol* 2023; 57 (8): 749–753. doi:10.1097/MCG.0000000000001865 PMID: 37224283
- [2] Bachour SP, Click BH. Clinical Update on the Prevention and Management of Postoperative Crohn's Disease Recurrence. *Curr Gastroenterol Rep*. 2024; 26 (2): 41–52. doi:10.1007/s11894-023-00911-7. Epub 2024 Jan 16 PMID: 38227128

eP989 When ERCP alone is not enough: Rendezvous repair of complete bile duct transection

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 DOI 10.1055/s-0046-1822341

Background A 45-year-old woman with a history of cholelithiasis, choledocholithiasis and benign biliary stricture developed necrotizing pancreatitis with extensive intra-abdominal collections. After laparotomy for perforated cholecystitis with purulent peritonitis, she presented a vascular injury leading to hepatic ischemia and bile duct perforation secondary to a complicated cholecystectomy.

Case report The patient underwent ERCP revealing a normal intrapancreatic bile duct with complete transection at the level of the common hepatic duct (Figure 1, Figure 2), with contrast filling of a heterogeneous subhepatic collection and spontaneous biliary drainage through the papilla (Figure 3).

Endoscopic recanalization of the intrahepatic duct or common hepatic duct was not technically achievable. Interventional radiology performed a percutaneous transhepatic cholangiography with placement of an internal–external biliary drain.

During a second ERCP, a guidewire was advanced through the percutaneous drain and retrieved endoscopically in the duodenum (“rendezvous”). A guidewire was then passed into the right hepatic duct and subsequently into the left hepatic duct. Plastic stents (9 cm × 8.5 Fr) were placed in each hepatic duct (Figure 4), and the external drain was removed.

Subsequently, both plastic stents were replaced with a fully covered self-expandable metal stent with anchoring flaps (80 × 10 mm), which was removed two months later. Follow-up cholangiography and cholangioscopy confirmed resolution of the leak and absence of biliary stricture (Figure 5).

Conclusions Therapeutic ERCP is a fundamental tool in the management of post-surgical bile leaks. In complex scenarios such as complete bile duct transections, the combined percutaneous–endoscopic “rendezvous” technique allows restoration of biliary continuity, avoidance of major surgery, and reduction of morbidity, with technical success rates exceeding 94%. Even after failed ERCP or radiological attempts we must continue to pursue minimally invasive management options whenever possible, as demonstrated in this case.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP990 Cholangioscopy-guided electrohydraulic lithotripsy versus laser lithotripsy for the treatment of choledocholithiasis: single center experience

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Aims Endoscopic retrograde cholangiopancreatography (ERCP) is the first-line therapy for choledocholithiasis; standard techniques—extraction baskets/balloons and mechanical lithotripsy—clear most stones. Difficult stones can be successfully approached with cholangioscopy-guided intraductal lithotripsy using electrohydraulic (EHL) or laser (LL) energy. The choice between EHL and LL remains debated. Our aim is to compare efficacy and safety between EHL and LL in the management of large difficult biliary stones

Methods We have included all intraductal lithotripsy procedures carried out from November 2021 to October 2025.

Results 32 adult patients (M/F: 12/20) with a mean age of 80 years were included. 18 patients underwent EHL lithotripsy and 14 LL. All procedures were performed in general anesthesia. Patients and stones characteristics were reported in the ► **Table 1**. Complete ductal clearance was achieved in 16/18 (89%) EHL patients and 13/14 (93%) LL patients. First-session clearance occurred in 13/16 (81%) with EHL and 12/13 (92%) with LL ($p = 0.39$). The mean procedure time was 101.1 vs 105.8 minutes ($p = 0.35$). Biliary stent use was similar (39% EHL vs 28% LL; $p = 0.45$) and not associated with clearance success ($p = 0.13$). Adverse events were rare: mild cholangitis in 1/22 (4.5%) EHL procedures and 1/18 (5.5%) LL procedures ($p = 0.85$). Performance data were reported in ► **Table 2**.

► **Table 1**

	EHL	LL	p
Patients	18	14	
Mean age media	82.61 ± 7.40	76.78 ± 7.95	0.04
M/F (n. / %)	4 (22%) / 14 (78%)	8 (57%) / 6 (43%)	0.04
ASA I-II / ASA III-IV	4 (22%) / 14 (78%)	6 (43%) / 8 (57%)	0.21
Previous ERCP	11/18 (61%)	11/14 (78%)	0.29
Multiple stones	14/18 (78%)	13/14 (93%)	0.24
Mean n. of stones	2.0 ± 0.76	2.5 ± 1.16	0.76
Stone size (cm)	2.77 ± 0.57	2.71 ± 0.51	0.45
Strictures	1/18 (5%)	1/14 (7%)	0.85

► **Table 2**

	EHL	LL	p
N. patients	18	14	-
N. procedures	22	18	0.38
Procedures per patient	1.22 ± 0.55	1.28 ± 0.72	0.38
Procedure time (min.)	101.13 ± 28.19	105.83 ± 47.13	0.35
Stent placement	7/18 (39%)	4/14 (28%)	0.45
Complete clearance	16/18 (89%)	13/14 (93%)	0.70
Clearance at I session	13/16 (81%)	12/13 (92%)	0.39
Advers events (cholangitis)	1/22 (4.5%)	1/18 (5.5%)	0.85

Conclusions Cholangioscopy-guided intraductal lithotripsy has markedly improved the management of difficult biliary stones. In our single-center study, both EHL and LL achieved high success rates with a favorable safety profile and low adverse-event rates; no statistically significant differences in efficacy or safety were detected between techniques. Future work should include larger prospective and randomized studies comparing the two techniques.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP991 Elevated Lipase with a Normal Pancreas: The Key Role of Endoscopic Ultrasound

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DOI 10.1055/s-0046-1822343

Background Ectopic pancreas is a rare congenital anomaly characterized by pancreatic tissue located outside its normal anatomic position and not connected to the main gland. Although frequently an incidental finding, it may lead to clinical symptoms such as abdominal pain, gastrointestinal bleeding, or, less commonly, acute or chronic pancreatitis. The diagnosis can be challenging, and endoscopic ultrasound (EUS) plays a decisive role in characterizing gastric subepithelial lesions and guiding their management.

Case Description A 22-year-old woman with no significant medical history presented with five days of epigastric pain, heartburn and nausea. Laboratory tests revealed a five-fold elevation in serum lipase. Upper endoscopy identified two submucosal lesions, 2–3 cm in diameter, at the gastric antrum–body junction (Figure 1).

Radial and linear EUS demonstrated two heterogeneous, lobulated subepithelial masses along the greater curvature: one arising from the submucosa (20 × 12 mm) and another extending into the muscularis propria (22 × 14 mm), while preserving wall layer anatomy (Figure 2). Fine-needle aspiration (25G) confirmed ectopic pancreatic tissue without atypia.

Abdominal CT revealed solid, contrast-enhancing gastric-wall lesions with surrounding inflammatory changes, without involvement of the orthotopic pancreas (Figures 3 and 4). Given the patient's clinical stability and the absence of complications, conservative management with outpatient follow-up was chosen, reserving endoscopic resection for possible recurrence.

Conclusion This case illustrates acute idiopathic-like pancreatitis originating from gastric ectopic pancreatic tissue, confirmed by EUS-guided FNA. EUS was decisive in establishing the diagnosis and avoiding unnecessary investigations, delays, or inappropriate treatments in this uncommon entity. Careful follow-up is appropriate in clinically stable patients, while endoscopic resection remains a therapeutic option if symptoms recur.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP992 Prognostic Value of Stromal and Mesenchymal Signatures Assessed by EUS Elastography in PDAC

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DOI 10.1055/s-0046-1822344

Aims To evaluate a combined approach using EUS-guided real-time elastography (RTE) and mesenchymal immunohistochemical markers to predict prognosis in pancreatic cancer.

Methods Twenty-three consecutive patients diagnosed with PC by EUS-FNB at the Research Center for Gastroenterology and Hepatology, University of Medicine and Pharmacy of Craiova, between January and April 2025, were enrolled. All patients underwent RTE-EUS using the ARIETTA 850 system. Histo-

pathology confirmed the diagnosis, and immunohistochemistry for α -SMA and vimentin was performed to assess mesenchymal activation. Quantitative morphologic and textural classifiers were automatically generated using Image ProPlus AMS analysis software, including: hole area, roundness, heterogeneity, integrated optical density (IOD), Feret max, Feret mean, fractal dimension, and clumpiness [1].

Results High expression of α -SMA and vimentin was significantly associated with the presence of metastases and decreased survival ($p < 0.05$). Morphologic classifiers applied to both elastography and IHC images demonstrated increased stiffness and dense fibrosis in advanced disease stages. Significant associations were found for heterogeneity, IOD, Feret max, Feret mean, fractal dimension, and clumpiness ($p < 0.001$), and for hole area and roundness ($p < 0.05$).

Conclusions This study highlights the potential of EUS-RTE as a real-time imaging tool for improving prognostic assessment in PDAC by integrating mesenchymal marker-based quantitative denominators. Combined elastography–IHC analysis may contribute to more refined risk stratification and personalized management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ungureanu B.S., Pirici D., Dima S.O., Popescu I., Hundorfean G., Surlin V., Saftoiu A. Morphometric Assessment of Confocal Laser Endomicroscopy for Pancreatic Ductal Adenocarcinoma, an Ex-Vivo Pilot Study. *Diagnostics* 2020; 10: 923

eP994 Multidrug-Resistant Bacteria in Acute Cholangitis: A 1960-Episode Cohort Linking Healthcare Exposure to Resistance Risk

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DOI 10.1055/s-0046-1822346

Aims Multidrug-resistant (MDR) pathogens may compromise empiric therapy in acute cholangitis, particularly after repeated biliary interventions. We aimed to describe MDR prevalence and identify patient- and procedure-related risk factors.

Methods We prospectively analysed 1960 Tokyo Guideline–defined acute cholangitis episodes in a multicenter cohort. Bile and blood isolates were classified as MDR if non-susceptible to ≥ 1 agent in ≥ 3 antimicrobial classes; episodes were labelled MDR when ≥ 1 MDR isolate was recovered. Analyses were restricted to culture-positive episodes.

Results Among 979 culture-positive episodes, 350 (35.8%) were MDR, corresponding to 17.9% of all cholangitis episodes. Patients with MDR organisms were older (mean 70.2 vs 68.0 years). MDR clustered in those with prior healthcare and biliary manipulation: previous hospitalisation increased MDR from 30.8% to 40.7%, prior ERCP from 30.1% to 46.0%, and any previous biliary stent from 30.7% to 47.5%. Stenting at the index ERCP was also associated with higher MDR rates (39.7% vs 29.5% without stent). MDR isolates accounted for 35.4% of bile and 23.3% of blood cultures. In multivariable analysis, older age (30% higher odds per decade), previous ERCP (adjusted odds ratio [aOR] 2.4) and antibiotic administration before ERCP (aOR 1.5) remained independently associated with MDR.

Conclusions In this large acute cholangitis cohort, over one-third of culture-positive episodes involved MDR organisms, with substantially higher rates

in older patients and those with recent hospitalisation, prior ERCP, and biliary stents. These findings support escalation of empiric therapy for patients with significant prior biliary manipulation or healthcare exposure, while antimicrobial-sparing regimens may remain appropriate for truly community-acquired cases without such risk factors.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP995 Quality in Focus: Performance Measures in Upper Gastrointestinal Endoscopy in a Single-centre Cohort

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Aims Improving the quality of upper gastrointestinal endoscopy (UGE) relies increasingly on structured performance measures (PMs) defined by the European Society of Gastrointestinal Endoscopy (ESGE). The 2025 update introduced revised key and minor PMs to strengthen standardization and enhance diagnostic performance. The aim of this study was to evaluate compliance with the updated 2025 ESGE UGE performance measures in a cohort of 100 consecutive UGE procedures, to calculate local quality metrics, and to compare these results with those obtained in the same centre in 2023, when examinations were assessed according to the 2016 ESGE framework.

Methods Retrospective cohort study including 100 consecutive UGE performed in 2025 and 309 consecutive procedures performed in 2023 in a single centre. Standard exclusion criteria aligned with ESGE recommendations were applied to both cohorts. Each examination was evaluated against the corresponding ESGE performance measures: the 2025 PMs for the 2025 cohort and the 2016 PMs for the 2023 cohort. Extracted variables included key and minor performance measures, and a comparative analysis between 2023 and 2025 was performed using chi-square, with significance set at $p < 0.05$.

Results In 2025, regarding key PMs, appropriate indication for the procedure was documented in 98% of examinations, fasting instructions in 100%, accurate photodocumentation in 99%, and standardized terminology in 91%. The management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS) protocol was followed in 100% of applicable procedures ($n = 40$), and recommended surveillance intervals in patients with gastric precancerous conditions were respected in 100% of applicable cases ($n = 21$). Two key performance measures remained below ESGE minimum thresholds: the use of a validated mucosal visibility score (39%) and documentation of an inspection time ≥ 7 minutes (39%). Among minor PMs, a minimum 20-minute allocated time slot was assured in 100% of procedures and patients' experience was not evaluated. Some PMs were not applicable due to the absence of eligible cases among the 100 consecutive UGE evaluated: Barrett's oesophagus-related measures, chromoendoscopy in squamous neoplasia risk groups and post-therapeutic complications. Comparative analysis of PMs available in both 2023 and 2025 revealed no relevant differences in fasting documentation (100% vs. 100%, $p = 1.00$), photodocumentation adequacy (99% vs. 99%, $p = 0.85$), or use of standardized terminology (94% vs. 91%, $p = 0.54$). There was a statistically significant improvement in the proportion of procedures in which the MAPS protocol was applied, when relevant (89% vs. 100%, $p = 0.03$). Comparing the 2016 ESGE measures requiring documentation of time vs. the 2025 update additionally mandating an inspection time ≥ 7 minutes, the proportion of examinations meeting the PM improved significantly (22% vs. 39%, $p < 0.01$), indicating a meaningful enhancement in compliance with time-related key PM. Overall, in 2025, 7 of the 10 available PM to evaluate were performed according to the ESGE minimum standard $\geq 90\%$.

Conclusions This two-cohort analysis demonstrates measurable progress in adherence to ESGE performance measures following the 2025 update, with several key PMs meeting or approaching target standards. Improvements were

particularly evident in time-related documentation and use of MAPS protocol for gastric precancerous assessment. Some PMs remain below ESGE minimum thresholds, giving room for continuous improvement, but the overall trend supports the positive impact of systematic quality monitoring and highlights ongoing opportunities to optimize UGE performance in accordance with evolving European standards.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP996 Evaluation of the Efficacy and Safety of Botulinum Toxin Injection in the Treatment of Chronic Anal Fissures

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DOI 10.1055/s-0046-1822348

Aims To assess the real-world efficacy and safety of botulinum toxin type A (BTX-A) injection as a minimally invasive therapeutic alternative for chronic anal fissures and to identify factors associated with early treatment success.

Methods We conducted a retrospective observational study including all patients aged ≥ 18 years with chronic anal fissure treated with BTX-A in a proctology outpatient clinic between January 2021 and September 2024, with a minimum follow-up of 12 months. Patients with inflammatory bowel disease were excluded. A standardized dose of 20 IU of BTX-A divided into two injections was administered in all cases. Primary outcomes were healing rate, number of treatment sessions required, recurrence, and procedure-related complications. The impact of optimized peri-procedural medical therapy (topical treatment and constipation control) on treatment response was also evaluated.

Results Twenty-two patients were included (54.5% male). Complete fissure healing was achieved in 64% after a single BTX-A session and in the remaining 36% after a second session, resulting in a 100% overall healing rate with no recurrences at 1-year follow-up. Patients with optimized peri-procedural medical therapy ($n = 16$, 73%) showed a significantly higher early success rate, as all healed after one session ($p < 0.001$). Only one case of transient mild fecal incontinence (4.5%) was observed, with no permanent sequelae. Complex fissure patterns (combined anterior and posterior fissures and fissure with anal ulcer) were exclusively identified among patients requiring two sessions.

Conclusions In this real-world cohort, BTX-A injection demonstrated excellent efficacy and an outstanding safety profile for the treatment of chronic anal fissures, achieving universal healing with minimal morbidity. Optimized peri-procedural medical therapy emerged as a key modifiable factor for early success, significantly reducing the need for repeated interventions. These data strongly support BTX-A as a first-line, sphincter-preserving, minimally invasive alternative to lateral internal sphincterotomy, with the potential to change current therapeutic paradigms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP997 Use of topical hemostatic agents in upper gastrointestinal bleeding: experience in a reference center in the province of girona

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DOI 10.1055/s-0046-1822349

Aims To evaluate the effectiveness and safety of topical hemostatic agents in the treatment of UGIB in a tertiary hospital.

Methods A retrospective study conducted at Hospital Universitari Dr. Josep Trueta in Girona. Patients with UGIB treated between January 2016 and June 2025 were included. Data were obtained from the Endobase database. Demo-

graphic variables, indication for gastroscopy, etiology of bleeding, use of topical hemostatic agent as first-line treatment, technical success, rebleeding, and 30-day survival were collected [1, 2].

Results A total of 47 patients were analyzed, with a mean age of 66.08 years and a male predominance (76.6 %). The main indication for gastroscopy was hematemesis (53.2 %), followed by melena (34.0 %) and rectal bleeding (4.3 %). The most frequent etiology was esophagogastrroduodenal neoplasm (25.5 %), followed by duodenal ulcer (21.3 %), esophagitis (14.9 %), gastric ulcer (6.4 %), and variceal bleeding (6.4 %). The topical hemostatic agent was used as first-line treatment in 27.7 % of cases. Immediate hemostasis was achieved in 91.5 %, with technical success in 89.4 %. Rebleeding at 7 days was 19.1 % and at 30 days 23.4 %. The 30-day survival rate was 78.7 %.

Conclusions The use of topical hemostatic agents in UGIB showed a high rate of technical success and immediate hemostasis. These results support their use as an effective tool in the endoscopic management of UGIB, especially in selected cases (neoplasms or refractory bleeding) and even as a first-line option.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cooper DM, Norton B, Hawkes ND, Hebbar S, Telese A, Morris J, Haidry R, Barkun A. 2025 "Hemostatic Powder TC-325 as First-Line Treatment Option for Malignant Gastrointestinal Bleeding: A Cost-Utility Analysis in the United Kingdom.". *Endoscopy*, January. doi:10.1055/a-2495-2813
- [2] Tau J.A 2025; "Topical Hemostatic Preventative and Therapeutic Agents: Clinical Impact and Utility.". *Gastrointestinal Endoscopy* 101 (1): 36–44

eP998 Endoscopic removal of an unusual foreign body from the stomach

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DOI 10.1055/s-0046-1822350

Abstract Text

Foreign body (FB) ingestion is common and usually benign. At-risk populations include children, elderly patients, psychiatric patients, prisoners, and those with esophageal disease. While most FBs pass spontaneously, 10–20 % require endoscopic removal, and only ~1 % need surgery. We report a case of toothbrush ingestion successfully removed endoscopically after multiple failed attempts [1, 2].

Case: A 40-year-old obese woman with allergic rhinitis accidentally ingested a toothbrush during a coughing episode. She presented with nausea and gastric fullness. Physical examination and plain thoraco-abdominal radiographs were unremarkable (radiolucent object). Urgent esophagogastrroduodenoscopy without sedation revealed the toothbrush lodged horizontally in the gastric fundus. After repositioning maneuvers and use of a diathermic snare, the object was turned vertically, grasped by the head, and removed successfully without complications. The patient was discharged the same day.

Conclusion: Long objects (>6 cm), such as toothbrushes, can become impacted in the stomach or duodenum and often require endoscopic removal. Use of a snare, basket, and appropriately sized overtube facilitates safe extraction. Management should be multidisciplinary, and preventive measures including patient and caregiver education are essential to reduce such incidents.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bekkerman M, Sachdev AH, Andrade J, Twersky Y, Iqbal S. Endoscopic Management of Foreign Bodies in the Gastrointestinal Tract: A Review of the Literature. *Gastroenterol Res Pract* 2016; 2016:8520767. doi:10.1155/2016/8520767
- [2] Birk M, Bauerfeind P, Deprez PH et al. Removal of foreign bodies in the upper gastrointestinal tract in adults: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2016; 48 (5): 489–496. doi: 10.1055/s-0042-100456

eP999V Human cadavers prepared with a novel anatomical technique for international diagnostic and therapeutic gastrointestinal endoscopy training

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DOI 10.1055/s-0046-1822351

Problem to solve Training in gastrointestinal (GI) endoscopy has mainly relied on plastic simulators, virtual reality platforms, mechanical, and animal tissue models. While widely used, the above modalities lack key features of the human GI tract, including anatomical accuracy, mucosal appearance, and tissue responsiveness. Human cadaver models provide a lifelike experience in surgical training. However, despite various efforts to develop GI endoscopy training on human cadavers, limitations in preservation methods, tissue quality, and reproducibility have prevented widespread adoption so far.

Innovation We developed a novel soft-embalming technique specifically optimised to preserve the human GI tract. Preservation quality was initially validated on three cadavers via standard upper and lower GI endoscopy. We established an international one-day hands-on GI endoscopy training program using our novel, next-generation human cadaver models designed explicitly for the realistic practice of diagnostic and basic therapeutic endoscopic techniques. Participants practiced diagnostic upper and lower GI endoscopy and basic therapeutic procedures, including endoscopic band ligation (EBL) and submucosal injection using Fujifilm devices.

Results The preserved GI tracts closely resembled living tissue, with realistic mucosal appearance, tissue pliability, and luminal distension. Notably, the reduced adherence of the upper GI mucosa to the submucosa proved beneficial for practising submucosal injection and EBL techniques. Preservation chemicals caused no damage to endoscopic equipment, and the cadavers remained suitable for reuse. 70 participants from 14 countries have completed the training across three courses since 2024, and reported significant improvements in both endoscopic technical proficiency and confidence. A total of 51 trainees completed a standardized evaluation (Likert scale 1–5), the results of which are summarized in ► **Table 1**.

► **Table 1** Summary of Trainee Evaluations (1 = poor, 5 = excellent)

Parameter	Mean Score, (n = 51)
Odour intensity of preservation method (low = better)	1.4
Mucosal realism	3.6
Tissue consistency	3.6
GI tract cleanliness	4.3
Endoscope handling realism	4.1
Overall examination realism	4.1
Comfort working on cadavers	3.8
Usefulness for diagnostic endoscopy training	4.3

Conclusions This new-generation human cadaver model provides a realistic, safe, and reusable platform for GI endoscopy training. Quantitative evaluations from 51 trainees demonstrate high realism and educational value, supporting its integration into international endoscopy curricula. Its ability to enable both

diagnostic and therapeutic training – especially submucosal injection, rarely feasible in cadaver models – positions this innovation as a promising bridge between simulation tools and real-world clinical practice.

video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1c10753f-8e5b-4413-a504-7e925b2b0ed1/Uploads/19990_Cadaver_Endoscopy%20for%20ESGE%202026%20-%20Submucosal%20injection.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

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eP1025 Navigating ERCP Through Duodenal Stenosis and Pre-existing Enteral Stents: A Single-Center Experience

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DOI 10.1055/s-0046-1822352

Aims Malignant biliary obstruction (MBO) in the setting of duodenal narrowing is a frequent and challenging scenario in advanced gastrointestinal cancers. Although EUS-guided biliary drainage has emerged as a promising alternative, its use is still limited to specialized centers with dedicated expertise. In daily practice, endoscopists often face two situations: patients with pre-existing enteral stents placed for gastric outlet obstruction (GOO), which complicate biliary access, and patients with duodenal strictures that appear clinically insignificant but prove non-transitable during ERCP. In both cases, positioning or navigating through duodenal stents can represent a pragmatic solution to enable ERCP.

Methods We conducted a single-center observational study including consecutive patients with MBO in the setting of duodenal narrowing. Patients were stratified into two groups according to stent indication: those who underwent ERCP-directed stent placement to enable biliary access, and those with pre-existing enteral stents previously positioned for palliation of GOO. The primary aim was the technical success, defined as successful cannulation of the biliary tract followed by correct placement of a stent. Secondary endpoints included the clinical success, the safety of the procedure, and the need for reintervention. Reinterventions were categorized according to indication: biliary reintervention, performed for stent dysfunction or recurrent biliary obstruction, and GOO-related reintervention, performed for recurrence or progression of duodenal obstruction.

Results Thirty-five patients were included, with a mean age of 68 years and a slight male predominance. The majority had pancreatic cancer and advanced disease stages. Most underwent ERCP-directed stent placement (29, 80.5%), while a smaller subgroup carried pre-existing enteral stents for GOO (7, 19.5%). Clinical indications were mainly jaundice, with a minority presenting with cholangitis. Papilla status was balanced between naïve and previously treated, and sphincterotomy was rarely performed. Metal stents were the preferred choice, either fully covered (82.7%) or uncovered (13.8%), with only one case requiring plastic stents due to hilar cholangiocarcinoma. ERCP was feasible in 30 out of 35 patients (82.9%), confirming a high rate of technical success. Clinical success was achieved in 26 out of 35 patients (74.3%). Procedural adverse events occurred in 2 patients (5.7%), both classified as grade IIIb, consisting of periprocedural collections requiring drainage. Reintervention was necessary in four cases (11.4%): three for cholangitis due to stent dysfunction, and one for stent occlusion, with subsequent ERCP and EUS-guided gastroenterostomy.

Conclusions ERCP in malignant biliary obstruction with duodenal stenosis is feasible (83.3% technical success), with a good clinical efficacy. Severe procedural adverse events were rare (5.6%), while stent dysfunction required reintervention in 11.1% of cases. Overall survival remained limited, reflecting advanced disease stage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1026 Acute bleeding from a downhill esophageal varix treated by endoscopic band ligation

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DOI 10.1055/s-0046-1822353

Case description: A 87-year-old patient presented to our emergency department with hematemesis and melena. With an initial hemoglobin level of 5 g/dL, two units of packed red blood cells were transfused before the hemodynamically stable patient was transferred to our endoscopy unit.

Emergency upper endoscopy revealed a column of downhill varices with stigmata of recent bleeding, characterized by a white nipple sign. During inspection, active bleeding from the downhill varix recurred. The remaining esophagus and stomach showed no signs of portal hypertensive gastropathy or additional varices.

Due to active hemorrhage, endoscopic band ligation was performed using a multiband ligator, resulting in immediate hemostasis. No additional endoscopic therapy was required.

To clarify the etiology of the downhill varices, contrast-enhanced CT of the chest was obtained. It demonstrated a 3.7 × 9 mm thrombus in the superior vena cava with collateralization through the azygos system. The patient had a previously implanted a CRT-D device for complete atrioventricular block, and the transvenous leads were regarded as the causative factor for the SVC thrombosis.

The patient was started on anticoagulation. Given the elevated risk of damaging the CRT-D system, an initial attempt was made to embolize the azygos vein. However, the procedure proved technically unfeasible, and the patient is now being evaluated for stenting of the superior vena cava.

Conclusion Acute bleeding from downhill esophageal varices is rare but can be effectively treated with endoscopic band ligation. Identification and management of the underlying SVC obstruction is crucial for preventing recurrence.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1027 Endocytoscopy in the evaluation of histological remission in ulcerative colitis

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DOI 10.1055/s-0046-1822354

Aims Endoscopic and histologic remission are therapeutic targets in ulcerative colitis (UC). Endocytoscopy (EC), provides optical magnification up to 520x, this real-time imaging modality offers the potential to assess histologic healing without tissue sampling. The objective of this study was to evaluate the diagnostic performance of EC to assess endoscopic and histologic healing in UC [1–3].

Methods We conducted a prospective observational study including consecutive patients with UC in clinical remission undergoing colonoscopy. EC and biopsies were performed and in the segment with the highest previously documented inflammatory activity. Endoscopic activity was evaluated using the Mayo endoscopic subscore and UCEIS. Clinical activity (PRO2) and biochemical markers (fecal calprotectin and C-reactive protein) were recorded. Endocytoscopy (ECI-H290ECI, Olympus) was evaluated using three different scores (ELECT, ICC and ESS) using NBI and 1% methylene blue staining. Three independent endoscopist reviewed EC videos for interobserver correlation. Histologic activity using Nancy index served as the gold standard.

Results Thirty-seven patients were included. Mean age was 52.3 (SD16,6) and 56,8% were female. Baseline characteristics are shown in ► Table 1. Only three

patients (8,6%) had demonstrated mucosal healing on the prior endoscopy. Clinically, patients were in remission, with normal bowel movements number (73 % reporting 1 bowel movement/day) and no rectal bleeding in 100%. Median fecal calprotectin was 39.5 µg/g (IQR 19.1-91.3), CRP 1.2mg/L (IQR 0.5-5.4), hemoglobin 14.8 g/dL (IQR 13.6-15.4), and albumin 4.5 g/dL (IQR 4.4-4.7).

► **Table 1** Baseline characteristics

Age mean (SD)	52,3 (16.6)
Sex	16(43,2 %) male, 21 (56,8 %) female
Smoking status	27 (73 %) No, 5(13,5) Yes, 5(13,5%)Ex
UC extension	Proctitis 8,6 %, Left-sided 54,3 %, extensive 37,1 %

Most patients were in endoscopic remission, with 90 % with Mayo 0 and UCEIS 0. Histologic remission (Nancy 0-1) was present in 78,4 % of patients. EC assessment showed 81 % patients scored as ELECT 0 or 1, 83 % as ICC 0 or 1 and 57 % as ESS 3.

Concordance between Nancy and EC indexes was good. 93,1 % of patients in histologic remission were correctly classified as ELECT 0 or 1, ICC 0 or 1 while 62 % as ESS 3.

Among 6 patients with significant histologic activity (Nancy 2-3), 3 were classified as ELECT 2-3, 2 as ICC 2 and 4 as ESS 4.

Interobserver agreement was good for ELECT score (kappa 0.67), and moderate for ICC and ESS (kappa 0.4). Concordance was 83.3 % for ELECT and 66,7 % for ICC and ESS scores. Of individual variables vascular architecture, distance between crypts, and absence of crypt abscesses had good agreement, while capilar morphology and presence of inflammatory infiltrate only had 33,3 % concordance.

Conclusions Endocytoscopy allows accurate in vivo assessment of histologic remission in patients with ulcerative colitis, with an excellent negative predictive value and could be a feasible alternative to biopsies in patients in endoscopic remission.

Conflicts of Interest Equipment support provided by Olympus

References

[1] Maeda Y, Kudo S, Ogata N, Mori Y, Misawa M, Homma M et al. Endocytoscopic intramucosal capillary network changes and crypt architecture abnormalities can predict relapse in patients with an ulcerative colitis Mayo endoscopic score of 1. *Dig Endosc* 2020; 32 (7): 1082–91

[2] Maeda Y, Ohtsuka K, Kudo SE, Wakamura K, Mori Y, Ogata N et al. Endocytoscopic narrow-band imaging efficiency for evaluation of inflammatory activity in ulcerative colitis. *World J Gastroenterol* 2015; 21 (7): 2108–15

[3] Iacucci M, Jeffery L, Acharjee A, Nardone OM, Zardo D, Smith SCL et al. Ultra-high Magnification Endocytoscopy and Molecular Markers for Defining Endoscopic and Histologic Remission in Ulcerative Colitis. An Exploratory Study to Define Deep Remission. *Inflamm Bowel Dis* 2021; 27 (11): 1719–30

eP1028 Optimizing Endoscopy: The Impact of Specialist Triage on Diagnostic Accuracy

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Aims Proper prioritization is essential for optimizing waiting lists and ensuring that endoscopic procedures provide meaningful diagnostic value. This study aimed to evaluate whether a gastroenterologist's review of General Practitioners (GP)-issued referrals could improve appropriateness and enhance the detection of clinically significant findings.

Methods A single-center retrospective observational study was conducted, including all patients who underwent upper or lower gastrointestinal endoscopy between January 2022 and December 2024. All referrals were issued by GP with a 60 day-priority. Patients were divided into two cohorts: the "GP" group, in which booking occurred directly through the regional scheduling system without specialist input, and the "Specialist" group, in which a gastroenterologist reviewed and, if necessary, modified the assigned priority before scheduling. Appropriateness was assessed using Italian (Raggruppamenti di Attesa Omogenea, RAO) [1] and American Society for Gastrointestinal Endoscopy (ASGE) [2] criteria, and endoscopic outcomes were evaluated for significant organic pathology.

Results A total of 602 patients (302 in the "Specialist" group and 300 in the "GP" group) were included in the study. The "Specialist" cohort demonstrated markedly improved appropriateness of referrals according to RAO (77.5 % vs 59.0 %, $p < 0.001$) and ASGE (94.0 % vs 83.0 %, $p < 0.001$) criteria and increased rates of significant organic pathology (23.2 % vs. 15.0 %, $p = 0.014$), both neoplastic (2.6 % vs 2 %) and non-neoplastic (20.5 % vs 13 %), compared with CUP. Across both cohorts, appropriate referrals were associated with a higher diagnostic yield and no neoplastic lesions were found in examinations classified as inappropriate.

The general features of the two cohorts and the more significant results are summarized in ► **Table 1**.

► **Table 1**

	Specialist (n = 302)	GP (n = 300)	p-value
Female sex	145 (48,0 %)	176 (58,7 %)	
Age (yrs; mean, SD)	63,71 (15,36)	62,81 (14,34)	
Esophagogastroduodenoscopy	191 (63,2 %)	132 (44,0 %)	
Colonoscopy	111 (36,8 %)	168 (56,0 %)	
RAO criteria	234 (77,5 %)	177 (59,0 %)	<0,001
ASGE criteria	284 (94 %)	249 (83 %)	<0,001
Significant pathology *	70 (23,2 %)	45 (15,0 %)	0,014
Neoplastic disease (GC/CRC)	8 (2,6 %)	6 (2,0 %)	0,078
Non-neoplastic disease	62 (20,5 %)	39 (13,0 %)	0,016

* Esophageal varices, Barrett's esophagus, erosive esophagitis grade C/D, eosinophilic/infectious esophagitis, gastric cancer (GC), gastric/duodenal ulcers, gastric antral vascular ectasia, gastric varices, endoscopic findings suspicious for coeliac disease, colorectal cancer (CRC), active inflammatory bowel disease, acute diverticulitis, recurrence of previously endoscopically resected lesion, high-risk colorectal polyp, anastomotic stenosis, rectal fistula, radiation proctitis

Conclusions Specialist review enhances prioritization accuracy and overall diagnostic yield, suggesting that implementing specialist triage may help manage the increasing demand for endoscopic procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] ASGE Standards of Practice Committee Early DS, Ben-Menachem T et al. Appropriate use of GI endoscopy. *Gastrointest Endosc* 2012; 75 (6): 1127–1131
- [2] Manuale RAO AGENAS, AGENAS Agenzia Nazionale per i Servizi Sanitari Regionali. 2020;

eP1029 Predictors of Stricture Requiring Therapeutic Intervention Following Oesophageal ESD: A Retrospective Cohort Study

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DOI 10.1055/s-0046-1822356

Aims Oesophageal endoscopic submucosal dissection (ESD) is increasingly used for the treatment of early oesophageal neoplasia. Post-ESD stricture remains a frequent adverse event, often requiring repeated therapeutic endoscopy. Although several factors have been proposed to influence stricture risk, reported associations vary and the relative importance of individual factors remains uncertain. We aimed to identify predictors of stricture requiring therapeutic endoscopic intervention (SRT) following oesophageal ESD in a real-world cohort.

Methods We performed a retrospective analysis of all oesophageal ESDs with accessible follow-up undertaken at our centre between July 2023 and September 2025. Collected variables included demographic, lesion-related (location, length, circumferential extent, histologic subtype, depth of invasion, histology-based risk category); and procedural characteristics (knife type, endoscopy, procedural complication).

The primary outcome was SRT. Secondary outcomes included the number of endoscopic dilations at predefined intervals (2 months, 4 months, 6 months, last follow-up) and change in dysphagia grade from pre-procedure to peak post-procedure and last follow-up. Clinically important events including oesophageal stenting, non-oral feeding, and stricture-related perforation were also recorded. All variables underwent univariate testing, and the strongest univariate predictors were entered into an exploratory multivariable model.

Results 70 oesophageal ESDs were included in the analysis (median age 71.5 years [IQR 62–77], 71 % male). Lesions were located in the upper (6 %), mid (26 %), lower (47 %) oesophagus or at the gastro-oesophageal junction (19 %). Median lesion length was 40 mm (IQR 30–60). Median circumferential extent was 50 % (IQR 26.3–78.8), with 22/70 (31.4 %) involving ≥ 75 % of the circumference. Histology comprised glandular neoplasia in 61.4 %, squamous neoplasia in 32.9 % and other subtypes. Depth of invasion included no invasion (24.3 %), T1a (50.0 %) and T1b (22.9 %).

28 patients (40 %) developed SRT. On univariate analysis, circumferential extent showed a strong association with SRT (median 87.5 % [IQR 46.5–100 %] vs 31.5 % [IQR 25–50 %]; $p < 0.0001$), while all other variables were non-significant. In the multivariable model containing the strongest univariate predictors, circumferential extent remained the only independent predictor of SRT (OR 1.04 per 1 %, 95 % CI 1.014–1.061; $p = 0.0016$). Histologic subtype (OR 2.92, 95 % CI 0.91–9.41; $p = 0.073$), lesion length (OR 0.996, 95 % CI 0.98–1.02; $p = 0.70$) and age (OR 1.009, 95 % CI 0.95–1.07; $p = 0.78$) were not significant.

Circumferential extent also demonstrated moderate to strong associations with dilatation burden across all intervals (Spearman $\rho = 0.55$ – 0.59 , $p < 0.0001$), was

strongly associated with peak dysphagia worsening ($\rho = 0.60$, $p < 0.0001$), and moderately associated with dysphagia at last follow-up ($\rho = 0.40$, $p = 0.001$). Lesion length showed weak associations with dilatation number and peak dysphagia ($\rho \approx 0.25$, $p < 0.04$), and histologic subtype showed borderline associations with dilatation burden ($p \approx 0.05$ – 0.09) but no association with dysphagia. Neither variable remained significant after adjusting for circumferential extent. All other variables showed no meaningful association with any secondary outcome.

All clinically important events were confined to 100 % circumferential ESDs, including oesophageal stenting ($n = 5$), need for non-oral feeding ($n = 2$), and dilatation-related perforation ($n = 3$).

Conclusions Circumferential extent was the sole independent predictor of SRT following oesophageal ESD and the only factor consistently associated with stricture severity across dysphagia and dilatation outcomes. These findings highlight circumferential involvement as the dominant determinant of clinically significant post-ESD stricture and support its use as the primary basis for risk stratification and preventive strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1030 New-Onset Eosinophilic Esophagitis Following Radiofrequency Ablation for Barrett's Esophagus: A Case Report

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DOI 10.1055/s-0046-1822357

Introduction Eosinophilic esophagitis (EoE) is a chronic, immune-mediated esophageal disorder characterized by eosinophil-predominant inflammation [1]. Esophageal eosinophilia may also be seen in gastroesophageal reflux disease (GERD) and Barrett's esophagus (BE) [2, 3]. However, the onset of EoE after endoscopic eradication therapy—particularly radiofrequency ablation (RFA)—is rare, with only a single case described in the literature [4]. We report a case of de novo EoE developing after successful RFA for BE.

Methods A 43-year-old woman with a 10-year history of GERD and BE underwent RFA in 2021 and remained on single-dose proton pump inhibitor (PPI) therapy thereafter. Surveillance esophagogastroduodenoscopy (EGD) in 2022 showed normal-appearing mucosa, while biopsies revealed > 15 eosinophils per high-power field (HPF) without dysplasia. After a four-week PPI washout, repeat EGD demonstrated mucosal edema and longitudinal furrows (EREFS score: 2). Biopsies from distal, medium and proximal esophagus showed up to 35 eosinophils/HPF, confirming EoE.

Results High-dose PPI therapy was initiated, resulting in both symptomatic and histologic improvement. Three-month EGD revealed partial mucosal healing (EREFS score: 1) and reduced eosinophilic count (9 eosinophils/HPF). As of today, the patient maintained sustained clinical, endoscopic, and histologic remission of EoE, with no recurrence of BE or dysplasia.

Conclusions This case illustrates the rare occurrence of EoE arising after RFA for BE. Clinicians should consider EoE in patients with previously treated esophageal conditions who develop persistent or unexplained symptoms, even after successful eradication therapy. Early recognition and appropriate management can prevent chronic inflammation and disease-related complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ameyaw PA, Parsons D, Mahmoud A, Marie R, Nagar A, Aslanian HR. Co-existent Eosinophilic Esophagitis and Dysplastic Barrett's Esophagus With Rapid Eosinophilic Infiltration of Neosquamous Mucosa After Radiofrequency Ablation. *ACG Case Rep J*. 2024; 11 (9): e01488
- [2] Ravi K, Katzka DA, Smyrk TC et al. Prevalence of esophageal eosinophils in patients with Barrett's esophagus. *Am J Gastroenterol* 2011; 106 (5): 851–857

- [3] Spechler SJ. Gastroesophageal Reflux Disease and Eosinophilic Esophagitis. *Gastroenterol Hepatol* (N Y) 2019; 15 (2): 111–113
- [4] Dellon ES, Muir AB, Katzka DA et al. ACG Clinical Guideline: Diagnosis and Management of Eosinophilic Esophagitis. *Am J Gastroenterol* 2025; 120 (1): 31–59

eP1031 Incidental Endoscopic Diagnosis of a Hepatoduodenal Fistula Secondary to a Pyogenic Liver Abscess

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DOI 10.1055/s-0046-1822358

Introduction Enterohepatic fistulas are rare complications of pyogenic liver abscesses, typically involving the stomach, colon, or duodenum [1, 2]. Prompt identification may be challenging, as symptoms are often nonspecific. Esophagogastroduodenoscopy (EGD) may reveal unexpected fistulous tracts, while contrast-enhanced CT remains the gold standard for detailed characterization [3, 4]. No standardized management guidelines exist; conservative drainage may allow spontaneous closure, though surgery is often required [3].

Methods A 76-year-old woman presented to the emergency department with abdominal pain, epigastric pain, fever, and coffee-ground vomiting. Given the suspicion of upper gastrointestinal bleeding, an urgent EGD was performed. The examination revealed an orifice with inflamed margins in the duodenal bulb, exuding purulent material—highly suggestive of a fistulous tract. Based on these findings, a contrast-enhanced CT scan was promptly obtained, demonstrating a 42 × 30 mm abscess in segment V of the liver, containing air–fluid levels and extending toward the gallbladder bed and duodenum, confirming a hepato-duodenal fistula.

Results Ultrasound-guided percutaneous drainage was performed and intravenous piperacillin/tazobactam was initiated. Despite a significant clinical improvement, persistence of the fistulous tract on follow-up imaging required surgical intervention. Postoperatively, the patient showed rapid clinical and biochemical improvement, and a CT scan confirmed complete resolution.

Conclusions This case describes the endoscopic detection of a rare hepato-duodenal fistula secondary to a pyogenic liver abscess. The initial EGD—performed for suspected upper GI bleeding—proved crucial in early detection of the fistulous tract and guided subsequent imaging and therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ahmed M. Gastrointestinal Fistulas-What Gastroenterologists Need to Know in 2025. *Can J Gastroenterol Hepatol* 2025; 2025:6210421
- [2] Serraino C, Elia C, Bracco C et al. Characteristics and management of pyogenic liver abscess: A European experience. *Medicine* (Baltimore) 2018; 97 (19): e0628
- [3] Bläckberg A, Jönsson A, Svensson E, Sunnerhagen T, Kiasat A, Ljungquist O. A Population-Based Study of Unfavorable Prognostic Factors Associated With Pyogenic Liver Abscess. *Open Forum Infect Dis* 2023; 10 (8): ofad352
- [4] Lamba AS, Singh B, Gupta M et al Hepato-Duodenal fistula complicating a pyogenic liver abscess: an unusual presentation. *Cureus* 2020; 12: e12236

eP1032 The Association of Extremely Elevated Pancreatic Cyst Fluid CEA with Underlying Malignancy Risk: A Single-Center Cohort Study

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DOI 10.1055/s-0046-1822359

Aims Pancreatic cystic neoplasms present a diagnostic challenge in determining which lesions are malignant or carry a high malignant potential. Cyst fluid carcinoembryonic antigen (CEA) is traditionally used to distinguish mucinous from non-mucinous pancreatic cysts, with limited value in identifying malignancy. However, in clinical practice, markedly elevated CEA levels are occasionally observed in patients with invasive cystic neoplasms. This study investigates the association between extremely high cyst fluid CEA concentrations and the presence of underlying malignancy in pancreatic cysts [1–3].

Methods We retrospectively analyzed pancreatic cyst fluid CEA concentrations in patients with known cyst outcomes. A total of 177 patients who underwent EUS-FNA between 2022 and 2024 for the evaluation of pancreatic cysts were included. Malignancy was established by expert cytopathology. Non-malignant lesions included low-grade intraductal papillary mucinous neoplasms, pseudocysts, serous cystadenomas, and lymphoepithelial cysts. We compared CEA levels between non-malignant and malignant groups and constructed a receiver operating characteristic (ROC) curve using malignant cytology (Yes/No) as the reference standard. The area under the curve (AUC) was calculated (accounting for tied values in CEA measurements), and we examined sensitivity and specificity at a high CEA cutoff. Finally, a univariable logistic regression was performed with log-transformed CEA (ln[CEA]) as the predictor of malignancy, reporting the odds ratio (OR) and model performance metrics.

Results A total of 177 pancreatic cysts were included (122 non-malignant, 55 malignant by cytology). Cyst fluid CEA levels ranged widely in both groups. The median CEA was 18 ng/mL in non-malignant cysts versus 800 ng/mL in malignant cysts, although there was notable variance and overlap between groups (some malignant cysts exhibited only modest CEA elevations, and occasional benign lesions had moderately increased CEA). ROC analysis yielded an AUC of 0.873 for CEA in predicting malignant cytology. Using an exemplary high cutoff (CEA > 1500 ng/mL), sensitivity was 78.8% and specificity 94.3% for identifying malignancy (based on cross-tabulation of the dichotomized CEA). In a logistic regression model, ln(CEA) was a significant independent predictor of malignancy (OR ≈ 1.97 per unit increase, $p < 0.001$). This single-predictor model achieved an overall diagnostic accuracy of 82.4%, with a Nagelkerke R^2 of 0.504, indicating that approximately half of the variance in cyst malignancy status was explained by fluid CEA alone.

Conclusions Extremely elevated pancreatic cyst fluid CEA levels are associated with malignancy, yet the overlap with benign lesions limits CEA's role as a standalone diagnostic marker. These findings support CEA as a valuable, though imperfect, tool in malignancy risk stratification. Clinicians may tailor interpretation of CEA thresholds based on the desired balance between sensitivity and specificity in the context of surgical decision-making. Our retrospective analysis suggests that markedly elevated CEA levels (in the thousands of ng/mL) are indicative of an invasive mucinous cyst and may aid in identifying high-risk cysts that warrant more aggressive management. Therefore, cyst fluid CEA results should be interpreted in conjunction with cytology, imaging, and clinical findings rather than in isolation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ngamruengphong S et al. 2013 "Cyst carcinoembryonic antigen in differentiating pancreatic cysts: a meta-analysis. *Explor Dig Dis*. 2025; 4: 100571. doi:10.37349/eddi.2025.100571
- [2] Nagula S et al. 2010 "Evaluation of cyst fluid CEA analysis in the diagnosis of mucinous cysts of the pancreas.". *J Gastrointest Surg*. 2010; 14 (12): 1997–2003. doi:10.1007/s11605-010-1281-0
- [3] Brugge WR et al. 2004 "Diagnosis of pancreatic cystic neoplasms: a report of the cooperative pancreatic cyst study. *Gastroenterology* 2004; 126 (5): 1330–1336

eP1033 Dual Remission of Eosinophilic Esophagitis and Ulcerative Colitis With Dupilumab: A Case Report

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DOI 10.1055/s-0046-1822360

Introduction Eosinophilic esophagitis (EoE) is a chronic, immune-mediated disease characterized by a T-helper 2 (Th2)–driven inflammatory response [1]. Ulcerative colitis (UC), although distinct, also involves dysregulated Th2-related pathways [2]. Dupilumab, a monoclonal antibody targeting IL-4Rα and modulating Th2 inflammation, has demonstrated efficacy in allergic disorders, including EoE [3]. Although theoretical concerns exist regarding IL-17 down-regulation and potential inflammatory bowel disease (IBD) activation, current evidence does not indicate an increased risk of UC exacerbation [4]. We report a case of coexisting EoE and UC successfully managed with dupilumab and mesalazine.

Methods A 43-year-old man with chronic atopic asthma treated with inhaled corticosteroids (ICS) and antihistamines was evaluated for recurrent bloody diarrhea. Colonoscopy and biopsies confirmed UC and combined oral and rectal mesalazine induced clinical remission. 2 years later, he developed reflux symptoms and dysphagia. Esophagogastroduodenoscopy (EGD) revealed distal esophagitis and a fixed ring, with 15 eosinophils/high-power field (HPF). After discontinuing ICS, a repeat EGD demonstrated edema, rings, and furrows (EREFS: E1R1Ex0F1S0) with > 70 eosinophils/HPF, confirming EoE. High-dose proton pump inhibitor therapy failed to improve symptoms. Given persistent EoE and worsening asthma control, dupilumab was initiated.

Results After three months of dupilumab, dysphagia resolved, and follow-up EGD showed near-complete mucosal healing (EREFS: E0R1Ex0F0S0) with 5 eosinophils/HPF. A same-visit colonoscopy demonstrated endoscopic and histologic remission of UC. At the follow-up 4 years later, the patient maintained sustained clinical, endoscopic, and histologic remission of both EoE and UC under dupilumab and mesalazine.

Conclusions This case highlights the efficacy and safety of dupilumab in a patient with concurrent EoE and UC, without IBD exacerbation. The findings support the potential role of Th2-targeted biologics in managing overlapping allergic and immune-mediated gastrointestinal diseases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Spencer EA, Dolinger MT, Dubinsky MC. A Single-Center Experience with Dupilumab for Atopic or Psoriasiform Dermatitis in Patients with Inflammatory Bowel Disease. *Dig Dis Sci* 2023; 68 (4): 1121–1124
- [2] Aceves SS, Dellon ES, Greenhawt M, Hirano I, Liacouras CA, Spergel JM. Clinical guidance for the use of dupilumab in eosinophilic esophagitis: A yardstick. *Ann Allergy Asthma Immunol* 2023; 130 (3): 371–378
- [3] Kałużna A, Olczyk P, Komosińska-Vashev K. The Role of Innate and Adaptive Immune Cells in the Pathogenesis and Development of the Inflammatory Response in Ulcerative Colitis. *J Clin Med* 2022; 11 (2): 400
- [4] Khokhar D, Marella S, Idelman G, Chang JW, Chehade M, Hogan SP. Eosinophilic esophagitis: Immune mechanisms and therapeutic targets. *Clin Exp Allergy* 2022; 52 (10): 1142–1156

eP1034 Endoscopic Musosal Resection of rare rectal composite neuroendocrine tumor and intra-mucosal adenocarcinoma

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DOI 10.1055/s-0046-1822361

Introduction Composite colorectal tumors combining neuroendocrine and glandular neoplastic components are exceptionally uncommon and may present diagnostic and therapeutic challenges [1, 2]. Advances in high-definition endoscopy and resection techniques allow effective, minimally invasive treatment when lesions are accurately staged [3].

Methods A 70-year-old man underwent colonoscopy for evaluation of non-specific abdominal discomfort. Endoscopic examination revealed a 40-mm sessile lesion in the proximal rectum. High-definition white-light and narrow-band imaging demonstrated a mixed pit pattern with glandular and slightly depressed areas, suggestive of early neoplasia limited to the mucosa. An en bloc endoscopic mucosal resection (EMR) was performed after submucosal injection with saline, epinephrine, and indigo carmine. The resection was macroscopically complete, and the procedure was uneventful.

Results Histopathologic analysis confirmed a composite tumor composed of a well-differentiated NET G1 (trabeculo-microacinar pattern; CKpan +, chromogranin +, synaptophysin +, Ki-67 < 3 %) and a coexisting intramucosal adenocarcinoma. Both components were strictly confined to the mucosa, with negative lateral and deep margins and no lymphovascular invasion. A contrast-enhanced CT performed after EMR showed no residual disease, regional lymphadenopathy, or complications. The final diagnosis was composite NET G1 and intramucosal adenocarcinoma with R0 resection. Considering the complete removal and low metastatic risk, conservative management was chosen, with follow-up colonoscopy scheduled at 12 months.

Conclusions This case illustrates that en bloc EMR can be a definitive, minimally invasive treatment for selected composite colorectal tumors when both endoscopic staging and histology confirm mucosal confinement. High-quality imaging, meticulous resection technique, and comprehensive pathology review remain essential to guide optimal management and surveillance in these rare lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ferlitsch M, Hassan C, Bisschops R, Antonelli G, Jover R, Kamiński MF et al. Colorectal polypectomy and endoscopic mucosal resection: ESGE Clinical Guideline – Update 2024. *Endoscopy*. 2024; 56 (4): 345–372
- [2] Kim JY et al. Mixed adenoneuroendocrine carcinoma of the colon: report of a case and review of literature. *Mod Pathol* 2016; 29: 1473–1483
- [3] La Rosa S, Sessa F, Uccella S. Mixed neuroendocrine–nonneuroendocrine neoplasms (MiNENs): an update. *Cancers (Basel)* 2012; 4 (1): 11–30

eP1035 Therapeutic ERCP is safe in patients over the age of 80 years when Imaging, biochemical and symptomatic profile fulfils the criteria

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Aims Endoscopic retrograde cholangiopancreatography (ERCP) is utilised as a therapeutic tool to treat pancreatobiliary diseases. Inherently, it carries a risk of complications ranging from mild to fatal. With an ageing population, a significant proportion of patients requiring an ERCP are > 80 years. Complications in this age group are significantly higher. The aim of this study was to evaluate the safety of ERCPs in individuals > 80 years by calculating the incidence of complications and associated mortality rate at our centre.

Methods A retrospective review of individuals > 80 years old who underwent an ERCP at our centre. Data was collected across 2 years and 10 months between January 2023 and October 2025. Endoscopic database was scrutinised to obtain data regarding details of the procedure, including medications administered and immediate complications. Electronic records were analysed to determine the indications, the presence of any intermediate/medium term

complications as well as mortality. Pathology database was reviewed to assess blood results at the time of the procedure.

Results A total of 398 ERCPs were performed during the 34-month time frame. Of which, 110 (27.6%) procedures had been performed on individuals of at least 80 years of age. Median age was 86 (IQ range 83-89). 56.4% of them were male. Median dose of midazolam and fentanyl administered were 1.25mg (IQ range 1-1.25), 25mcg (IQ range 25-37.5), respectively. 43.1% of patients received hyoscine butylbromide.

91.8% of patients received PR diclofenac. All patients received intravenous fluids pre and post procedure. Mean ALT, ALP and bilirubin prior to ERCP was 125 (IQ range 36.5-169), 592 (IQ range 174-705) and 115 (IQ range 14.5-155), respectively.

The decision to perform an initial ERCP was determined by at least 2 of the 3 parameters: imaging, biochemistry or symptoms. 90.6% of patients fulfilled minimum 2 criteria. Most common indication for ERCP was choledocholithiasis +/- cholangitis (68%). Other indications were abnormal imaging indicative of hepato pancreato biliary cancer.

Complications were found in 10% of the cohort. Most common complication was post-ERCP pancreatitis and post ERCP cholangitis, occurring in 4.5% and 3.6% of procedures respectively. Delayed bleeding occurred in 0.1% of patients. There were no patients in this study who sustained a perforation. One patient in the cohort of 110 patients died from cardiorespiratory arrest and 1 patient died from post-ERCP pancreatitis resulting in a total mortality rate of 1.8% (multiple co-morbidities and frailty). In 5 of the 110 procedures, a repeat ERCP was required due to inability to cannulate. An alternative procedure, such as an EUS or PTC was organised.

Conclusions Outcomes of this study indicate that ERCP is safe in this age group for sepsis and decompressing of the biliary system, when two out of three pre-requisition criteria are met and safe sedation practices are followed. When compared to national metrics there is no difference in complication rates in those over the age of 80.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1036 Real world outcomes from endoscopic ultrasound guided gastrojejunostomy for malignant gastric outlet obstruction

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DOI 10.1055/s-0046-1822363

Aims Endoscopic ultrasound guided gastrojejunostomy (EUS-GJ) has recently been shown to be superior to enteral stenting and surgery for management of gastric outlet obstruction (GOO). Outcomes outside of randomised trials is limited. We aimed to assess the outcomes from EUS-GJ for management of malignant gastric outlet obstruction in 2 UK centres.

Methods Retrospective analysis of patients undergoing EUS-GJ was conducted in 2 tertiary centres. Information was collected including demographics, indication, sedation, pre- and post- GOOS score, stent size, technique used, number of days to commencing diet, adverse events, reintervention rate, other interventions required, receipt of oncological treatment and survival. Univariate analysis was performed to assess pre- and post-procedure GOOS scores. Survival was assessed using Kaplan-Meier curves and assessment of factors associated with survival using Cox regression analysis.

Results 46 patients were included with mean age 68.8 year and 22 females. The majority were for obstruction due to pancreaticobiliary cancer (n = 38) and 23 were performed under anaesthesia and 23 sedation. Median pre-procedure

GOOS score was 0.5 (IQR 0 – 1). Technical success was achieved in 44/46 (95.6%) with 2 stents having a type 1 maldeployment (1 managed endoscopically with subsequent success). Median GOOS score rose to 3 (IQR 3 – 3, p<0.0001) post-procedure with a median of 1 day to full diet. Overall 7-day adverse event rate was 4/46 (8.7%) which were maldeployment (2), acute kidney injury (1) and failure to improve (1). 21/46 (45.7%) also required biliary intervention. Overall survival was 113 days which was shorter in those needing biliary intervention (97 days biliary vs. 150 days non-biliary, p = 0.3). Improved survival was associated with subsequently receiving chemotherapy (HR 1.2, 95% confidence interval 1.07 – 1.6, p = 0.0004).

Conclusions EUS-GJ is an effective intervention for malignant gastric outlet obstruction showing significant improvement in GOOS scores and early return to full diet. Adverse event rates are low and allows receipt of chemotherapy which improves survival. Larger studies are needed to determine factors affecting survival.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1037 EUS-guided Double Drainage outcomes in real world practice

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Aims Malignant pancreaticobiliary pathology can result in simultaneous gastric outlet obstruction (GOO) and biliary obstruction. Previously, surgical and/or radiological intervention was required to alleviate this combination of symptoms. Endoscopic ultrasound guided gastrojejunostomy (EUS-GJ) and EUS-biliary drainage (EUS-BD) now affords patients endoscopic options for double drainage, relieving both GOO and obstructive jaundice. Real world data on double drainage feasibility is emerging.

Methods A retrospective analysis of patients undergoing both EUS-GJ and EUS-BD was conducted across 2 UK centres over 17 months. Data collected included demographics, indication, sedation approach, drainage approach, technical success rate, clinical success rate, adverse events, re-intervention rate and survival. Univariate analysis was performed to compare outcomes and Cox regression used to determine factors influencing survival.

Results 18 patients underwent double drainage intervention. Mean patient age was 69.7 with 55% male predominance (n = 10/18). 78% of procedures were completed under conscious sedation (n = 14/18). Pancreatic adenocarcinoma was the most common pathology (44%, n = 8/18), followed by duodenal adenocarcinoma (22%, n = 4/18). EUS-GB was the most common biliary drainage approach (33%, n = 6/18), followed by EUS-CDD (27%, n = 5/18). Technical success was achieved in 100% of patients. Clinical success rate was 88.9% (n = 16/18) with a significant drop in bilirubin (median pre-bilirubin 158 vs median post-bilirubin 36, p = 0.0007). Adverse events were recorded in 16.7% (3/18; acute renal failure, lower respiratory tract infection, CDD stent occlusion). Re-intervention was required in 11% (2/18). Median survival post intervention was 97 days (range 40-171). Palliative chemotherapy post intervention conferred a significant survival benefit, OR 1.2 (95% CI 1.07-1.6).

Conclusions Real world data demonstrates that EUS double-drainage provides a single session alternative to surgical or radiological drainage options. Clinical success and complication rates were comparable with international standards. Although conscious sedation supported double-drainage is feasible, general anaesthetic remains the preferred sedation approach to facilitate prolonged interventional procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1038 The Index of Severity for Eosinophilic Esophagitis is associated with baseline clinical and endoscopic characteristics but not predict the response to BOT in adult patients

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Aims The Index of Severity for Eosinophilic Esophagitis (I-SEE, EoE) is a longitudinal, clinically applicable scoring system designed to evaluate the complete extent of EoE symptoms, endoscopic and histologic activity, fibrostenotic progression, and the risk of complications. We aimed to define the relationship between the I-SEE score and EoE features and disease severity at diagnosis, and to assess whether the I-SEE score could predict the loss of response to budesonide orodispersible tablets (BOT).

Methods Patients with EoE undergoing at least one year of BOT maintenance therapy at the dosage of 1 mg/day were enrolled. The I-SEE score was calculated at the time of EoE diagnosis. According to the score, patients were classified as mild (1–6 points), moderate (7–14 points) or severe (≥ 15 points). Patients characteristics and disease features, including symptoms, endoscopy and histology, were collected at baseline and after one year of BOT therapy. Pearson correlation, chi-square test and logistic regression analysis were used where appropriate. A p value < 0.05 was considered statistically significant.

Results A total of 114 adult EoE patients (81.6% male) with a mean age of 38.7 (SD ± 12.8) were retrospectively enrolled in the study. At baseline, 27.2%, 54.4% and 18.4% of patients had mild, moderate and severe I-SEE scores, respectively. At diagnosis, the total I-SEE score positively correlated with diagnostic delay ($r^2 = 0.18$, $p = 0.043$) and with the EREFS score ($r^2 = 0.40$, $p < 0.001$). Moderate/severe I-SEE was significantly associated with food impaction ($\chi^2 = 13.6$, $p = 0.001$) the presence of stenosis ($\chi^2 = 28.4$, $p < 0.001$) and the need for endoscopic dilation ($\chi^2 = 20.9$, $p < 0.001$) at diagnosis. Presence of atopic comorbidities at baseline did not correlate with I-SEE severity score.

In the logistic regression model, increasing I-SEE severity was a strong independent predictor of endoscopic dilation ($p < 0.01$), corresponding to almost ten-fold increase in risk for each severity category (OR = 9.97, 95% CI: 2.8–34.4).

In our cohort, 4.9% has not responded to induction treatment and 24.7% lost histological response after 1 year of BOT. The I-SEE score at diagnosis did not correlate with BOT failure and it could not predict loss of response after one year of follow-up.

Conclusions In our study, the I-SEE score could not predict loss of response to BOT treatment. However, our results suggest that the I-SEE is a valuable tool for classifying EoE patients according to the severity of their symptoms, endoscopic activity and fibrostenotic features, and for predicting the need for endoscopic dilation at diagnosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1039 Endoscopic ultrasound-guided liver biopsy with dynamic aspiration technique using heparin. Initial experience in a tertiary care center

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DOI 10.1055/s-0046-1822366

Aims Endoscopic ultrasound-guided liver biopsy (EUGLB) has become an alternative to percutaneous biopsy. The most commonly used techniques require several punctures in both hepatic lobes. The technique with dynamic aspiration with heparin (DAH) allows the procedure to be performed with a single puncture without affecting quality indicators. Our aim is to describe our center's experience with the implementation of EUGLB with DAH.

Methods Retrospective study of patients undergoing EUGLB with DAH from September 2024 to June 2025 at our center. Clinical, anatomicopathological, and procedural data were collected. The procedure was performed using the DAH technique with a single transduodenal puncture with a 19F biopsy needle (Boston Adquire) on the right hepatic lobe. An adequate sample was defined as ≥ 20 mm in size and including ≥ 11 complete portal spaces (CPS).

Results A total of 30 EUGLB procedures were performed with DAH. The main indication was hypertransaminasemia (81.7%). Other indications were suspected rejection (4.5%) and acute hepatitis (13.7%). The mean total sample size was 58.7 ± 26.6 mm, the mean size of the largest fragment was 20.6 ± 9.22 mm, and the mean number of CPS was 12 ± 6.79 . An adequate sample was obtained in 68.7% of cases, and a histological diagnosis was possible in 100% of cases. No serious adverse effects were observed, and all patients were discharged in less than 12 hours. In 2 cases (6.6%), abdominal pain was reported, which was controlled with first-line analgesia.

Conclusions EUGLB with DAH has proven to be a safe and effective technique for obtaining liver parenchyma samples with a single puncture.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1040 Clinical benefits of prucalopride in colon capsule endoscopy: A Real-World comparative analysis

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Aims Colon capsule endoscopy (CCE) is a noninvasive alternative for colorectal evaluation; however, its widespread adoption has been limited by historically suboptimal completion rates and inadequate colonic cleanliness compared with conventional colonoscopy. Prucalopride, a selective 5-HT₄ agonist, may improve gastrointestinal motility and enhance CCE performance, but real-world data are limited.

Methods A prospective, cohort analysis was performed on 500 CCE examinations. Asymptomatic, FIT negative patients (aged between 40 and 60 years) were enrolled and divided into two groups: those who did not receive prucalopride and/or fleet enema ($n = 250$) and those who received 2 mg prucalopride immediately after gastric imaging ($n = 250$). In this group if colonic transit was already prolonged, patients (who consented) received an on-demand rectal sodium phosphate enema as a rescue booster. Gastric, small bowel, colonic and total transit times were compared using Welch's t-test. Completion rates (defined as excretion or visualization of the hemorrhoidal plexus before battery depletion) were compared using chi-square and Fisher's exact tests. Polyp detection rates and CC-CLEAR colonic cleanliness scores were also analyzed.

Results Prucalopride and enema booster administration significantly reduced small bowel transit time (mean 99.7 vs. 54.6 min, $p < 0.001$) and total examination time (392.9 vs. 315.9 min, $p = 0.0056$), while gastric and colonic transit times showed no significant differences.

The technical incomplete examination rate was markedly lower in the new protocol group (15/493) compared with the control group (16/100) ($p < 0.00001$; OR 6.07), indicating a more than six-fold reduction in failure risk. Polyp detection rates did not differ significantly between the groups (21% vs. 29%; $p = 0.11$).

In the CC-CLEAR subset, colonic cleanliness was significantly better with prucalopride (mean score 3.8 vs. 8.4; $p < 0.001$).

Conclusions Our new protocol improves the efficiency and technical success of colon capsule endoscopy by significantly accelerating transit and enhancing colonic cleanliness, while maintaining comparable polyp detection rates. These findings suggest that optimized CCE protocols may help overcome longstanding limitations of the modality and hold promise for future application as a non-invasive colorectal cancer screening alternative, particularly in FIT-negative screening populations who require reliable yet patient-friendly diagnostic pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1041 Comparison of AI-based CADx systems for optical diagnosis of colorectal polyps

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DOI 10.1055/s-0046-1822368

Aims Artificial intelligence (AI)-assisted polyp characterization during colonoscopy may support real-time decisions on resection strategy and surveillance intervals. Several systems are now available, but head-to-head comparative data remain limited.

Our aim was to compare the diagnostic performance of two CADx systems (MagentiQ and PolypBrain) for differentiating neoplastic from non-neoplastic colorectal polyps during colonoscopy, using histology as the gold standard.

Methods We performed a retrospective single-centre analysis of 62 colorectal polyps with available histology and AI-based predictions from both systems. Histopathology was classified as neoplastic (adenomas, sessile serrated adenomas/lesions, adenocarcinoma, high-grade neoplasia) or non-neoplastic (hyperplastic and juvenile polyps, inflammatory/IBD-related changes, normal mucosa). For MagentiQ, outputs labelled “Neo” / “Neo-Neo” were considered neoplastic; “Non-Neo”, “Inconclusive” or “not found” were considered non-neoplastic. For PolypBrain, any output containing “adenoma” was classified as neoplastic; all other outputs (including “too small / too bloody / not classified”) were considered non-neoplastic. We calculated sensitivity, specificity, positive and negative predictive values (PPV, NPV) and overall accuracy, and compared paired classifier performance using McNemar’s test.

Results Histology identified 46/62 (74.2%) lesions as neoplastic. For MagentiQ, sensitivity was 67.4% (31/46), specificity 68.8% (11/16), PPV 86.1% (31/36), NPV 42.3% (11/26), and accuracy 67.7% (42/62). For PolypBrain, sensitivity was 73.9% (34/46), specificity 62.5% (10/16), PPV 85.0% (34/40), NPV 45.5% (10/22), and accuracy 71.0% (44/62). PolypBrain correctly classified 14 lesions that MagentiQ misclassified, whereas MagentiQ correctly classified 12 lesions misclassified by PolypBrain (McNemar $p = 0.85$).

Conclusions Both AI systems achieved high PPV but only moderate sensitivity for identifying neoplastic colorectal polyps. PolypBrain showed slightly higher sensitivity and overall accuracy at the expense of somewhat lower specificity, while overall performance differences were not statistically significant. These findings support the potential of AI-assisted polyp characterization but highlight the need for the opinion of experts as AI systems remain suboptimal.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1042 Comparison of EUS-Guided and Percutaneous Liver Biopsy Needles for Diagnostic Yield and Tissue Adequacy in Explanted Cirrhotic Livers: A Prospective Comparative Study

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DOI 10.1055/s-0046-1822369

Aims Endoscopic ultrasound-guided liver biopsy (EUS-LB) is increasingly used as an alternative to percutaneous liver biopsy (PC-LB), but comparative evidence on optimal needle selection remains limited. This study compared diagnostic yield and tissue adequacy of EUS and percutaneous biopsy needles using explanted cirrhotic livers [1].

Methods In this prospective, comparative ex-vivo study, 30 adult explanted cirrhotic livers underwent biopsies using four needles: PC-16G, PC-18G, EUS-19G FNB, and EUS-22G FNB from both lobes (total 240 biopsies). Tissue adequacy was defined as specimen length ≥ 15 mm and ≥ 11 complete portal tracts (CPT). Histopathology was assessed by a blinded pathologist. Repeated-measures ANOVA, Cochran’s Q, and McNemar tests were used (► Table 1).

► Table 1 DIAGNOSTIC ACCURACY OF EUS AND PC NEEDLES

Sl no.	Needles	Stage 2 n (%)	Stage 3 n (%)	Stage 4 n (%)
1	PC 16 G	1 (3.3%)	1 (3.3%)	58 (96.6%)
2	PC 18 G	0	8 (13.3%)	52 (86.6%)
3	EUS 19 G	0	21 (35%)	39 (65%)
4	EUS 22 G	16 (26.6%)	43 (71.6%)	1 (3.3%)

Results Mean total specimen length was highest with EUS-19G (26.8 $\pm$ 14.9 mm), followed by PC-16G (18.8 $\pm$ 5.5 mm), PC-18G (17.9 $\pm$ 6.2 mm), and EUS-22G (12.9 $\pm$ 8.2 mm) ($p < 0.001$). Mean CPT was comparable between EUS-19G (13.5 $\pm$ 3.8) and PC-16G (13.4 $\pm$ 2.8), but significantly lower with EUS-22G (8.9 $\pm$ 3.2, $p < 0.001$). Tissue adequacy was achieved in 98% with PC-16G, 93% with PC-18G, 92% with EUS-19G, and 50% with EUS-22G ($p < 0.001$). Cirrhosis was most accurately identified with PC-16G and EUS-19G, while EUS-22G had higher non-diagnostic rates and lower fibrosis staging accuracy.

Conclusions EUS-19G provides tissue adequacy and portal tract yield comparable to standard percutaneous biopsy needles and yields significantly longer core specimens. EUS-22G is inferior for diagnostic liver biopsy. EUS-19G represents a reliable alternative to PC-LB in appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Bhandari M, Samanta J, Spadaccini M, Fugazza A, Crinò SF, Gkolfakis P et al. Diagnostic Yield of Endoscopic Ultrasound-Guided Liver Biopsy in Comparison to Percutaneous Liver Biopsy: A Meta-Analysis of Randomized Controlled Trials and Trial Sequential Analysis. *Diagnostics*. 2024; 14 (12): 1238

eP1043 Utility of EUS chronic pancreatitis criteria in prediction of pancreatic texture and pancreatic fistula post pancreaticoduodenectomy

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DOI 10.1055/s-0046-1822370

Aims Postoperative pancreatic fistula (POPF) remains the most significant complication following pancreaticoduodenectomy (PD), and pancreatic parenchymal texture is a key determinant of POPF risk. While intraoperative palpation and histopathological fibrosis assessment are traditional methods to evaluate pancreatic texture, a reliable preoperative tool is lacking. Endoscopic ultrasound (EUS) provides high-resolution evaluation of pancreatic parenchyma. EUS conventional criteria of chronic pancreatitis (EUS CP criteria) has been found to correlate well with pancreatic fibrosis but whether the criteria can predict POPF has not been established. The aim of the study was to evaluate the accuracy of the preoperative EUS CP criteria in predicting POPF and to assess its association with intraoperative pancreatic texture by palpation and histopathological fibrosis [1].

Methods A prospective observational study was conducted on patients with benign and malignant periampullary disease undergoing PD. Preoperatively, all patients underwent EUS and CP scoring (0–9). Intraoperative pancreatic texture by palpation and histopathological fibrosis (Klöppel score) were recorded. Comparative analysis was performed between patients with and without POPF (► Table 1).

► Table 1

Statistic	Value	95 % Confidence Interval
Sensitivity	95.24 %	76.18 % to 99.88 %
Specificity	27.78 %	9.69 % to 53.48 %
Positive Predictive Value	60.61 %	53.21 % to 67.54 %
Negative Predictive Value	83.33 %	39.10 % to 97.50 %
Accuracy	64.10 %	47.18 % to 78.80 %

Results POPF occurred in 53.8 % (21/39), with clinically relevant POPF in 19 %. Soft pancreas and non-dilated pancreatic duct were significantly associated with POPF ($p = 0.003$ and $p = 0.002$). EUS CP criteria ≥ 3 was significantly associated with firm/hard pancreas and lower POPF incidence (16.7 %) whereas those with criteria < 3 was associated with soft pancreas and higher POPF incidence (60.6 %). EUS CP criteria correlated significantly with intraoperative pancreatic texture ($p = 0.001$) and histopathological fibrosis ($p = 0.005$). EUS CP criteria predicted POPF ($p = 0.047$), demonstrating high sensitivity (95 %) and NPV (83 %) but lower specificity (28 %) and PPV (63 %), with an overall diagnostic accuracy of 64 %.

Conclusions Preoperative EUS using the CP criteria reliably predicts pancreatic texture and can serve as a valuable screening tool to identify patients at high risk for POPF prior to PD. Incorporating EUS-based assessment into preoperative planning may enhance risk stratification and guide perioperative management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Albashir S, Bronner MP, Parsi MA, Walsh MR, Stevens T. Endoscopic Ultrasound, Secretin Endoscopic Pancreatic Function Test, and Histology: Correlation in Chronic Pancreatitis. *Am J Gastroenterol* 2010; 105 (11): 2498–503

eP1044 Diagnostic Utility of Pancreatic and Bile Duct Brushing for Pancreatic Cancer During ERCP: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1822371

Aims Pancreatic cancer is a highly lethal disease, often diagnosed at an advanced stage when only palliative care is available. Endoscopic retrograde cholangiopancreatography (ERCP) with brush cytology or forceps biopsy is commonly used to obtain samples from the bile duct (BD) and pancreatic duct (PD) in patients presenting with distal biliary strictures; however, its diagnostic accuracy remains debated. This study aimed to assess the pooled sensitivity of BD and PD brushing, as well as BD forceps biopsy, in detecting pancreatic cancer compared to histology.

Methods A systematic search was conducted in three major medical databases on November 05, 2024. We included studies reporting the performance measures of BD and/or PD brushing or forceps biopsy, primarily based on histology, but also considering radiological follow-up, laparotomy, or other accepted diagnostic methods. A random-effects meta-analysis was performed to calculate the pooled sensitivity of each technique for various cytopathological interpretations, with results presented as percentages and 95 % confidence intervals (CI).

Results Our systematic search identified 11340 articles, of which 83 met the inclusion criteria for the final analysis. These included 6,638 BD brushing procedures, 1,089 PD brushing procedures, and 3,416 BD forceps biopsies. The pooled sensitivity for PD brushing was 53 % (95 % CI: 28 % – 76 %; $I^2 = 70.3$ %), for BD brushing 28 % (95 % CI: 23 % – 34 %; $I^2 = 58.8$ %), for BD forceps biopsy 36 % (95 % CI: 29 % – 45 %; $I^2 = 0$ %) when only clearly malignant samples were considered positive. Additional analyses were performed to explore differences of different cytopathological interpretations. The post-ERCP pancreatitis rate did not differ between index tests, and it remained under 5 % for each. However, data on the safety and adverse events associated with ERCP were limited among the included studies.

Conclusions PD brushing may increase the sensitivity compared to BD brushing during ERCP and provide a valuable ancillary diagnostic technique in detecting pancreatic cancer in patients with distal biliary strictures. Moreover, PD brushing may not elevate the risk for post-ERCP pancreatitis in this population. These findings support the integration of brush cytology in ERCP procedures to enhance early detection of pancreatic cancer, ultimately facilitating more informed clinical decision-making.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1045 Evaluation of the Safety and Diagnostic Yield of Transvascular and Thrombus Fine-Needle Aspiration in Suspected Malignancy

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Aims Endoscopic ultrasound-guided fine-needle aspiration has become an indispensable tool for the diagnostic workup and biological characterization of lesions arising within or adjacent to the gastrointestinal tract. However, in certain clinical scenarios, the presence of interposed vascular structures may impede direct access to the target lesion, limiting the feasibility of conventional approaches. In recent years, transvascular EUS-guided puncture has emerged as a technically feasible and potentially safe diagnostic alternative.

The aim of this study was to evaluate the feasibility, safety profile, and diagnostic performance of EUS-guided transvascular fine-needle aspiration, including portal thrombus puncture, in patients undergoing workup for suspected malignant disease in a tertiary referral centre.

Methods A retrospective case series was conducted including consecutive patients who underwent EUS-guided transvascular aspiration of suspicious lesions between 2014 and 2025. Demographic characteristics, comorbidities, procedural variables (including needle gauge, type of access, target anatomy, and number of needle passes), and peri-procedural management were recorded.

ed. Diagnostic performance (sensitivity, specificity, and accuracy) was assessed based on cytopathological results, including immunohistochemical profiling when available. Procedural safety was evaluated by documenting adverse events and classifying them according to severity.

Results Sixteen patients were included, with a median age of 69.5 years; 75 % were male. Most patients were classified as ASA II, and the mean Charlson Comorbidity Index was 4.75. Anticoagulant or antiplatelet therapy had been prescribed in 25 % of cases and was temporarily discontinued before the procedure. Targets included suspected malignant portal thromb (50 %), pancreatic cystic lesions (25 %), lymphadenopathy (12.5 %), and solid masses (12.5 %). Access routes comprised transportal puncture (31.25 %), non-portal transvascular routes (18.75 %), and direct puncture of portal thrombi (50 %). A 22G needle was used in 62.5 % of procedures, employing a slow-pull technique with two to three passes. A diagnostic specimen was successfully obtained in 81 % of cases, sensitivity of 81.8 % (95 % CI 52.3–94.9), specificity of 100 % (95 % CI 56.6–100), and overall accuracy of 87.5 % (95 % CI 63.0–96.8). Malignancy was confirmed in 56.25 % of patients, and immunohistochemistry was feasible in all cytologically malignant specimens.

A total of 43.75 % of procedures were performed in hospitalized patients and 56.25 % on an outpatient basis. Only one patient required admission due to acute pancreatitis, which resolved with conservative management. The composite adverse event rate was 12.5 %, and no statistically significant association was found between adverse events and age, sex, ASA score, Charlson Index, or anticoagulant use ($p > 0.15$).

Conclusions EUS-guided transvascular puncture appears to be a feasible and safe technique with high diagnostic performance in selected clinical scenarios involving difficult-to-access lesions or malignant thrombi. The favourable outcomes and low complication rate observed in this cohort support the incorporation of transvascular access as a complementary diagnostic strategy in advanced endoscopic practice. Furthermore, these findings raise the possibility that transvascular access may eventually extend beyond diagnostic applications and into therapeutic endoscopic interventions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1046 The Introduction of Safety Checklist in Endoscopy: A Nationwide Prospective Multicentric Study

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Aims The European Society of Gastrointestinal Endoscopy (ESGE) recommends the use of a standardized safety checklist. The concept is gaining attention, but real-world data on its implementation and impact remain limited. This study aimed to assess the feasibility, adherence, and user perception of implementing the ESGE Safety Checklist in gastrointestinal endoscopic practice across Hungary.

Methods A nationwide, prospective, multicenter observational study was conducted between 20 January and 14 February 2025 in 14 public and seven private endoscopy units. The ESGE Safety Checklist was translated into Hungarian and locally adapted before implementation. Data were collected on the checklist application, procedure type, preventable errors, and user feedback. Quantitative data were analyzed descriptively, and qualitative comments were thematically summarized.

Results Altogether, 5124 procedures were performed, of which 4160 (81.2 %) were completed with the checklist. Adherence was higher in private (94.7 %) than in public centers (80.0 %). The checklist identified at least one preventable error in 335 procedures (8.0 %) and multiple deficiencies in 117 (2.8 %). The most frequent omissions were team introductions (5.7 %), post-procedure instructions (2.7 %), resumption of anticoagulation (1.9 %), and rectal administration of nonsteroidal anti-inflammatory drugs during endoscopic retrograde cholangiopancreatography (2 %). Preventable errors occurred most often during colonoscopy (4.5 %) and gastroscopy (2.6 %). Most centers reported improved communication, organization, and attention to patient safety.

Conclusions In a considerable proportion of endoscopic procedures, the ESGE Safety Checklist helped identify preventable errors, confirming its practical value in improving procedural safety. Its implementation enhanced procedural structure and supports broader adoption, strengthening patient safety and quality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1047 Dual Endoscopic Approach for Radiation-induced Complete Esophageal Obstruction in the Upper Esophagus: Insights from Two Challenging cases

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DOI 10.1055/s-0046-1822374

Abstract Text

Complete esophageal obstruction (CEO) is an uncommon but debilitating late complication of chemoradiotherapy for head and neck cancers, with reported incidence ranging from 0.8 % to 5 %. Affected patients experience profound dysphagia, often losing the ability to swallow even saliva, resulting in dependence on enteral feeding and markedly impaired quality of life. While traditional management relied on complex surgical reconstruction, the combined antegrade and retrograde endoscopic dilation (CARD) technique has emerged as a less invasive and increasingly preferred option. CARD facilitates safe recanalization of obstructed esophageal segments, but its use in upper esophageal strictures, particularly those near the upper esophageal sphincter, remains technically challenging and underreported. We present two cases of radiation-induced CEO involving the upper esophagus, emphasizing procedural strategies, outcomes, and practical considerations [1–8].

The first case involved a 54-year-old man treated previously with chemotherapy and radiotherapy for buccal squamous cell carcinoma. He presented with complete dysphagia (FOIS 1) and dependence on a pre-existing PEG tube. Endoscopic evaluation revealed total obstruction just below the pyriform fossa. CARD was performed using dual ultrathin gastroscopes introduced antegrade and retrograde, with transillumination enabling precise scope alignment in this anatomically difficult region. A needle-knife puncture was made through the fibrotic segment, followed by guidewire passage and sequential Savary dilation up to 15 mm. The procedure was technically successful and complication-free. After subsequent dilations, the patient achieved sustained recanalization and full PEG removal, ultimately tolerating a soft diet (FOIS 6) at one year.

The second case involved a 15-year-old boy with hypopharyngeal squamous cell carcinoma who also presented with absolute dysphagia and PEG dependence. CARD was performed with transillumination guidance, needle puncture, cystotome-assisted tract creation, and sequential balloon and mechanical dilatation. A nasogastric tube was left across the recanalized lumen to maintain patency. Although initial improvement allowed limited oral intake, early recurrence was noted. Repeat CARD and serial dilations resulted in improvement to FOIS 3 (liquids only), though PEG dependence persisted. Mild bleeding occurred but resolved spontaneously, consistent with the low complication rates reported in the literature.

These cases demonstrate that CARD is a safe and effective modality for managing radiation-induced CEO, even in anatomically constrained upper esophageal locations. Successful recanalization can significantly improve swallowing function and quality of life. However, recurrence remains a major limitation, particularly in pediatric patients and in severe post-radiation fibrosis, necessitating repeated interventions and long-term multidisciplinary follow-up. Overall, CARD offers a minimally invasive alternative to surgery, with meaningful functional benefits despite its inherent challenges.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jayaraj M, Mohan BP, Mashiana H, Krishnamoorthi R, Adler DG. Safety and efficacy of combined antegrade and retrograde endoscopic dilation for complete esophageal obstruction: a systematic review and meta-analysis. *Ann Gastroenterol* 2019; 32 (4): 361–369. doi:10.20524/aog.2019.0385
- [2] Boutari RA, Diab MW, Mallah FI. Complete Esophageal Obstruction Due to Dysphagia Lusoria and Subclavian Artery Thrombosis: A Case Report. *Cureus*. 2025; 17 (2): e78840. Published 2025 Feb 11. doi:10.7759/cureus.78840
- [3] Bossola M, Antocicco M, Pepe G. Tube feeding in patients with head and neck cancer undergoing chemoradiotherapy: A systematic review. *JPEN J Parenter Enteral Nutr* 2022; 46 (6): 1258–1269. doi:10.1002/jpen.2360
- [4] Best SR, Ha PK, Blanco RG et al. Factors associated with pharyngoesophageal stricture in patients treated with concurrent chemotherapy and radiation therapy for oropharyngeal squamous cell carcinoma. *Head Neck* 2011; 33 (12): 1727–1734. doi:10.1002/hed.21657
- [5] Krishna SR, Muzumder S, Johnson S et al. Predictive Factors for Esophageal Stricture Following Definitive Chemoradiotherapy in Esophageal Carcinoma. *J Gastrointest Cancer* 2025; 56 (1): 65. Published 2025 Feb 14 doi:10.1007/s12029-025-01192-1
- [6] Govender R, Gilbody N, Simson G, Haag R, Robertson C, Stuart E. Post-Radiotherapy Dysphagia in Head and Neck Cancer: Current Management by Speech-Language Pathologists. *Curr Treat Options Oncol* 2024; 25 (6): 703–718. doi:10.1007/s11864-024-01198-0
- [7] Lawson JD, Otto K, Grist W, Johnstone PA. Frequency of esophageal stenosis after simultaneous modulated accelerated radiation therapy and chemotherapy for head and neck cancer. *Am J Otolaryngol* 2008; 29 (1): 13–19. doi:10.1016/j.amjoto.2006.12.002
- [8] Grooteman KV, Wong Kee Song LM, Vleggaar FP, Siersema PD, Baron TH. Functional outcome of patients treated for radiation-induced complete esophageal obstruction after successful endoscopic recanalization (with video). *Gastrointest Endosc* 2014; 80 (1): 175–181. doi:10.1016/j.gie.2014.03.007

eP1048 The road to papilla- ERCP in patients with altered anatomy Following Billroth II Gastrectomy: A 20-year, retrospective, single-center study

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DOI 10.1055/s-0046-1822375

Aims Endoscopic Retrograde Cholangiopancreatography (ERCP) in patients with altered anatomy due to Billroth II (BII) gastrectomy remains challenging. Difficulties arise from the need to traverse the afferent loop, reach the major duodenal papilla, and achieve selective cannulation due to reversed anatomy. These challenges often demand the use of specialized techniques and both side-viewing and forward-viewing endoscopes. This study aims to evaluate the efficacy and safety of ERCP in this patient population [1, 2].

Methods We conducted a 20-year retrospective study in our hospital between February 2005 and October 2025. Non-naïve ERCP patients with BII anatomy were excluded. Data on demographics, indications, endoscope type used (duodenoscope, gastroscope) and procedural outcomes were systematically collected. Initial endoscopic evaluation with gastroscope was performed in all patients to determine the optimal approach. The study outcomes included

successful afferent loop intubation, papilla cannulation, completion of procedure, and rate of procedure-related complications. Standard ERCP devices and pharmacological sedation were used in all patients.

Results A total of 54 patients (42 males, 12 females) were studied. The median age of the group was 78.5 years. The most common indication was cholelithiasis (n = 42, 77.8%). Other indications included cholangitis (n = 3, 5.6%), obstructive jaundice (n = 3, 5.6%), biliary colic (n = 2, 3.7%), cholangiocarcinoma (n = 2, 3.7%), and pancreatic cancer (n = 2, 3.7%).

The majority of procedures, 44 (81.5%), were performed using a duodenoscope, while 10 procedures (18.5%) utilized a gastroscope. The overall technical success rate for the entire cohort was 85.2% (46/54). A detailed analysis revealed a success rate of 84.1% (37/44) in the duodenoscope group compared to 90.0% (9/10) in the gastroscope group (p = 0.46). The rates of successful afferent loop intubation (95.5% vs 90%) and selective cannulation (86.4% vs 90%) did not differ significantly between the two endoscope type groups.

Among the cohort, 6 patients (11.1%) had a concurrent Braun anastomosis, a configuration usually excluded from prior studies. Success was significantly lower in patients of this subgroup compared to standard BII anatomy (50.0% vs 89.6%, p = 0.036, < 0.05).

Regarding safety, major complications occurred in 5 patients (9.3%). This included three perforations (5.5%) requiring surgery, one post-ERCP bleeding managed endoscopically, and one case of pancreatitis. All complications except one perforation occurred in the duodenoscope group. No case of cholangitis was recorded in either group.

Conclusions In this study, ERCP in patients with Billroth II anatomy demonstrated efficacy and safety comparable to existing literature. No statistically significant differences were found between endoscope types. However, patients with a concurrent Braun anastomosis had a statistically significant lower success rate (p = 0.036), highlighting the technical challenge of this complex anatomy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kim SB, Kim KH, Kim TN. Comparison of endoscopic retrograde cholangiopancreatography outcomes between cap-fitted forward and side viewing endoscopes in patients with Billroth II anastomosis. *BMC Gastroenterol*. 2023; 23 (1): 115. doi:10.1186/s12876-023-02701-x PMID: 37024780 PMID: PMC10080899
- [2] Bove V, Tringali A, Familiari P, Gigante G, Boškoski I, Perri V, Mutignani M, Costamagna G. ERCP in patients with prior Billroth II gastrectomy: report of 30 years' experience. *Endoscopy*. 2015; 47 (7): 611–6. doi:10.1055/s-0034-1391567 Epub 2015 Mar 2 PMID: 25730282

eP1049 Autoimmune Pancreatitis Without IgG4 Tissue Infiltration: An Unusual Manifestation of IgG4-Related Disease with Prior Ocular Involvement

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Abstract Text

Autoimmune pancreatitis (AIP) is a rare form of chronic pancreatitis and is classified into two subtypes: type 1 (associated with systemic IgG4-related disease) and type 2 (not associated with IgG4). Diagnosis is based on a combination of clinical, imaging, serological, and histological findings [1–4].

We present the case of a 52-year-old woman who was referred to our department for endoscopic ultrasound (EUS) evaluation due to an enlargement of the pancreatic head. The reported lesion has been identified in recent imaging studies (CT, MRI) performed due to painless obstructive jaundice. Serologically, a markedly elevated serum IgG4 level was recorded, while tumor markers CEA and CA19-9 were within normal limits. Medical history revealed a possibly underdiagnosed IgG4-related ocular disease; the patient had undergone sur-

gical excision of the lacrimal gland three years earlier, due to severe inflammation and vision impairment. The histological exams revealed dense lymphoplasmacytic infiltrate, storiform fibrosis and IgG4-positive lymphoplasmacytic infiltration with IgG4+ /IgG plasma cell ratio <20 %.

EUS revealed diffuse, homogeneous and hypoechoic enlargement of the head, uncinata, isthmus, and part of the body of the pancreas, without clear features of an infiltrative neoplasm. The pancreatic duct appeared thin yet visible, whereas the intrapancreatic portion of the common bile duct was narrow with upstream dilatation. Endoscopic ultrasound-guided biopsy showed extensive fibrosis with scattered lymphocytic aggregates, numerous small tubular formations, and scattered plasma cells without IgG4 expression.

A presumptive diagnosis of type 1 AIP was made based on the medical history, imaging features and elevated serum IgG4, despite certain atypical findings. Corticosteroid therapy was initiated, leading to rapid clinical and biochemical improvement and marked regression of the imaging findings.

Nonetheless, symptoms relapsed during corticosteroid tapering. The patient, subsequently, appeared with jaundice, blurred vision and arthralgia. Following consultation with a rheumatologist, a shared decision was made to initiate rituximab and a substantial improvement was observed. The patient remains under close surveillance with blood tests and frequent clinical assessment.

This case demonstrates the diagnostic problems associated with autoimmune pancreatitis in the absence of histological IgG4 confirmation, underlining the need for a multifactorial approach, particularly when a relevant medical history is present. In uncertain cases, where the diagnosis is unclear, particularly when the traditional diagnostic criteria are not entirely satisfied, the therapeutic response can support the diagnosis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zen Y. Autoimmune pancreatitis: Biopsy interpretation and differential diagnosis. *Semin Diagn Pathol* 41: 79–87 2024
- [2] Hart P.A., Smyrk T.C., Chari S.T. Lymphoplasmacytic sclerosing pancreatitis without IgG4 tissue infiltration or serum IgG4 elevation: IgG4-related disease without IgG4. *Modern Pathology* 28: 238–247 2015
- [3] Lanzillotta M, Vujanovic M, Löhr JM, Della Torre E. Update on Autoimmune Pancreatitis and IgG4-Related Disease. *United European Gastroenterol J* 13: 107–115 2025
- [4] Lai K.K.H. et al. Advances in understanding and management of IgG4-related ophthalmic disease. *Asia-Pacific Journal of Ophthalmology* 13: 100101 2024

eP1050 Comparison of Biliary Decompression Methods in Malignant Distal Biliary Obstruction when Failed ERCP: A Single Referral Centre Experience

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DOI 10.1055/s-0046-1822377

Aims ERCP is the established method for biliary drainage in patients with malignant distal biliary obstruction (MDBO); however, in approximately 5-15 % of cases ERCP may fail. Various salvage techniques are used to effectively drain the biliary tract in patients with MDBO, including percutaneous transhepatic cholangiography (PTC), EUS-guided choledochoduodenostomy (EUS-CDS) and EUS-guided rendezvous technique (EUS-RV). The aim of this study is to compare the clinical efficacy and safety of PTC, EUS-CD and EUS-RV in patients with MDBO and failed ERCP drainage.

Methods Data from patients with MDBO who underwent PTC, EUS-CDS or EUS-RV (1/2022-8/2024) after failed ERCP were retrospectively studied. MDBO was defined as malignant obstruction between the papilla and the cystic duct. All patients had previously failed ERCP drainage, either because it was not tech-

nically feasible or because it did not reduce bilirubin levels. The primary endpoint was the clinical success of the method (reduction in total bilirubin of at least 50 % at 2 weeks). The secondary endpoint was the occurrence of complications.

Results A total of 66 patients (45,9 % males) were included, categorized by underlying pathology: distal cholangiocarcinoma (24 patients, 36,4 %), periampullary carcinoma (23 patients, 34,8 %), and pancreatic carcinoma (19 patients, 28,8 %). Intervention types included EUS-CDS drainage (30 patients, 45,5 %), PTC (13 patients, 34,8 %), and EUS-rendezvous technique (23 patients, 34,8 %). Mean initial total bilirubin was 10.6 ± 4.7 mg/dL, decreasing to 3.1 ± 3.4 mg/dL post-intervention, representing a mean reduction of 69.6 %. The clinical success rate of EUS-CDS (90 %) was significantly higher as compared, with the most common complications being bleeding (6.7 %) and peritonitis (3.3 %). Regarding clinical success, EUS-CDS showed a statistical trend toward higher clinical success compared to PTBD (90 % vs 69.2 %, $p = 0.09$), although no significant difference was detected in comparison with EUS-RV (90 % vs 78.3 %, $p = 0.237$). PTC showed a success rate of 69.2 % with the most common complications being abscess formation (15.4 %), biloma (7.7 %) and cholangitis (7.7 %). The EUS-RV technique was clinically successful in 78.3 %, with the most frequent complication being bleeding (17.4 %) followed by cholangitis (4.3 %). Pairwise comparisons of complication distributions showed a borderline significant difference between EUS-CDS and EUS-RV technique ($p = 0.04-0.05$), with higher bleeding in the rendezvous group. Comparisons between EUS-CDS vs PTC and PTC vs EUS-RV did not reach statistical significance ($p > 0.05$), although PTC tended to have more infectious complications and abscess, while EUS-RV technique had more bleeding.

All complications were treated conservatively and no patient died due to complications.

Conclusions EUS-guided biliary drainage demonstrates superior clinical success rates and lower complication rates compared to PTC and EUS-RV technique in patients with failed ERCP for MDBO. These findings support EUS-guided intervention as the preferred alternative drainage method when ERCP is unsuccessful.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1051 Evaluating the Diagnostic Accuracy of EUS-FNB Compared to On-site Evaluations for Diagnosing Pancreatic Neoplasias: A Systematic Review and Meta-analysis

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Aims Endoscopic ultrasound-guided fine needle biopsy (EUS-FNB) is the primary diagnostic tool for assessing pancreatic masses. The time taken to obtain an accurate diagnosis is critical; therefore, it is essential to acquire a high-quality histological sample. Techniques such as Rapid On-Site Evaluation (ROSE) and Macroscopic On-Site Evaluation (MOSE) may enhance the diagnostic accuracy of EUS-FNB and increase the proportion of histologically adequate samples. However, the necessity of these on-site evaluation techniques remains a topic of debate. This study aims to determine whether these techniques should be incorporated into routine practice.

Methods Five medical databases (PubMed, EMBASE, CENTRAL, Scopus, WebOfScience) were searched comprehensively for studies comparing the diagnostic accuracy of EUS-FNB ± ROSE and/or MOSE in solid pancreatic lesions. In the meta-analysis, pooled proportion rates with 95 % confidence intervals (CIs) were calculated, and then a multivariate meta-analysis model was constructed to calculate the differences.

PROSPERO registration number: CRD42024613021.

Results Altogether, we included 4562 patients' data from 31 articles in our quantitative and qualitative synthesis.

The sensitivity of ROSE (95 % [92 %; 97 %]; $p = 0.0087$) and MOSE (93 % [92 %; 95 %]; $p = 0.0349$) is significantly higher than stand-alone EUS-FNB (88 % [83 %; 92 %]).

The specificity of both ROSE (94 % [89 %; 97 %]; $p = 0.2368$) and MOSE (90 % [81 %; 95 %]; $p = 0.5854$) does not differ significantly from stand-alone EUS-FNB (92 % [85 %; 96 %]; $p = 0.0087$).

Both the sensitivity ($p = 0.2535$) and specificity ($p = 0.2535$) of ROSE and MOSE are not significantly different.

Conclusions MOSE is equally effective compared to ROSE, suggesting that routine incorporation of MOSE is sufficient in the diagnosis of pancreatic lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1052 Vac stent therapy for esophageal perforations after interventional endoscopy: a preliminary case series

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DOI 10.1055/s-0046-1822379

Aims The Vac Stent system, combining the mechanical properties of self-expandable metal stents with endoluminal negative pressure therapy, has emerged as a promising option for the treatment of post-esophagectomy leaks. However, its role in the management of esophageal perforations following interventional endoscopy has not yet been clearly defined [1].

Methods All consecutive patients with esophageal perforation after interventional endoscopic procedures treated with a Vac Stent at San Raffaele Hospital, Milan, between May 2024 and September 2025 were prospectively included. Placement was performed under fluoroscopic guidance and managed according to the manufacturer's recommendations, including continuous negative pressure settings and predefined timing and modality of removal.

The primary outcome was clinical success, defined as complete closure of the perforation, confirmed by endoscopy, fluoroscopy, and/or CT imaging, along with clinical resolution of symptoms. Secondary outcomes included technical success (successful placement and removal of the Vac Stent), adverse events, total treatment duration, and length of hospital stay.

Results Five patients (4/5 male; median age 66 years, range 55–78) with esophageal perforation were included: four following endoscopic submucosal dissection (ESD) and one following 30-mm balloon dilation for type II achalasia. Histological analysis of the ESD specimens revealed adenocarcinoma in all cases. The mean maximum perforation size was 13 mm (range 5–30).

In three cases, post-procedural CT imaging demonstrated a leak-associated cavity, with a mean cavity size of 17 mm (range 12–24).

Clinical and technical success were achieved in 100 % of cases. The mean total Vac Stent treatment duration was 11 days (range 6–14), with a mean of 1.6 devices per patient (range 1–2). The mean length of hospital stay was 19.4 days (range 7–33). No Vac Stent-related adverse events occurred, and no patient required surgical rescue therapy. Notably, the patient treated after a fully circumferential esophageal ESD did not develop post-procedural esophageal stricture.

Conclusions In this prospective case series, Vac Stent therapy proved to be a safe and effective treatment for esophageal perforations following interventional endoscopy. In addition, it may contribute to the prevention of post-resection esophageal stricture after extensive mucosal resections. Larger, controlled studies are warranted to confirm these preliminary findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dell'Anna G, Fanti L, Fanizza J, Barà R, Barchi A, Fasulo E, Elmore U, Rosati R, Annese V, Laterza L, Fuccio L, Azzolini F, Danese S, Mandarino FV. VAC-Stent in the Treatment of Post-Esophagectomy Anastomotic Leaks: A New

"Kid on the Block" Who Marries the Best of Old Techniques-A Review. J Clin Med. 2024; 13 (13): 3805. doi:10.3390/jcm13133805 PMID: 38999371 PMID: PMC11242239

eP1053 Compliance with the 2025 ESGE Performance Measures in Endoscopic Ultrasound: a Single-centre Cohort Study

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DOI 10.1055/s-0046-1822380

Aims Quality improvement in endoscopic ultrasound (EUS) is essential to ensure diagnostic accuracy, procedural safety, and consistency in clinical practice. Given the expanding use of EUS, the European Society of Gastrointestinal Endoscopy (ESGE) released in 2025 an updated set of key performance measures (KPMs) to standardize and enhance quality assessment. The aim of this study was to evaluate compliance with the 2025 ESGE EUS KPMs in a cohort of 124 consecutive EUS procedures and to evaluate our centre's performance across applicable KPMs.

Methods Retrospective cohort study including 124 consecutive EUS procedures performed from September 2024 to October 2025 at a single centre, of which 50 involved EUS-guided fine-needle aspiration/biopsy (EUS-FNA/FNB) of solid lesions. Exclusion criteria were applied according to the 2025 ESGE recommendations. Each procedure was assessed individually for adherence to the relevant KPMs, encompassing both diagnostic EUS and EUS-FNA/FNB indicators. An overall compliance analysis was carried out for each applicable KPM to determine our centre's adherence to the updated 2025 minimum standards (MS) proposed.

Results Among the six KPMs assessed, four met the established minimum standards. Informed patient consent was documented in 100 % of all procedures (MS = 100 %). Adequate documentation of EUS anatomical landmarks was achieved in 96 % of examinations (MS ≥ 90 %). Regarding tissue acquisition from solid lesions, the overall success rate, defined as obtaining a tissue sample that allows an accurate diagnosis, was 86 % (MS ≥ 85 %). No adverse events related to EUS-FNA/FNB were recorded (MS < 5 % in cystic, < 3 % in solid lesions). The remaining indicators performed below the recommended thresholds. For cases involving pancreatic cystic lesions, standardized lesion description was recorded in 70 % (7/10) (MS ≥ 85 %). Finally, formal competence assessment of trainees performing EUS was not documented in any of the 11 eligible procedures (MS ≥ 20 %).

Conclusions This assessment of the 2025 ESGE EUS key performance measures demonstrated strong compliance across several essential domains, including informed consent, adequate documentation, successful and safe tissue acquisition from solid lesions. While some indicators did not fully meet the recommended thresholds, the findings primarily highlight opportunities for continued improvement of practice. Ongoing systematic monitoring of these indicators is crucial to optimize procedural quality, enhance training, and ensure consistent, high-standard EUS practice within our centre.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1054 Peroral pancreatoscopy for the assessment of intraductal papillary mucinous neoplasm of the pancreas

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DOI 10.1055/s-0046-1822381

Aims Peroral pancreatoscopy (POPS) is an endoscopic procedure that allows for direct visualization of the main pancreatic duct (MPD) along with to sample tissue and perform directed local therapy. This study evaluates POPS assess-

ment of intraductal papillary mucinous neoplasm (IPMN) of the pancreas with MPD involvement.

Methods A retrospective, cross-sectional study was conducted on individuals with IPMN who underwent POPS using the Boston Scientific Spyglass system at a tertiary medical center between 2020–2023. Multivariate logistic regression evaluated the association between both quality of visualization, as well as pathological results, and IPMN with MPD involvement. In addition, a univariate logistic regression model was applied to determine whether POPS independently influenced management of these individuals.

Results Eleven patients who underwent POPS were evaluated. Among them, 7 (63.6%) were males and the mean age was 57 ± 13. Eight (72.7%) had main duct IPMN, two (18.2%) had mixed-type IPMN, and one (9.1%) had branch-duct IPMN. Quality of visualization was good in all individuals. No suspicious lesions were found and no targeted biopsies were taken. Random biopsies were successfully taken in 10 (90.9%) patients. Biopsy specimens did not show malignant or premalignant lesions (including dysplasia of any grade). Benign neoplastic epithelium was found in 3 individuals (27.2%), all with main duct IPMN. In one case (9.1%) biopsies showed mild atypia with reactive and regenerative changes. Post-POPS prophylactic pancreatic stent was inserted in 4 (36.3%) patients. Post-POPS complications were observed in one patient (9.1%) who developed asymptomatic mild hyperamylasemia and one patient (9.1%) who developed mild post-POPS pancreatitis. POPS results did not change the pre-POPS multidisciplinary decision or the management in any of the patients.

Conclusions POPS appears to be feasible and safe, but did not impact clinical management among patients with IPMN of the pancreas with suspected MPD involvement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1055 Endoscopic management of post-orthotopic liver transplantation of anastomotic biliary stenosis with multiple plastic stents: preliminary prospective study

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Aims Post-orthotopic liver transplantation (OLT) anastomotic biliary strictures (ABS) are commonly treated with multiple plastic stents (MPS), but data on protocol performance and the role of endoscopic ultrasound (EUS) remain limited. We evaluated efficacy, safety and technical characteristics of an MPS protocol in ABS, focusing on patients with associated ischemic-type biliary lesions (ITBL).

Methods This single-centre retrospective study included 28-OLT recipients with ABS treated with ERCP-guided MPS. Of the 31-screened patients, 3 were excluded as they didn't fulfill the cholangiographic criteria for ABS. In a subset, linear EUS or transpapillary miniprobe EUS was performed before/after MPS.

Results Ten patients had completed the MPS protocol and 18 are still on treatment. Among completed, 2 had isolated ABS and 8 ABS + ITBL: overall, 35 ERCPs were performed (3.5 per patient; 38 minutes per session). A mean of 3.3 stents were placed, achieving a cumulative diameter of 29.6 Fr. Biliary clearance with stent removal was required in 40% of procedures (50% in ABS + ITBL, 0% in isolated ABS), and mechanical dilation in 40%. Adverse events included two mild-moderate post-ERCP pancreatitis and one moderate cholangitis. Resolution of ABS at the end of MPS, according to predefined cholangiographic criteria, was achieved in 90%. In five ABS + ITBL patients with follow-up (5.25 months), three maintained stricture resolution and two developed recurrence requiring retransplantation.

Conclusions ERCP-guided MPS is an effective and safe strategy for post-OLT ABS, whereas concomitant ITBL identifies a more complex subgroup in which

adjunctive EUS may help to identify anatomical alterations and to customize treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1056V Removal of an intragallbladder migrated lumen apposing metal stent through a secondary endoscopic ultrasound-guided gallbladder drainage

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DOI 10.1055/s-0046-1822383

Abstract Text

Aims: Endoscopic ultrasonography-guided gallbladder drainage (EUS-GBD) with lumen-apposing metal stents (LAMS) is a minimally invasive option for managing high-risk, non-surgical patients with acute calculous cholecystitis. LAMS migration represents a potential adverse event. **Methods:** We report a case of complete intragallbladder LAMS migration following EUS-GBD. **Results:** A 74-year-old woman with significant comorbidities and grade 2 acute cholecystitis underwent initial PTGBD, but was referred for persistent symptoms and bile leakage. After conversion to EUS-GBD, she returned one month later for planned stent removal. Endoscopy, EUS, and fluoroscopy revealed full intragallbladder migration. A repeat EUS-GBD with a LAMS enabled trans-LAMS extraction of the migrated stent and gallstone removal. **Conclusion:** EUS-guided LAMS retrieval may serve as an effective rescue strategy.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/e1dc693e-a842-4dbe-b274-333cbdefdb50/Uploads/19978_EUS_GBD%20LAMS%20removal%20ESGE%20DAYS.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1057 Diagnostic Yield of Capsule Endoscopy in Patients with Suspected Small Bowel Bleeding: A Single-Centre retrospective Study

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DOI 10.1055/s-0046-1822384

Aims The primary aim of this study was to evaluate the diagnostic yield of CE in patients with obscure small bowel bleeding. A secondary objective was to identify predictive factors for angiodysplasia in the two patient groups under investigation: those with occult bleeding and those with overt bleeding.

Methods We conducted a single-center, retrospective observational study including all CE procedures performed at the Gastroenterology Unit of Azienda Ospedaliera–University of Padua between January 2018 and September 2025 for overt or occult gastrointestinal bleeding. Demographic, clinical, biochemical, and endoscopic data were prospectively recorded in a dedicated database. CE findings were classified according to the presence of angiodysplasias, ulcers, erosions, red spots, polyps, and evidence of bleeding. Furthermore, the Saurin classification was employed to evaluate the bleeding risk, according to each lesion's potential for clinically significant hemorrhage. Patients were categorized into overt bleeding (melena or hematochezia) and occult bleeding (anemia or positive fecal occult blood test) groups. Univariate and multivariate analyses were performed to identify factors associated with angiodysplasia, ulcers, and red spots. Statistical analyses were conducted using STATA 18.

Results A total of 1,049 CE procedures were performed for suspected gastrointestinal bleeding, including 323 for overt and 726 for occult bleeding. The mean age of the patients was 71 ± 14 years, with a predominance over 60 years, and 54% were male, without significant differences between groups ($p = 0.084$). At least one comorbidity was present in 66% of the case. The overall diagnostic yield was 71% (75% for overt and 74% for occult bleeding). Angiodysplasia was the most common finding, with similar prevalence in both groups (53.2% vs. 56.0%, $p = 0.398$). In multivariate analysis, a hemoglobin drop of at least 2 g/

dl and iron supplementation therapy were the only independent risk factors for angiodysplasia among patients undergoing CE for overt bleeding. In patients who underwent CE for anemia or occult blood, the probability of detecting angiodysplasia increased with age in multivariate analysis: 45–60 vs. <45 years OR 5.03 (95 % CI: 1.37–18.46); 61–80 vs. <45 years, OR 7.22 (95 % CI: 2.08–25.01); and >80 vs. <45 years, OR 10.59 (95 % CI: 2.98–37.56).

Conclusions Our study confirms the high diagnostic yield of capsule endoscopy in patients with both overt and occult gastrointestinal bleeding. Angiodysplasia emerged as the most frequently detected lesion and we identified advanced age, iron supplementation therapy, and a hemoglobin drop of at least 2 g/dL from baseline as independent risk factors for detecting these lesions. These findings underscore the importance of considering patient age and the degree of anemia when evaluating patients with obscure gastrointestinal bleeding and may help guide the prioritization of CE in clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1058 A rare cause of an upper gastrointestinal obstruction – Bouveret's syndrome in 73-old man

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DOI 10.1055/s-0046-1822385

Abstract Text

Bouveret's syndrome is a gastric outlet obstruction caused by gallstone blockage. We report a case of a 73-years old man who was admitted to the hospital with a symptoms of upper gastrointestinal (GI) obstruction. In CT scan Ringler's triad was observed, including intestinal obstruction, pneumobilia, and an aberrant gallstone in the bowel. At admission we decided to perform endoscopic removal of the gallstone from the duodenum, which after many attempts with a loop and an extraction basket was unsuccessful. Subsequently, the surgical treatment with omega loop gastric bypass was accomplished. In the postoperative period patient developed upper GI obstruction. Due to persistent symptoms and increase in inflammatory parameters relaparotomy was conducted upon which the right hepatic lobe abscess was revealed and removed. In the following days patient presented intolerance of oral alimentation therefore gastroscopy with insertion of nasointestinal feeding tube was performed. To supplement the calorie deficit and adjust the diet to the metabolic demand the patient was referred to a nutritional treatment center.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1059 Comparative Accuracy of Endoscopic Ultrasound and Pelvic MRI for Locoregional Staging of Rectal Cancer

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DOI 10.1055/s-0046-1822386

Aims Accurate locoregional staging is essential for optimal management of rectal cancer. Both endoscopic ultrasound (EUS) and pelvic magnetic resonance imaging (MRI) are widely used, but their comparative performance in routine clinical practice remains debated. This study aimed to evaluate and compare the accuracy of EUS and MRI for T and N staging in a consecutive cohort of rectal cancer patients.

Methods Thirty consecutive patients with histologically confirmed rectal cancer underwent both EUS and pelvic MRI prior to definitive treatment. Staging results were compared to surgical pathology as the reference standard. The primary endpoints were the accuracy of T and N staging for each modality.

Results The accuracy of EUS for T staging was 73 %, while the accuracy for N staging was 66 %. These findings are consistent with published data, where EUS and MRI demonstrate similar accuracy for T staging (typically 70–89 %) and N staging (65–90 %), with some studies reporting a slight advantage for EUS in overall T staging and for MRI in N staging. [1, 4, 5] The American College of Radiology and the World Society of Emergency Surgery recommend both modalities as complementary, with EUS favored for early-stage tumors and MRI for advanced disease and assessment of mesorectal fascia involvement. [2–3]

Conclusions In this single-center cohort, EUS and MRI demonstrated comparable accuracy for T and N staging of rectal cancer, supporting their complementary use in clinical practice. These results reinforce current guideline recommendations for a multimodal approach to locoregional staging.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Halefoglu AM, Yildirim S, Avlanmis O, Sakiz D, Baykan A. Endorectal Ultrasonography Versus Phased-Array Magnetic Resonance Imaging for Preoperative Staging of Rectal Cancer. *World Journal of Gastroenterology* 2008; 14 (22): 3504–10. doi:10.3748/wjg.14.3504
- [2] Fernández-Esparrach G, Ayuso-Colella JR, Sendino O et al. EUS and Magnetic Resonance Imaging in the Staging of Rectal Cancer: A Prospective and Comparative Study. *Gastrointestinal Endoscopy* 2011; 74 (2): 347–54. doi:10.1016/j.gie.2011.03.1257
- [3] Korngold EK, Moreno C, Kim DH et al. ACR Appropriateness Criteria Staging of Colorectal Cancer: 2021 Update. *Journal of the American College of Radiology : JACR* 2022; 19 (5S): S208–S222. doi:10.1016/j.jacr.2022.02.012
- [4] Podda M, Sylla P, Baiocchi G et al. Multidisciplinary Management of Elderly Patients With Rectal Cancer: Recommendations From the SICG (Italian Society of Geriatric Surgery), SIFIPAC (Italian Society of Surgical Pathophysiology), SICE (Italian Society of Endoscopic Surgery and New Technologies), and the WSES (World Society of Emergency Surgery) International Consensus Project. *World Journal of Emergency Surgery : WJES* 2021; 16 (1): 35. doi:10.1186/s13017-021-00378-9
- [5] Chan BPH, Patel R, Mbuagbaw L, Thabane L, Yaghoobi M. EUS Versus Magnetic Resonance Imaging in Staging Rectal Adenocarcinoma: A Diagnostic Test Accuracy Meta-Analysis. *Gastrointestinal Endoscopy* 2019; 90 (2): 196–203.e1. doi:10.1016/j.gie.2019.04.217

eP1060 Enhanced natural retraction with trans-anal platform combined with speedboat assisted endoscopic submucosal dissection for distal colon polyps- Single center prospective observational study

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DOI 10.1055/s-0046-1822387

Aims Speedboat is a novel multimodal endosurgical device. It utilizes the use of advanced bipolar energy for cutting/dissection and super-high frequency microwave energy for coagulation. The trans-anal platform comprises the Gel-point as an access port and the Airseal as a CO₂ exchange apparatus. It creates an “invisible pneumo-dissection” effect due to intraluminal CO₂ pressure gradient. This study aims to evaluate the efficacy of Speedboat assisted Endoscopic Submucosal Dissection (S-ESD) with and without the trans-anal platform (TAP) in the management of complex distal colorectal polyps as well as the speed of dissection.

Methods Data, from a prospectively collected clinical audit (2018-2025) was analyzed. Cases were divided into two groups, the pre-TAP group (2018-2020 TAP not introduced) and the post-TAP group (2021-2025) which was further analyzed in two subgroups, the non-TAP and the TAP group when the platform was indicated. Lesion characteristics, long and short axis length, and time dissection were collected. Lesion surface (cm²), Speed (cm²/hr) and Clinical outcomes were compared between the three groups.

Results Over the study period, a total of 291 consecutive patients [55.7% male, age 72 (IQR: 64-77)] had a distal colorectal lesion completely excised using S-ESD with median surface of 13.73cm² (IQR:6.86-25.12), long axis 5.0 cm (IQR: 3.5-7.0) and speed 10.23cm²/hr (IQR:6.97-16.75).

Pre-TAP group included 58 patients [58.6% male, age 72 (IQR 65-77)] with median surface of 9.81cm² (IQR:6.72-15.89), long axis 4.5cm (IQR: 3.5-6.1) and speed 7.15 (IQR: 6.86-9.31). Post-TAP group included 233 patients with distal polyps had S-ESD [54.9% male, age 72 (IQR: 64-77)] with median surface of 15.11 cm² (IQR:6.96-28.26), long axis 5.0cm (IQR: 3.5-7.25) and speed 12.19 (IQR: 7.18-18.84)].

Within the post-TAP group, the TAP subgroup included 145 patients who underwent S-ESD [60.0% male, age 71(IQR: 63-76) with median surface 15.70 (IQR: 8.83-34.34) and speed 12.18 (IQR: 7.06-18.59). In the non-TAP subgroup 88 patients were subject to S-ESD [46.6% male, age 72 (IQR: 64-79), median surface 11.77 (IQR: 4.90-20.16)] and speed 11.99 (IQR: 7.39-21.81).

Overall, the speed and surface were significantly increased in the post-TAP group when compared with the pre-TAP group ($p < 0.001$ and $p = 0.006$ respectively). There was not a statistical significant difference in dissection speed within the post-TAP subgroups ($p = 0.563$). The median surface of the polyps removed were significantly larger in the TAP subgroup ($p = 0.002$). No statistically significant difference in regards with age and gender was found among any of the groups.

Conclusions The use of TAP modality combined with S-ESD appears to facilitate excision of distal lesions with larger surface with reasonable speed over time. A randomized trial and/or an international registry to investigate the role of pneumo-dissection is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1061 Tailored-made vacuum-sponge for treating large cavities

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DOI 10.1055/s-0046-1822388

Problem to solve Endoscopic vacuum therapy has been used in treating leakages and perforations in gastrointestinal tract. For patients having a larger leakage cavity, the standard-sized sponge for upper gastrointestinal leakages can be too small, being only 5cm long. Even though it is possible to place two sponges, it would also mean two nasal tubes resulting in increased discomfort for the patient and may challenge the swallowing process. Taking this into consideration, novel techniques to cover larger cavities is needed.

Innovation A tailored-made sponge solution was created for larger cavities. A second sponge was fastened above the original sponge with non-absorbable sutures. The original nasal tube was pierced to allow the air to flow into the vacuum system. The original overtube was cut to accommodate the new length of the combined sponge enabling a feasible the placement of the lengthened sponge. The innovation was tested with a patient having a complex, large fistula cavity at the resection line of the stomach which did not respond to standard therapeutic options.

Results The sponge was prepared for the patient before the visit at the outpatient clinic.

Insertation of the combined sponge solution was feasible when the overtube was cut accordingly.

During the therapy, the vacuum-sponge was changed once a week. The double sponge needed was tightly attached to the cavity walls showing good contact.

During the changes a longer moisturizing time was used to safely remove or change the system.

Minimal bowel content was detected in the cavity during the sponge changes demonstrating a sufficient occlusion of the mouth of the fistula.

The sutures and sponges stayed intact during the therapy and the vacuum through the sponge shrank the cavity.

Conclusions The developed sponge solution was found to offer an alternative technique for vacuum therapy of complex cavities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1062 Comparative analysis of EUS and US guided biopsy methods in pancreatic solid tumors

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DOI 10.1055/s-0046-1822389

Aims 1. To compare diagnostic accuracy between EUS-guided and US-guided biopsy approaches in pancreatitis solid tumors. 2. To evaluate procedural safety, including complication rates such as bleeding and pancreatitis. 3. To assess sample adequacy, number of passes required, technical success rates and cost-effectiveness of the two methods.

Methods A retrospective analysis was conducted at Military Medical Academy – Sofia, including 170 consecutive patients with suspected pancreatic solid tumors who underwent pancreatic biopsy between January 2024 and December 2024. Patients were divided into two groups – the first with patients who underwent endoscopic ultrasound guided (EUS-guided) pancreatic biopsy and the second with patients who underwent ultrasound guided (US-guided) pancreatic biopsy. For the patients in the EUS group 22G needle was used and for the patients in the US group 18G needle was used.

Results After the final analysis, we found that the male-to-female ratio in the two groups was equivalent: 50.5 % to 49.5 %. The mean age in the US-guided core biopsy group was 66.5 years, and the mean age in the EUS-guided biopsy group was 70 years. The mean size of the pancreatic solid tumor in the US group was 38.75 mm, and the mean size of the solid pancreatic lesions in the EUS group was 34.65 mm. The mean number of needle passes in both groups was two. ERCP was performed in 50.5 % of the patients in the US group and in 44.1 % of those in the EUS group. The mean hospital stay was 4 days in the US group and 4.6 days in the EUS group. The most common complications were pancreatitis and bleeding. We found that ERCP was an independent risk factor for complications. The rate of pancreatitis in the US group was 1.17 % without ERCP and 8.23 % with ERCP in addition to the biopsy. The rate of bleeding in the US group was 1.17 % without ERCP and 10.58 % with ERCP. In the EUS group, the rate of pancreatitis was 2.35 % without ERCP and 11.62 % with ERCP. Bleeding occurred in 3.52 % of the patients undergoing EUS-guided biopsy without ERCP and in 8.23 % of those with ERCP. Histology results in the US group showed 86 % pancreatic adenocarcinoma, 11 % chronic pancreatitis, and 3 % other solid pancreatic lesions. In the EUS group, pancreatic adenocarcinoma was diagnosed in 77 % of the patients, chronic pancreatitis in 10 %, and other solid lesions in 13 %. The positive predictive value in the US group was 100 %, the negative predictive value was 90.12 %, sensitivity was 100 %, specificity was 99 %, and overall accuracy was 98.70 %. In the EUS group, the positive predictive value was 98.48 %, the negative predictive value was 47.48 %, sensitivity was 91 %, specificity was 86.70 %, and overall accuracy was 87.20 %.

Conclusions US-guided core biopsy demonstrated higher diagnostic accuracy (98.70 %) compared to EUS-guided biopsy (87.20 %) in this cohort of 170 patients. Although both techniques required a similar number of passes and had comparable safety profiles, ERCP significantly increased the risk of pancreatitis and bleeding in both groups. EUS was more frequently associated with pancreatitis, while US-guided biopsy showed higher bleeding rates when combined with ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1063V Modified Mickey PEG tube placement(push method)

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DOI 10.1055/s-0046-1822390

Problem to solve For enteral nutrition especially in adults, in cases of Mickey PEG(button type) placement only upto 20Fr introducer kits are available making it possible only to place 20Fr tubes initially(push technique) and asking the patient to come back for placement of 24 Fr tube once the tract matures. More visits, more interventions, more costs, more time lost.

Innovation This problem can be overcome by simply modifying the technique of placement by push technique with available accessories in endoscopy room. All the steps till introduction of 20Fr sheath of dilatation system are the same. Once the 20 Fr sheath goes in, the inner dilators are removed by rotation. Normally a 20 Fr tube is placed by peeling of the sheath. To place 24 Fr tube, few steps are to be followed more. Once the 20 Fr sheath is in and inner dilators are removed, the 20 Fr sheath is peeled a little (approximately equal to the distance/abdominal wall thickness measured by the measuring balloon of introducer kit) above the skin surface. Then 9mm Savary Gilliard (SG) dilator(8mm not available) is introduced over the guidewire until it fits completely inside the sheath. Peeled sheath is held close to the dilator preparing it to dilate the tract. Then 20 fr sheath along with the SG dilator is pushed inside till the upper margin of the sheath is abutting the skin surface thus dilating the tract. Then sheath and dilator are pulled back till peeled part of sheath is above skin surface and the dilator is removed. Now the 24 Fr tube loaded over the removed dilators is placed inside the partially peeled sheath. 24 Fr tube is pushed inside while peeling the 20 Fr sheath. Once inside the lumen balloon inflated with 5ml NS and tube placement secured [1, 2].

Results Until now 18 Mickey PEG tube (button type) placements have been done in last two years using the modified technique. No events of pneumoperitoneum noted. Hematoma or bleeding or infection of PEG site are not seen. No peri PEG tube leakage seen. Mild pain at PEG site seen in few patients which resolved in a day or two. No major adverse events noted. All were discharged on the same day.

Conclusions 24 Fr Mickey PEG tube can be safely placed in the first go with simple modification of the technique. Simple modification of the procedure needing no extra skill set.

Done with the available accessories.

Reduces the number of visits, number of interventions thereby reducing costs and time(for patients as well as health personnel)

No adverse events related to modification of the procedure.

Future implications –

Such modifications obviate the need for 24 Fr introducer kit.

8mm dilator is better if available(American dilator)

VIDEO http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/b4b096f0-c97a-4b75-834a-b1ff2fabebc5/Uploads/19990_ESGE_2026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tang S.J Percutaneous Endoscopic Gastrostomy Tube Replacement, Video Journal and Encyclopedia of GI Endoscopy. Volume 2 (Issue 2): 2014;
- [2] O'Dowd M, Given MF, Lee MJ. New approaches to percutaneous gastrostomy. *Semin Intervent Radiol* 2004; 21 (3): 191–7

eP1064 Rate and Predictors of Conversion from Small Bowel Capsule Endoscopy to Double Balloon Enteroscopy

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DOI 10.1055/s-0046-1822391

Aims Small bowel capsule endoscopy (SBCE) is an established, minimally invasive technique for evaluating small bowel pathology, offering high diagnostic yield across a range of clinical indications. The European Society of Gastrointestinal Endoscopy (ESGE) recommends that at least 75 % of patients who require further assessment with Double Balloon Enteroscopy (DBE) should successfully progress as a key performance indicator (KPI). However, little is known about the expected SBCE to DBE conversion rate. This knowledge will help in monitoring performance as well as aiding service provision. Understanding conversion rates may also help clarify which clinical indications are most likely to proceed to DBE, supporting more efficient triage and referral pathways. Our aim is to evaluate the SBCE-to-DBE conversion rate. Secondly, we will assess our DBE compliance against ESGE standards. We also seek to examine how clinical indications influence the likelihood of requiring DBE and to assess whether these patterns have changed over time. By analysing these factors, we aim to provide insight into procedural demand, referral optimisation, and alignment with recognised performance standards.

Methods All SBCE procedures performed between 2018 and 2023 were retrospectively analysed using data extracted from the local PillCam database. Each SBCE report was individually reviewed, and no inclusion or exclusion criteria were applied to ensure complete case capture. Indications were broadly grouped into 5 categories; Iron Deficiency Anaemia (IDA) and suspected bleeding, suspected small bowel Crohn's (CD), coeliac or enteropathy, polyps or lesions and finally radiology correlation. Recommendations for DBE were cross-checked against the endoscopy reporting software to confirm procedure completion. Overall and indication-specific SBCE-to-DBE conversion rates were calculated. Odds ratios with 95 % confidence intervals were derived using Fisher's exact test, and year-to-year DBE conversion rates were summarised descriptively and benchmarked against the ESGE 75 % performance standard

Results A total of 3,105 SBCE procedures were performed during the study period. DBE was recommended in 311 (10%). Of these, 176 DBEs were completed, corresponding to an actual SBCE-to-DBE completion rate of 5.7 %. This gives a total DBE completion rate of 56.6 %, below the ESGE standard of 75 %. Yearly analysis demonstrated marked variability in DBE completion performance. KPI compliance ranged from a low of 41.8 % in 2020 to a high of 77.4 % in 2023, with only 2023 meeting the ESGE KPI threshold. Indication-specific analysis showed significant differences in the likelihood of progressing from SBCE to DBE. Compared with all other indications combined, patients with IDA demonstrated a significantly increased probability of undergoing DBE (OR 3.70, $p < 0.001$), while those with polyps also showed an elevated likelihood (OR 2.08, $p = 0.045$). In contrast, suspected Crohn's disease was associated with a markedly decreased likelihood of DBE (OR 0.16, $p < 0.001$). Coeliac disease (OR 0.69, $p = 0.47$) and radiology-driven indications (OR 1.34, $p = 0.55$) did not significantly influence DBE utilisation. These patterns confirm a strong dependence of DBE conversion on underlying clinical indication.

Conclusions Overall, our centre did not meet the ESGE 75 % KPI for progression from SBCE to DBE, with the most pronounced decline occurring during the COVID-19 period, when elective services were significantly disrupted. As a national referral pathway, the geographical separation from the DBE centre may have played a role in reduced completion rates, potentially amplified by historically limited recognition within smaller referring units of the procedural importance and clinical benefits of DBE. Indication-specific analysis showed a high odds ratio for DBE in iron-deficiency anaemia, consistent with the high diagnostic yield of SBCE in this group, while polyp detection appropriately prompted DBE for therapeutic polypectomy. In contrast, low conversion in suspected

Crohn's disease may reflect reliance on complementary evidence such as biomarkers, faecal calprotectin, and cross-sectional imaging before committing to enteroscopy. Understanding these conversion patterns is valuable for informing service planning, optimising triage pathways, and strengthening referral practices to ensure timely access to DBE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1065 Impact of Heparin-Bridging Therapy on Delayed Bleeding Risk in Colorectal Endoscopic Submucosal Dissection (ESD) Among Patients on Vitamin K Antagonists

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DOI 10.1055/s-0046-1822392

Aims One of the main challenges after colorectal endoscopic submucosal dissection (ESD) is the management of oral anticoagulation. Heparin-bridging therapy (HBT) has been associated with an increased risk of delayed bleeding in gastric ESD, but its impact in the colorectal setting remains controversial. The aim of the study was to evaluate the impact of HBT on the rate of delayed bleeding after colorectal ESD in patients treated with vitamin K antagonists.

Methods We performed a multicenter retrospective cohort study based on a consecutive prospective registry (11/2012–04/2025). We included patients ≥ 18 years undergoing colorectal ESD. Delayed bleeding was defined as any bleeding event within 30 days requiring urgent evaluation, hospitalization, or endoscopic reintervention. Procedures aborted or referred to surgery for non-bleeding reasons were excluded [1–5].

Results A total of 855 ESDs were included; 49 patients were on vitamin K antagonists, of whom 38 (77.6%) received HBT. Mean age was 73.8 years (SD 8), and 79.2% were male. The timing of anticoagulation resumption was similar between groups (day 1 in 78.9% with HBT vs 72.7% without HBT; $p = 0.98$). Among vitamin K antagonist users, no significant differences were observed between HBT and non-HBT groups in baseline characteristics, concomitant antiplatelet therapy, lesion morphology, or lesion location.

The overall delayed bleeding rate was 4.5% (95% CI 3.3–6.1%), and 33.3% (95% CI 21.7–47.5%) among patients on vitamin K antagonists ($p < 0.001$). Median DEBE score was 6 (IQR 4–8) and 17 (IQR 13–19), respectively ($p < 0.001$).

No significant differences were found between HBT and non-HBT groups in delayed bleeding rates (34.3% vs 30%; $p = 1$) or in time to bleeding (median 4 vs 3 days; $p = 0.57$). Two patients (12.5%) required transfusion, and no thromboembolic events occurred.

Conclusions Reinitiation of anticoagulation using heparin-bridging therapy was not associated with a higher risk of delayed bleeding compared with direct reinitiation. However, the limited sample size affects the robustness of the conclusions and supports the need for prospective studies with a larger sample size.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ogiyama H, Inoue T, Maekawa A, Yoshii S, Yamaguchi S, Nagai K, Yamamoto M, Egawa S, Horimoto M, Ogawa H, Nishihara A, Komori M, Kizu T, Tsutsui S, Tsujii Y, Hayashi Y, Iijima H, Takehara T. Effect of anticoagulants on the risk of delayed bleeding after colorectal endoscopic submucosal dissection. *Endosc Int Open*. 2020; 8 (11): E1654–E1663. doi:10.1055/a-1244-2097 Epub 2020 Oct 22 PMID: 33140021 PMID: PMC7581472
- [2] Sanomura Y, Oka S, Tanaka S, Yorita N, Kuroki K, Kurihara M, Mizumoto T, Yoshifuku Y, Chayama K. Taking Warfarin with Heparin Replacement and Direct Oral Anticoagulant Is a Risk Factor for Bleeding after Endoscopic Submucosal Dissection for Early Gastric Cancer. *Digestion*. 2018; 97 (3): 240–249. doi:10.1159/000485026 Epub 2018 Feb 8 PMID: 29421806

- [3] Jaruvongvanich V, Sempokuya T, Wijarnpreecha K, Ungprasert P. Heparin-Bridging Therapy and Risk of Bleeding After Endoscopic Submucosal Dissection for Gastric Neoplasms: a Meta-Analysis. *J Gastrointest Cancer* 2018; 49 (1): 16–20. doi:10.1007/s12029-017-0049-0 PMID: 29308541

- [4] Hatta W, Tsuji Y, Yoshio T, Kakushima N, Hoteya S, Doyama H, Nagami Y, Hikichi T, Kobayashi M, Morita Y, Sumiyoshi T, Iguchi M, Tomida H, Inoue T, Koike T, Mikami T, Hasatani K, Nishikawa J, Matsumura T, Nebiki H, Nakamatsu D, Ohnita K, Suzuki H, Ueyama H, Hayashi Y, Sugimoto M, Yamaguchi S, Michida T, Yada T, Asahina Y, Narasaka T, Kuribasyashi S, Kiyotoki S, Mabe K, Nakamura T, Nakaya N, Fujishiro M, Masamune A. Prediction model of bleeding after endoscopic submucosal dissection for early gastric cancer: BEST-J score. *Gut*. 2021; 70 (3): 476–484. doi:10.1136/gutjnl-2019-319926 Epub 2020 Jun 4 PMID: 32499390 PMID: PMC7873424

- [5] Nagata N, Yasunaga H, Matsui H, Fushimi K, Watanabe K, Akiyama J, Uemura N, Niikura R. Therapeutic endoscopy-related GI bleeding and thromboembolic events in patients using warfarin or direct oral anticoagulants: results from a large nationwide database analysis. *Gut*. 2018; 67 (10): 1805–1812. doi:10.1136/gutjnl-2017-313999 Epub 2017 Sep 5 PMID: 28874418 PMID: PMC6145295

eP1066 Diagnostic Accuracy of EUS-Guided Fine-Needle Biopsy for Pancreatic Tumors: A Retrospective Single-Center Study

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DOI 10.1055/s-0046-1822393

Aims EUS-guided fine-needle biopsy (EUS-FNB) is a key modality for diagnosing pancreatic lesions, but its real-world accuracy may be influenced by sampling adequacy, tumor heterogeneity, and inconclusive histology. This study aimed to evaluate the diagnostic performance of EUS-FNB for (1) all pancreatic tumors and (2) specifically pancreatic adenocarcinoma, using final histopathology as the reference standard.

Methods We retrospectively analyzed patients undergoing EUS-FNB for pancreatic lesions in a tertiary center. Based on procedural assessment, FNB results were categorized as tumoral or non-tumoral. Final histopathology classified lesions as pancreatic tumors (adenocarcinoma, pancreatic neuroendocrine tumors, ampullary/periampullary carcinoma, insulinoma), non-tumoral pancreatic disease, or indeterminate. Diagnostic accuracy was calculated for cases with conclusive histology; indeterminate outcomes were recorded to reflect sampling limitations.

Results Eighty-three patients had paired FNB and final histology results. Conclusive histopathology was available in 70/83 cases (60 pancreatic tumors, 10 non-tumoral lesions). For all pancreatic tumors, EUS-FNB demonstrated a sensitivity of 96.7%, specificity of 80.0%, and an overall accuracy of 94.3% (95% CI: 86.2%–97.8%), consistent with recent large-scale studies reporting comparable accuracy for pancreatic EUS-FNB [1, 2]. When restricting the target condition to pancreatic adenocarcinoma, FNB showed a sensitivity of 100%, specificity of 50%, and an overall accuracy of 72.3%. Histopathology was indeterminate in 13/83 patients (15.7%), reflecting insufficient or non-diagnostic tissue acquisition.

Conclusions EUS-FNB demonstrated high diagnostic accuracy for pancreatic tumors, with results aligning with the upper range of contemporary evidence, in which accuracies of 85–95% are typically reported for solid pancreatic lesions [1–3]. The lower accuracy observed for pancreatic adenocarcinoma alone, despite excellent sensitivity, highlights the challenge of differentiating adenocarcinoma from other neoplastic entities when tissue sampling is limited. These findings reinforce the strong diagnostic utility of EUS-FNB while underscoring the importance of optimal sampling techniques and careful interpretation, particularly when precise tumor subtyping is clinically relevant.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] El Chafic AH, Loren D, Siddiqui A et al. Comparison of FNA and FNB for EUS-guided sampling of solid pancreatic lesions: a large multicenter study. *Clin Gastroenterol Hepatol* 2020; 18 (2): 515–523
- [2] Crino SF, Ammendola S, Meneghetti A et al. Endoscopic ultrasound-guided tissue acquisition in solid pancreatic lesions: diagnostic performance of fine-needle biopsy versus fine-needle aspiration. *Gastrointest Endosc* 2021; 93 (4): 648–657
- [3] Thomsen MM, Larsen MH, Di Caterino T et al. Accuracy and clinical outcomes of pancreatic EUS-guided fine-needle biopsy in a consecutive series of 852 specimens. *Endosc Ultrasound* 2022; 11 (1): 45–54

eP1067 Transnasal Endoscopy as a Patient-Centered Solution to Strengthen Diagnostic Services

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DOI 10.1055/s-0046-1822394

Aims Conventional esophagogastroduodenoscopy (cEGD) is increasingly performed under sedation, adding costs and logistical complexity, while delaying patients' return to normal daily activities. Transnasal esophagogastroduodenoscopy (tnEGD) emerged as a less invasive, better-tolerated alternative to cEGD. Several UK centres have reported high patient acceptance and superior comfort compared to cEGD, with fewer instances of gag reflex, reduced cardiovascular stress and no need for sedation enabling immediate return to usual daily activities. Recent data show that new generation tnEGD offers comparable diagnostic accuracy for oesophageal and gastric pathology, including early gastric cancer and premalignant conditions, while improving throughput, reducing use of resources, and facilitating outpatient-based endoscopic services. Despite its benefits, there is no widespread use in continental Europe. Conventional esophagogastroduodenoscopy (cEGD) is increasingly performed under sedation, adding costs and logistical complexity, while delaying patients' return to normal daily activities. Transnasal esophagogastroduodenoscopy (tnEGD) emerged as a less invasive, better-tolerated alternative to cEGD. Several UK centres have reported high patient acceptance and superior comfort compared to cEGD, with fewer instances of gag reflex, reduced cardiovascular stress and no need for sedation enabling immediate return to usual daily activities. Recent data show that new generation tnEGD offers comparable diagnostic accuracy for oesophageal and gastric pathology, including early gastric cancer and premalignant conditions, while improving throughput, reducing use of resources, and facilitating outpatient-based endoscopic services. Despite its benefits, there is no widespread use in continental Europe. We aim to test the feasibility and efficacy of tnEGD in the first transnasal unit in Iberia.

Methods This study included all tnEGD performed between April and November 2025. Before starting, the team of doctors, nurses and assistants, went through a dedicated learning program. Prospective data collection was performed, including patient demographics, procedural success, tolerance, adverse events, and patient-reported satisfaction through standardized Likert-scale questionnaires. All patients had a telephone interview one week after the procedure.

Results During this period, 291 procedures (in 290 patients) were performed for diagnostic purposes. Most frequent indications were pre-surgical assessment (28 %), dyspepsia/GERD (16 %), post-surgical evaluation (10 %) and premalignant gastric conditions surveillance (10 %). Complete tnEGD was possible in 265 procedures (91 %). Incomplete cases were related to nasal cavity anatomical limitations in 22 patients (nasal conchae hypertrophy/congestion), while only 2 cases were due to patient intolerance. There were 7 immediate adverse events (AE): 5 nasal discomfort/pain and 2 mild epistaxis – all self-lim-

ited. Concerning the following days after the procedure, 13 patients reported late AE: 6 mild epistaxis, 5 rhinosinusitis, 1 migraine and 1 throat irritation. Overall, 226 patients (77.9 %) reported being satisfied with the examination and 228 (78.6 %) patients would repeat the examination. Among 135 individuals who had previously undergone cEGD, 121 (89.6 %) reported the tnEGD to be more comfortable. Regarding the costs related to sedation (previous analysis, anesthesiologist and nurse fee), a saving of approximately €63.60 per procedure is estimated.

Conclusions This early experience in a large cohort confirms that tnEGD is a well-accepted, highly tolerable, and safe alternative to cEGD, maintaining procedural efficacy while enhancing patient satisfaction. These results were consistent since the beginning of operations and support wider implementation of tnEGD across Europe.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1068 Prevalence and Histopathological Patterns of Inflammatory Bowel Changes Among Patients Undergoing Colonoscopy in sub-saharan Africa – Nigeria

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DOI 10.1055/s-0046-1822395

Aims Inflammatory bowel changes which include inflammatory bowel disease (ulcerative colitis) and others like Proctitis, chronic colitis, is characterized by immune-mediated inflammation of the intestines, chronic gastrointestinal inflammation, often induced by underlying predisposing factors such as genetics, environmental factors, and the gut microbiota.¹ Formerly, Inflammatory bowel changes which include inflammatory bowel disease (ulcerative colitis) and others like Proctitis, chronic colitis is not considered as a common diagnosis within the sub-saharan African population Asia and South America population, but lately the incidence of the disease is now on the rise.^{2,3} Endoscopy preceding histopathological evaluation remains a cornerstone in understanding disease mechanisms and early detections of these changes [1–3].

Methods A retrospective review of this inflammatory bowel changes was conducted using a total of 238 histological reports of patients gotten during an endoscopy examination to ascertain the incidence and distribution of this inflammatory bowel changes. Their clinical presentation, endoscopic findings, and the risk factors which predisposed them to these symptoms were evaluated.

Results Out of the 238 patients included in the study, 66 cases (27.7 %) were identified as being related to inflammatory bowel disease (IBD), comprising colitis & IBD (61 cases, 25.6 %) and proctitis (5 cases, 2.1 %). Ulcerative Colitis represented the predominant inflammatory bowel change diagnosis, reflecting the higher prevalence of ulcerative colitis in the sampled population, while proctitis likely represents localized or early-stage IBD manifestations. This indicates that approximately one in four patients in the study population exhibited IBD-related gastrointestinal inflammation. These findings underscore the clinical importance of accurate histopathological evaluation to distinguish inflammatory bowel changes from other gastrointestinal disorders and to guide appropriate management.

Conclusions Inflammatory bowel changes are increasingly detected among patients in our setting, indicating a shifting disease pattern once considered uncommon in sub-Saharan Africa. Early endoscopic and histological diagnosis is crucial for proper management. Ongoing surveillance is needed to better understand its evolving burden and risk factors in the region.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ananthakrishnan A.N. 2015; Epidemiology and risk factors for IBD. *Nat. Rev. Gastroenterol. Hepatol.* 12: 205–217. doi:10.1038/nrgastro.2015.34

[2] Zhou X.L., Zhao Q.Q., Li X.F., Li Z., Zhao S.X., Li Y.M. 2022; Protein intake and risk of inflammatory bowel disease: A meta-analysis. *Asia Pac J. Clin. Nutr.* 31: 443–449

[3] Wu T, Cheng H, Zhuang J, Liu X, Ouyang Z, Qian R 2025; Risk factors for inflammatory bowel disease: an umbrella review. *Frontier in Cellular Infection and Microbiology* 14:1410506. doi:10.3389/fcimb.2024.1410506

eP1069 Performance of a New Bipolar Knife in Third-Space Endoscopy: A Single-Center Experience

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DOI 10.1055/s-0046-1822396

Aims There has been growing interest in the development of bipolar knives in therapeutic endoscopy due to their safety profile. These devices incorporate a negative electrode at the tip, ensuring closed-circuit current transmission. Thus, they have the potential to reduce transmural thermal injury, lowering the risk of perforation or stricture, as well as decreasing interference with implanted cardiac devices. However, reports describe lower cutting efficiency, with longer procedure times. We want to test the efficacy and safety of a new bipolar knife in a clinical setting.

Methods Patients were prospective enrolled. In all, a newly certified bipolar knife was used, with a 1.4-mm ball-type device and cap. A dedicated electro-surgical unit was utilized (Hangzhou AGS MedTech Co, China).

Results Twenty-six patients were included, with a median age of 69,5 (IQR 61,0–77,5) years, in whom 28 procedures were performed: 16 gastric endoscopic submucosal dissections (ESD), 4 colonic ESD, 3 rectal ESD, 3 esophageal ESD and 2 peroral endoscopic myotomies. The median procedure time was 70 minutes (IQR 40–121). Regarding the 26 endoscopic resections, 24 were en bloc, of which 20 were curative. The median size of lesions was 25,0 mm (range 10–104mm). Two ESDs were converted to a hybrid technique, one due to device malfunction. Only one major adverse event occurred (post-ESD rectal bleeding in a patient on dual antiplatelet therapy), which was endoscopically treated. No post-ESD strictures were observed, including in lesions on the cardia and rectum with significant luminal circumference involvement.

Conclusions This new bipolar knife seems to be safe and effective in advanced endoscopic therapies, with potential to reduce the risk of perforation or stricture. Bipolar knives may play an important role in the future of third-space endoscopy, particularly in high-risk patients, although further comparative studies are needed to confirm our findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1070 Quality Improvement Project in Cavan Monaghan Hospital to Change Prescribing Practices For The Eradication of *Helicobacter Pylori* using a pro-forma prescription

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DOI 10.1055/s-0046-1822397

Aims *Helicobacter Pylori* (HP) is a class-1 carcinogen and Bismuth Quadruple Therapy (BQT) has recently been recommended as first line eradication therapy in Ireland. Previous local audits have shown that there is a variety of prescribed therapy for HP eradication; causes include unfamiliarity with BQT and cumbersome prescription. When BQT was used, eradication rates in our local service was 90 %.

Since January 2025, we introduced a simple pro-forma prescription in Cavan Monaghan Hospital for BQT that only requires prescribers' identifiers. The aim of this audit was to assess prescribing rates of BQT since introduction. Since

January 2025, we introduced a simple pro-forma prescription in Cavan Monaghan Hospital for BQT that only requires prescribers' identifiers. The aim of this audit was to assess prescribing rates of BQT since introduction.

Methods We reviewed both physical and electronic records of patients who had a positive Rapid Urease Test (RUT) over a 1 year period (July 2024–July 2025). We then compared prescribing practices of HP eradication once the pro-forma was introduced. We also checked return rates of HP stool antigen post eradication therapy, which is the only non-invasive HP test available to us.

Results Over the 1 year period, we had a total of 202 positive RUT tests. Incomplete data sets were removed and only 201 cases were included in the analysis. 108 (54 %) had positive RUT prior to proforma introduction and 93 (46 %) after.

In total prior to introduction of pro forma – 69 (64 %) patients were prescribed Triple Therapy (TT); 39 (36 %) was given BQT.

After the pro forma introduction TT was prescribed in only 10 (11 %) patients and BQT was prescribed in 83 (89 %) patients.

Overall stool return rate for HP serology was only 53 % (106 patient), eradication was achieved in 92 % (98).

Conclusions The introduction of the pro-forma BQT prescription has shown that there has been a marked increase (53 % increase) in the use of the most effective nationally recommended HP eradication regimen. In line with previous studies, stool sample returns were low; limiting data on post treatment eradication. This supports the development of other services including Urea Breath Testing for diagnosis and to assess post treatment eradication.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1071 Training in Endoscopic Retrograde Cholangio-Pancreatography (ERCP): Results from an E-Survey Amongst Young Italian Endoscopists

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DOI 10.1055/s-0046-1822398

Aims Endoscopic Retrograde Cholangio-Pancreatography (ERCP) is among the most complex procedures in digestive endoscopy, associated with high technical demands and risk of complications. While proficiency is essential for safe and effective clinical practice, training programs remain highly variable across Europe. To address these inconsistencies, the European Society of Gastrointestinal Endoscopy (ESGE) has published a structured core curriculum that outlines minimum standards for ERCP training. However, it is unclear to what extent these recommendations are being implemented in Italy. This study aims at exploring the current ERCP training practices among young Italian endoscopists [1–6].

Methods An anonymous e-survey was developed and distributed via Google Forms to all members of the Italian Association of Young Gastroenterologists and Endoscopists (AGGEI) since October 2024. The questionnaire was designed to assess demographics, ERCP training characteristics, procedural exposure, perceived competence, feedback and assessment methods, and overall satisfaction. Responses were collected up to January 2025. Inclusion criteria were age under 40 and less than 5 years of ERCP training experience. Descriptive statistics were calculated, and a multivariable linear regression analysis was

performed to identify factors independently associated with perceived training quality.

Results A total of 39 out of 904 young Italian endoscopists completed the survey (response rate: 4.3%). Most were male (69%) and aged 30–34 years (56%). The majority (87%) began ERCP training during residency, typically in the last year, and 67% worked in high-volume centres (≥ 200 ERCPs/year). Training practices varied considerably. While 67% had access to a dedicated ERCP mentor and 74% received integrated EUS training, only 3% reported using simulation-based tools. Regular feedback from mentors (daily or weekly) was reported by 62%, yet only 4 (10.3%) had completed a structured core curriculum. Participants expressed higher confidence in cognitive skills (mean 3.5/5, 79.5% ≥ 3) than in motor skills (mean 2.9/5, 61.5% ≥ 3). Most trainees required supervision for core therapeutic manoeuvres, with only 43.6% performing ERCPs at least partially independently; the majority (53.8%) required constant supervision or served only as assistants. Perceived training quality was rated as "Excellent" by 13%, "Very Good" by 18%, "Good" by 33%, "Fair" by 28%, and "Poor" by 8%. In multivariable regression, two factors were significantly associated with higher perceived quality: motor skill confidence ($\beta = 0.46$, $p = 0.004$) and inclusion of EUS training ($\beta = 0.81$, $p = 0.044$). Mentor availability, simulator use, and feedback frequency were not significantly associated with perceived quality.

Conclusions These early findings indicate substantial variability in ERCP training practices among young Italian endoscopists, with limited adherence to the ESGE curriculum recommendations. The inconsistent presence of mentors, minimal use of simulation tools, and unstructured assessment frameworks may hinder the development of essential competencies. As ESGE emphasises a structured, competency-based approach, including simulation and summative assessment, efforts should be made to align national training programs with these standards. Greater adoption of the ESGE core curriculum could help standardise ERCP education, promote procedural safety, and ensure a more equitable learning experience across training centres in Italy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Adler DG, Lieb JG 2nd, Cohen J et al. Quality indicators for ERCP. *Gastrointest Endosc* 2015; 81 (1): 54–66
- [2] Shahidi N, Ou G, Telford J et al. When trainees reach competency in performing ERCP: a systematic review. *Gastrointest Endosc* 2015; 81 (6): 1337–42
- [3] Wani S, Keswani RN, Petersen B et al. Training in EUS and ERCP: standardizing methods to assess competence. *Gastrointest Endosc* 2018; 87 (6): 1371–1382
- [4] Siau K, Dunckley P, Feeney M et al. Joint Advisory Group on Gastrointestinal Endoscopy. ERCP assessment tool: evidence of validity and competency development during training. *Endoscopy*. 2019; 51 (11): 1017–1026
- [5] Bisschops R, Dekker E, East JE et al. European Society of Gastrointestinal Endoscopy (ESGE) curricula development for postgraduate training in advanced endoscopic procedures: rationale and methodology. *Endoscopy*. 2019; 51 (10): 976–979
- [6] Johnson G, Webster G, Boškoski I et al. Curriculum for ERCP and endoscopic ultrasound training in Europe: ESGE Position Statement. *Endoscopy*. 2021; 53 (11): 1071–1087

eP1072 Single Pass Dynamic Suction Technique for EUS-Guided Liver Biopsy

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Aims Liver biopsy is important for diagnosing liver disease. Adequacy of biopsy specimen is essential for accurate pathology evaluation. The American Association for the Study of Liver Disease (AASLD) defines an adequate sample containing more than eleven complete portal tracts (CPT) and measuring at

least 1.5 cm in length. EUS-guided liver biopsy (EUS-LB) has emerged as a promising alternative to traditional percutaneous or transjugular liver biopsy. Prior studies have shown that variation in liver biopsy technique impacts tissue yield, and studies evaluating various techniques have been performed. The dynamic suction technique is a simple modification of the wet heparin suction technique that obtains exceedingly adequate liver biopsy specimens for diagnosis. The aim of this study is to evaluate the safety, efficacy, and tissue adequacy of EUS-LB with the dynamic suction technique.

Methods This is a retrospective study including all patients that underwent EUS-LB with the dynamic suction technique at our institution in 2025. Clinical, laboratory, and procedural data were collected. All biopsies were performed with 1 pass, 3 actuations using a 19 G EUS-FNB needle primed with 3 mL of heparinized saline. The primary endpoint was technical success rate and diagnostic adequacy as per pathologist. Secondary endpoints include total specimen length, number of complete portal tracts, stage of fibrosis, and rate of adverse events.

Results A total of 23 patients were identified to have undergone EUS-LB with dynamic suction technique from January to November 2025. The average age was 61, with 48% female. The mean INR was 1.08 (0.9–1.2) and the mean platelet count was 164.5 ($\times 10^3/\text{mm}^3$) (56–334). Unilobar biopsy was performed in all cases (87% in right lobe and 13% left lobe). Indications for liver biopsy included chronic liver disease (57%), evaluation of abnormal LFTs (43%), and stratification of portal hypertension (17%). The technical success rate of EUS-LB was 100% with diagnostic adequacy by pathology achieved in all cases. The average fixed liver specimen length per pathology was 6 cm (SD 1.5) and average CPT 14 (SD 6.2). 22% of specimens were staged as fibrosis stages F1–F2, while 39% were staged as F3–F4. There were no adverse events or procedure complications reported.

Conclusions The dynamic suction method is an effective adaptation of the wet suction method during EUS-LB. We achieved consistently adequate tissue acquisition with 1 pass, 3 actuations with no adverse events. Our findings support the dynamic suction method as a safe, reliable, and practical approach for obtaining diagnostic liver tissue.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1073 Overcoming challenging biliary diseases with percutaneous Digital Cholangioscopy: A Pilot Study

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DOI 10.1055/s-0046-1822400

Aims Endoscopic retrograde cholangiopancreatography (ERCP) can fail in some challenging situations, such as surgically altered anatomy, complex/intrahepatic biliary strictures, or difficult lithiasis. Percutaneous approach using digital single-use cholangioscopy (DSOC), eventually in combination with an endoscopic procedure ("rendezvous") may provide a prompt and effective rescue option. The aim of this pilot study was to evaluate feasibility, safety, and effectiveness of percutaneous cholangioscopy in the management of complex biliary diseases.

Methods This single-center retrospective analysis included all consecutive patients who underwent percutaneous biliary access with the simultaneous

collaboration between interventional radiologist and endoscopist (2021–24). Data were extracted from a prospectively maintained database. All procedures were performed under general anesthesia. DSOC with SpyGlass Discover (Boston Scientific) system was employed (always handled by the endoscopist) for direct visualization of biliary mucosa, selective biopsies (SpyBite forceps) or stone treatment through electrohydraulic lithotripsy (EHL with Autolith). All patients received antibiotic prophylaxis, rectal indomethacin in case of a rendezvous procedure. Descriptive analysis was performed regarding baseline characteristics, clinical indication, therapeutic details, and adverse events.

Results Twelve patients were included (mean age 71.5 years; 7 females, 5 males). For 3 patients a rendez-vous procedure was performed (with contemporary endoscopic access from the papilla and a percutaneous one); the remaining 9 procedures were carried out through percutaneous access with the endoscopist managing the cholangioscope. Indications were predominantly choledocholithiasis and complex stone disease ($n = 8$), followed by biliary strictures ($n = 4$), including 2 cases of hilar cholangiocarcinoma. ERCP failure was previously reported in 50 % of cases (6 pts), mainly due to duodenal diverticula ($n = 2$), luminal strictures ($n = 2$), altered anatomy such as Roux-en-Y or bilio-digestive anastomosis ($n = 1$), or impossibility of oral intubation ($n = 1$); 3 more patients had surgically altered anatomy directly approached in a percutaneous fashion. The largest biliary stone diameter ranged from **5 mm to 50 mm**. EHL was required in **10 patients**: 6 needed one session, 3 required two sessions, and 1 required three sessions to achieve complete clearance. Technical success of the combined procedure was obtained in all patients, allowing biliary drainage, stone removal, or targeted biopsies when indicated. Among the 4 cases of biliary strictures, 3 were subjected to biopsy sampling obtaining diagnostic confirmation of malignancy ($n = 2$) or inflammation ($n = 1$). Safety evaluation showed a low complication rate: **8 patients experienced no adverse events**. Four complications occurred overall: 2 cases of post-procedural fever managed conservatively (antibiotic therapy), 1 mild bleeding/anemia not requiring blood transfusion, 1 severe hemoperitoneum resulting in death. No perforations or sepsis were reported. Overall, **minor complications represented 75 %** of all adverse events. No patient required urgent re-intervention due to treatment failure, and in selected cases repeat procedures were performed solely to complete EHL-guided lithotripsy or planned re-evaluation of biliary benign stenosis.

Conclusions This pilot study demonstrates that percutaneous cholangioscopy, with or without a “rendezvous” approach, with the simultaneous presence of high professional figures like interventional radiologist and endoscopist, is **feasible, effective, and generally safe** for managing complex biliary conditions. DSOC enables a precise diagnosis in hard-to-reach areas both for diagnostic purposes or for targeted therapy, achieving successful stone clearance or stricture evaluation in challenging anatomies. The safety profile was acceptable considering the high-risk population (fragile/oncological patients), but the occurrence of 1 fatal adverse event should emphasize the need of performing this procedure in expert centers, where all facilities are available in a multidisciplinary setting, and by skilled operators able to interpret in real-time the intraductal findings to optimize the treatment strategy.

Conflicts of Interest Fabbri C, Binda C and Coluccio C are consultant for Boston scientific

eP1074 EUS-guided management of combined esophageal and gastric varices using coil-and-glue technique in a young high-risk patient ineligible for standard treatment

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DOI 10.1055/s-0046-1822401

Abstract Text

A 37-year-old patient with cirrhosis secondary to hepatitis B, complicated by hepatocellular carcinoma previously treated with right hepatectomy, presented with recurrence in the remnant liver requiring chemoembolization and treatment with Atezolizumab–Bevacizumab. He had a history of multiple episodes of gastrointestinal bleeding refractory to repeated endoscopic band ligation, with no other complications related to portal hypertension. CT imaging demonstrated multiple portosystemic collaterals and partial splenic vein thrombosis, managed with anticoagulation without resolution after 6 months [1,2].

Following discussion at the multidisciplinary tumor board, and given the contraindication to beta-blockers due to dilated cardiomyopathy, endoscopic ultrasound (EUS)-guided treatment of the varices was recommended prior to initiating systemic therapy. EUS re-evaluation revealed esophageal varices and residual gastric varices. The decision was made to perform glue injection of the esophageal varices first, followed by treatment of the gastric varices.

During the initial procedure, EUS identified a perforating vein (5 mm diameter) feeding the esophageal collateral system, confirmed by lipiodol injection. Using a 19G FNA needle, 2 cc of glue were injected, resulting in immediate cessation of flow within the esophageal varices. One month later, resolution of the esophageal varices was confirmed, with persistence of collateral gastric flow; therefore, treatment was completed with placement of one coil (14 cm × 10 mm) plus 1 cc of glue—also delivered through a 19G FNA needle—leading to significant flow reduction.

No complications or new bleeding episodes have occurred to date, with no evidence of intraluminal collateral flow on follow-up EUS at 3 months.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Florencio de Mesquita C, Antunes VLJ, Milioli NJ. et al. EUS-guided coiling plus glue injection compared with endoscopic glue injection alone in endoscopic treatment for gastric varices: a systematic review and meta-analysis. *Gastrointest Endosc* 2025; 101 (2): 331–340.e8
- [2] Praktikno M, Dollinger M, Braden B. et al] Endo-Hepatology: New Endoscopic Solutions for Old Hepatological Problems. *Z Gastroenterol* 2025; 63 (7): 771–782

eP1075 The Gallbladder: An Endoscopic Access Route for Choledocholithiasis in Roux-en-Y Gastric Bypass (RYGB) After Failed Enteroscopy-ERCP and EUS-Guided Biliary Drainage (EUS-BD)

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DOI 10.1055/s-0046-1822402

Abstract Text

Choledocholithiasis after Roux-en-Y gastric bypass poses major endoscopic challenges. When enteroscopy fails, EUS-guided options are often unfeasible: EDGE is not possible, EDEE is unpredictable, and EUS-BD lacks intrahepatic dilation. We report a single-session rendezvous using the gallbladder as an access port. After failed ERCP, EDEE, and EUS-BD, a Spaxus cholecysto-jejunostomy enabled cholecystoscopy and transcystic guidewire passage to the duodenum. Saline instillation allowed creation of a 20 × 10-mm Axios jejuno-duodenostomy, granting gastroscopic access to the papilla. Sphincterotomy, stone extraction, and temporary covered stent placement restored biliary drainage, resolving symptoms. The gallbladder offers a feasible endoscopic route to perform ERCP in altered anatomy when standard strategies fail.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1076 Association between the duration of stent indwell and the adverse events in patients with EUS-guided drainage of peripancreatic fluid collections using LAMS

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DOI 10.1055/s-0046-1822403

Aims Early reports on the application of Lumen-Apposing Metal Stents (LAMS) guided by EUS for the drainage of peripancreatic fluid collections (PFCs) reported a high number of adverse events (AEs) mainly related to the indwelling time of the stent. The recommendation is to remove LAMS within 3-4 weeks of placement. [1] The aim was to evaluate the AEs rate in patients undergoing PFC drainage with LAMS, focusing on the timing of these events with the date of stent placement.

Methods A total of 1,242 studies were identified in the initial search. After the selection process, 15 studies were included, comprising 674 patients. The databases consulted were: Scopus (n = 250), Web of Science (n = 286), PubMed (n = 243), Embase (n = 226), and Cochrane Library (n = 83).

Results 1,242 references were identified, of which 15 studies encompassing 674 patients were included. 129 (19.1%; CI 95% 0.17-0.23) AEs were reported, with the timing ascertainable for 123 (95.3%) cases. The most frequently reported AEs were stent obstruction (n = 39, 31.7%; CI95%: 0.22-0.37) and bleeding (n = 31, 24%; CI95%: 0.15-0.29). 12 (8.8%; CI 95%: 0.06-0.18) AEs occurred during the stent removal. 41 (6%; CI95%: 0.04-0.08) AEs were classified as severe. Mortality associated with LAMS was reported in 5 (0.73%; CI95% = 0-0.02) cases. Of the total AEs for which the timing of occurrence was documented (n = 123), 65 AEs (52.8%; CI 95% = 0.41-0.58) occurred within the first 4 weeks following stent placement. The remaining AEs (n = 58, 47.2%; CI95% = 0.42-0.59) occurred in patients who retained the stent > 4 weeks. No significant differences were observed concerning the type of collection (pseudocyst vs. necrosis).

Conclusions The observed AEs rate is noteworthy; however, most reported AEs (94%) were mild. This study did not find a correlation between the duration of stent indwelling and the development or severity of complications.

Conflicts of Interest Consulting/Lecture Olympus/Medtronic/Lumendi/Siemens/Boston Scientific/M.I.Tech

References

[1] Arvanitakis M, Dumonceau JM, Albert J et al. Endoscopic management of acute necrotizing pancreatitis: European Society of Gastrointestinal Endoscopy (ESGE) evidence-based multidisciplinary guidelines. *Endoscopy*. 2018; 50 (5): 524-46

eP1077 Fentanyl Use Is Associated with Higher ERCP Success Rates Compared to Pethidine: A Retrospective Analysis

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DOI 10.1055/s-0046-1822404

Aims Effective sedation is critical for endoscopic retrograde cholangiopancreatography (ERCP). While pethidine (meperidine) has traditionally been used for procedural analgesia, many centers are shifting toward fentanyl due to its favorable pharmacokinetic profile. We aimed to compare ERCP success rates and sedation characteristics between patients receiving fentanyl versus pethidine in a real-world endoscopy unit setting [1-3].

Methods We retrospectively analyzed 2,871 ERCP procedures performed between 2004 and 2025 at our tertiary endoscopy center. Patients were grouped based on analgesic received (pethidine or fentanyl). Primary outcome was procedural success. Secondary outcomes included the total intravenous midazolam dose administered during the procedure, as well as procedural complexity indicators such as the need for needle-knife precut sphincterotomy and the presence of difficult biliary cannulation, as defined by ESGE criteria. Multivariable logistic regression and inverse probability of treatment weighting (IPTW) using propensity scores were applied to adjust for confounding (covariates: age, gender, year, procedure difficulty, precut use, midazolam dose).

Results Fentanyl was used in 348 cases (12.1%), primarily in 2024-2025, while pethidine was used in 2,523 (87.9%). Despite higher rates of difficult cannulation (37.1% vs 23.5%, $p < 0.001$), fentanyl cases had significantly higher unadjusted success rates (95.4% vs 89.6%, $p = 0.0008$). In adjusted logistic regression, fentanyl was independently associated with increased ERCP success (OR 7.08, 95% CI 3.58-14.03, $p < 0.001$). IPTW analysis confirmed this association. Median midazolam dose was higher in fentanyl cases (3 mg vs 2 mg, $p < 0.001$), likely reflecting the greater procedural complexity and evolving sedation practices during the study period.

Conclusions Fentanyl use during ERCP was independently associated with significantly higher procedural success, even in cases with increased technical difficulty. While fentanyl is typically associated with reduced midazolam requirements in procedural sedation, our finding of higher midazolam dosing in the fentanyl group likely reflects the significantly higher procedural complexity and case difficulty. Fentanyl was introduced in the most recent period, coinciding with more advanced therapeutic ERCPs, often requiring precut sphincterotomy and prolonged cannulation attempts, necessitating deeper sedation. Furthermore, evolving practice patterns may have permitted more aggressive midazolam titration when using fentanyl, due to its rapid onset and shorter duration of action. These findings suggest that fentanyl may offer clinical advantages over pethidine in achieving successful outcomes, particularly in challenging ERCPs, and support its adoption as the preferred analgesic in modern endoscopy sedation protocols.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Aqil M, Khan MA, Mansoorulhaq HM, Shah SR. Comparison of fentanyl and pethidine in combination with midazolam for sedation in diagnostic upper gastrointestinal endoscopy. *Saudi J Gastroenterol* 2008; 14 (2): 67-71. doi:10.4103/1319-3767.41731

[2] Robertson DJ, Jacobs DP, Mackenzie TA, Oringer JA, Rothstein RI. Clinical trial: a randomized study comparing meperidine (pethidine) and fentanyl in adult gastrointestinal endoscopy. *Aliment Pharmacol Ther* 2009; 29 (8): 817-823. doi: 10.1111/j.1365-2036.2009.03943.x

[3] Kastelijn JB, van den Berg AM, Talwar R, Koks MS, Marsman M, van Erpecum KJ et al. Technical success and adverse event rates after endoscopic retrograde cholangiopancreatography using deep sedation with propofol. *Ann Gastroenterol* 2024; 37 (6): 726-733. doi:10.20524/aog.2024.0925

eP1078 Pan-intestinal Capsule Endoscopy: Is it ready for Prime Time? A Snapshot of the Irish Experience

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DOI 10.1055/s-0046-1822405

Aims Pan-intestinal Capsule Endoscopy (PIC) offers a potential to assess the entire small bowel and colon in a single test. PIC may be advantageous in a variety of clinical scenarios, including the established indication of Crohn's disease assessment and the more recently proposed indication of suspected mid-lower GI bleeding and for selected patients with polyposis syndromes. Its uptake and efficacy in routine clinical practice remain to be assessed.

Methods PIC procedural data uploaded to the Irish Capsule Endoscopy Registry (ICaRe) from 2024 to date were included for analysis. Patient demographics, clinical indication, and procedural variables – including bowel preparation and booster regimen, capsule type, complete transit rate (capsule reaching the dentate line), adequate image quality, complete study rate (transit and image quality) and significant small bowel or colonic findings – were documented.

Results In all, 307 PIC procedures were included in the registry. The median age was 57 years (IQR 40–71), and 134 (44 %) were male. A dedicated PIC capsule was used in only 32 (10 %) of cases, with the remainder employing colon capsules. The indication given for PIC was obscure GI bleeding in 48 % (n = 146), Crohn's disease assessment in 16 % (n = 49), new GI symptoms in 10 % (n = 32), screening in 6 % (n = 19), polyp surveillance in 4 % (n = 12), incomplete colonoscopy in 4 % (n = 13), and other indications in 8 % (n = 36). The complete transit rate was 78 % (n = 240) and adequate image quality in both the small bowel and colon was reported in 76 % (n = 234). The combined complete study rate (transit and adequate image quality) was 65 % (n = 198). While the overall diagnostic yield was 47 % (n = 145), significant colonic findings (CRC, significant polyps, or colitis) were found in 25 % (n = 76), including two with colorectal cancer. While significant small bowel disease was found in 26 % (n = 81), indication did not affect diagnostic yield. Of interest, PIC performance varied by preparation and booster regimen. Higher complete transit rates were seen in subjects who received low-dose PEG-based bowel preparation with Plenvu, 100 % vs 75.6 % (OR 23.7; 95 % CI 1.4–392.1; p < 0.001). Patients who received higher-volume PEG (2 litres of Moviprep), compared with other bowel preparation regimens, were more likely to have inadequate image quality (OR 0.37; 95 % CI 0.17–0.82; p = 0.014). Of note, prucalopride as a booster had no impact on either transit or complete study rate, while the use of castor oil as a booster was significantly associated with a higher complete study rate, 55 % vs 75 % (OR 2.4; 95 % CI 1.5–3.9; p < 0.001). Although transit rates were similar (28/32 [88 %] vs 212/275 [77 %]), both adequate image quality and resultant complete study rates were higher with dedicated PIC Crohn's capsules compared with colon capsules. Adequate image quality was achieved in 29/32 (91 %) vs 205/275 (75 %) (OR 0.30; 95 % CI 0.09–1.03; p = 0.05), and complete studies were achieved in 28/32 (88 %) vs 172/275 (63 %) (OR 0.24; 95 % CI 0.08–0.67; p = 0.009). However, patients in the Crohn's capsule cohort were significantly younger, which may have affected outcomes (p = 0.03).

Conclusions Our clinical data suggests PIC is being employed in a variety of clinical scenarios, with variable procedural success. Despite this, the overall diagnostic yield for both colonic and small bowel disease was high, irrespective of indication. PIC procedures should be considered as a distinct capsule entity, with specific procedural recommendations, as variations in bowel preparation, boosters and capsule type all impact performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1079 Colonoscopy in patients with infections of unknown origin has a high diagnostic yield for detecting colonic lesions

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DOI 10.1055/s-0046-1822406

Aims Infective endocarditis and infections of unknown origin have been associated with an increased risk of either benign or malignant colonic lesions. Aim of our study is to determine the diagnostic yield of colonoscopy in this setting.

Methods We retrospectively evaluated all colonoscopies performed at our center from 2013 to the present for endocarditis or systemic infections of unknown origin. Clinical, microbiological and endoscopic data, including polyp detection rate (PDR), adenoma and advanced adenoma detection rate (ADR and AADR) and cancer detection rate were analyzed. The correlation between different infective agents or sites of infection and endoscopic findings was examined.

Results 107 patients (mean age 68 years, 77.6 % males) were enrolled; main cause of admission was endocarditis (66 patients, 61.7 %), followed by sepsis (21, 19.6 %) and hepatic abscesses (14, 13.1 %). 25 (23.4 %) patients carried biological cardiac valve prostheses and 11 (10.3 %) had mechanical prostheses. 18 (16.8 %) had diabetes, 12 (11.2 %) had chronic kidney disease, 6 (5.6 %) had cirrhosis, 7 (6.6 %) were immunocompromised, and 5 (4.7 %) had an active malignancy. The most frequently isolated etiological agents were *E. faecalis* (38, 35.5 %) and *S. gallolyticus* (36, 33.6 %). Adequate bowel preparation rate was 82.2 %. Overall, PDR and ADR were 44.8 % (48/107) and 36.4 % (39/107). Advanced adenomas were found in 22 patients (AADR 20.6 %), and adenocarcinoma in 6 (5.6 %). *S. gallolyticus* isolation was associated with higher PDR (58.3 %, OR 2.28, 95 CI 1.00–5.16, p = 0.048), ADR (50 %, OR 2.38, 95 CI 1.03–5.45, p = 0.04) and AADR (33.3 %, OR 3.93, 95 CI 1.43–10.81, p = 0.007) compared to other etiological agents. Among patients diagnosed with cancer, no statistically significant differences were observed across the various infectious agents. No differences were observed between endocarditis and other infections.

Conclusions Performing colonoscopy in patients with endocarditis or infections of unknown origin is justified by a high diagnostic yield. Identification of colonic lesions is particularly frequent when the isolated etiological agent is *S. gallolyticus*.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1080 Automated Grading of Capsule Endoscopy Cleanliness by Analysis of the Capsule Reader's Colour Progress Bar: An AI Success Story

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DOI 10.1055/s-0046-1822407

Aims Small bowel capsule endoscopy preparation quality is typically graded qualitatively and is largely subjective and subject to inter-observer variability. Quantitative scoring systems, such as the Brotz scale, exist but are cumbersome to implement. Deep learning models are being developed to grade quality from capsule video frames. However, these tools will be limited to commercial software and may not be readily accessible. We aimed to develop a novel, open access, reliable clinical tool to objectively grade capsule endoscopy cleanliness by analysing the colour progress bar displayed by the capsule reader's software.

Methods We developed an AI algorithm deployed via ChatGPT that processes screenshots of the colour progress bar that is automatically generated by capsule reader software. This bar represents the dominant colour of each video frame throughout the small bowel transit and we hypothesised that analysis of

these colours could provide an objective surrogate for preparation quality. To train the algorithm, a human reader labelled multiple individual frames from real studies as having either good or poor mucosal visibility. For each labelled frame, the dominant mucosal colour was sampled, creating a library of colours associated with good or poor views. Using this library, the algorithm defined rules describing which colours typically represent good and poor visibility. When a screenshot of a colour bar is uploaded, the algorithm applies these rules to classify each small portion of the bar as good or poor. While several metrics can be generated from this, we evaluated the performance of the overall fraction of poor-classified portions (the PoorFrac score, range 0–1). We selected a cohort of small bowel capsule studies with both human adequacy grading and Brotz-score adequacy grading (inadequate was defined as a Brotz score < 10). Each colour bar was processed by the algorithm and their PoorFrac scores were generated. The relationship between the PoorFrac score and both human grade and Brotz-score were assessed using Pearson's *r*, point-biserial Correlation, and ROC analysis.

Results A total of 54 studies were analysed, with a human grading of adequate in 32 (59%) and inadequate in 22 (41%). Median Brotz score for this cohort was 12 (range 2–18). There was a strong correlation between human adequacy grading and Brotz score ($r = 0.68$, 95% CI 0.45–0.83; $p < 0.001$). The AI-automated PoorFrac score was strongly negatively correlated with the Brotz score ($r = -0.69$; 95% CI -0.83 to -0.46; $p < 0.001$) and strongly positively correlated with the human adequacy grade ($r = 0.59$; 95% CI 0.38 to 0.74; $p < 0.001$). A PoorFrac cutoff of 0.28 yielded an AUC of 0.836, with 70% sensitivity and 88% specificity for identifying inadequate studies (Brotz score < 10) on ROC analysis.

Conclusions Our AI algorithm offers a simple method to objectively assess capsule endoscopy preparation quality from the colour progress bar. The score from this approach correlated well with the established Brotz scale. Pending further refinement and validation of the algorithm, this could be a highly useful and widely accessible clinical tool.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1081V Targeted intermuscular dissection of rectal adenocarcinoma with a novel bipolar-microwave assisted endoscopic submucosal dissection technique combined with a new trans-anal platform

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DOI 10.1055/s-0046-1822408

Abstract Text

DESCRIPTION OF PROCEDURE AND KEY FINDINGS

En block resection using Bipolar-Microwave assisted Endoscopic Submucosal Dissection modality of the rectal malignant lesion (T1 sm3) was achieved with targeted separation of the layers of the bowel wall. Gradual increase CO₂ pressure every 2mm Hg by CO₂ exchange apparatus allowed ease separation of the circular layer in 2 stages: first peeling off the superficial surface of the circular followed by a deeper dissection to the intermuscular space. With aid of the bipolar/microwave device and a smoke free CO₂ exchange apparatus, the intermuscular dissection was achieved by pulsed injections prior to the bipolar cutting modality. Follow up endocytoscopy check confirmed granulation tissue.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/43814ac8-a096-4d3e-ac72-79bf083d7477/Uploads/19978_TARGETED_ENDO%20.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1082 Optimization of Indication and Prioritization of Digestive Endoscopy Requests Submitted from Primary Care

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DOI 10.1055/s-0046-1822409

Aims Effective coordination between Primary Care (PC) and hospital-based endoscopy units plays a crucial role in improving early diagnosis and timely detection of relevant gastrointestinal pathology. The increasing demand for endoscopic procedures requires the implementation of standardized referral pathways to ensure adequate patient selection, avoid inappropriate indications, and prioritize individuals at higher risk. Structured collaboration, supported by evidence-based protocols and continuous feedback to referring clinicians, can improve efficiency, reduce unnecessary procedures, and enhance diagnostic performance across the healthcare system.

To evaluate the indications, appropriateness, acceptance, and reasons for rejection of endoscopies requested from PC during 2024, while assessing the influence of clinical referral protocols and the colorectal cancer (CRC) screening program on decision-making and final scheduling outcome

Methods A retrospective descriptive analysis was performed of all digestive endoscopy requests submitted from PC throughout 2024. Data collected included reason for referral, compliance with predefined clinical criteria and CRC Screening Program requirements, type of endoscopy requested, and whether the procedure was accepted, temporarily deferred, or definitively rejected. Reasons for non-acceptance were categorized according to predefined clinical and organizational criteria.

Results A total of 3,281 endoscopy requests from PC were evaluated: 1,289 gastroscopies (95.3% accepted), 1,830 colonoscopies (86% accepted), and 162 combined procedures (95% accepted). The overall rejection rate was 9%. For gastroscopies, the leading causes of rejection were uncomplicated dyspepsia without alarm features and without prior *Helicobacter pylori* testing (37.7%), followed by inadequate or prematurely requested surveillance of previously detected lesions (34.4%). For colonoscopies, the most frequent reasons for rejection were post-polypectomy surveillance intervals not aligned with clinical guideline recommendations (39%) and inappropriate requests related to family-history-based CRC screening (32%). Among colonoscopies requested within the CRC Screening Program ($n = 1,124$), 16% were rejected for failing to meet program criteria. The most common causes were a previous colonoscopy performed within the last 10 years (50.55%) and the presence of gastrointestinal symptoms (17.58%); most symptomatic patients were subsequently re-assigned as diagnostic colonoscopies. A comparative evaluation with previous years showed a progressive reduction in inappropriate referrals (► **Table 1**)

► **Table 1** Annual proportion of Endoscopic procedures rejection

YEAR	Upper Endoscopy	Colonoscopy	CRC screening
2021	10 %	19 %	19 %
2023	4 %	20 %	13 %
2024	4,7 %	14 %	16 %

Conclusions The structured implementation of shared referral protocols between PC and the Endoscopy Unit, together with systematic assessment of indication appropriateness, has led to a measurable improvement in the quality of endoscopy requests. This has contributed to reducing unnecessary procedures, optimizing resource allocation, and enhancing diagnostic yield. Sustained communication with PC, ongoing updates on referral criteria, and feedback on screening indications remain essential to consolidate and further strengthen this positive trend.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1083 Bringing Light into the Tunnel: Laser-Assisted Per Oral Endoscopic Myotomy (LA-POEM)

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DOI 10.1055/s-0046-1822410

Aims Per oral endoscopic myotomy (POEM) is a minimally invasive treatment that has become the first-line treatment for achalasia, and it is emerging as a therapeutic option for other esophageal spastic disorders. Although the main procedural steps are well established, myotomy technique varies according to the centre's expertise, ranging from conventional to underwater, or from selective to full thickness. POEM is considered a safe procedure but may be associated with adverse events in up to 7.5% of cases, with some reports of capno-pericardium and cardiac arrest. Fiber laser have been used in different applications on interventional endoscopy, and more recently on POEM. This technology enables precise and direct cut without the use of conventional monopolar current.

Methods We report the use of holmium fiber laser technology (Quanta System, Samarate, Italy) as primary treatment on four patients with different esophageal motility disorders: type 1 and type 2 achalasia, esophagogastric junction outlet obstruction and hypercontractile esophagus.

Results Patients' age ranged between 47 and 77 years. The procedures were performed under general anesthesia at the endoscopy unit after multidisciplinary conference and patient informed consent. Conventional esophageal incision and submucosa tunnelling extending to the gastric cavity was performed using an ESD knife. Subsequently, under saline immersion and through an endoscopic catheter, a 365 µm holmium laser fiber was used for the myotomy (1.5–1.8 J; 10 Hz). Myotomy length varied according to the clinical indication and manometric results, from 6 to 10 cm. Selective myotomy was performed without bleeding or any other intraprocedural adverse event. All patients were admitted for 24 hours and resumed liquid diet on day 1, without adverse events. At 3-month follow-up, all patients achieved clinical remission, one continued PPI therapy for persistent reflux symptoms.

Conclusions Holmium fiber laser technology appears to be an effective and safe therapeutic tool for POEM, especially due to its ease of use, precise cutting and ability to avoid bleeding during the procedure. Robust comparative studies are needed to demonstrate the advantages of using fibre laser over standard techniques in third-space endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1084 The Importance Of P53 As A Biomarker Of Dysplasia In Ibd – Reconfirmed By The Application Of Artificial Intelligence

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DOI 10.1055/s-0046-1822411

Aims The aim of our study is to determine the most valuable marker for early detection of dysplasia in colorectal tissues of patients with IBD. These results will contribute for patient classification into different risk groups regarding closer follow-up. Artificial intelligence is being useful during colonoscopy examination (for diagnosis of IBD, detection and characterisation of dysplasia, quantifying disease severity and integration with digital pathology), as well as in IBD histologic assessment (in p53 evaluation in particular).

Methods For investigation of IHC expression of several markers (beta-catenin, VDR, NF-kappaB) in IBD patients, colorectal tissue samples from 30 patients who underwent colonoscopy examination were selected. IHC examinations in the tissue slides of patients with IBD were performed at the "Laboratory for Tumor Pathology" – Medical University of Vienna [1–9].

Results Of all IHC markers we have analyzed, staining intensity of p53 best correlated with disease activity and intensity of inflammation. Positive nuclear p53 expression was found in 52% of patients with IBD, of which 32% showed low expression, 15% – medium expression, and 6% – high expression).

Conclusions Our results are in line with the majority of publications in this field, which consider the protein expression of p53 in dysplastic crypts as a good biomarker and a very valuable diagnostic tool in IBD-associated colon cancers. Traditional diagnostic methods, such as IHC for p53 combined with H&E staining, are widely used to identify colitis-associated dysplasia precisely, but remain subject to inter-observer variability – at this point artificial intelligence offers a promising alternative.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Santacroce G., Zammarchi I., Nardone O.M., Capobianco I., Puga-Tejada M., Majumder S., Ghosh S., Iacucci M. 2025; Rediscovering histology – the application of artificial intelligence in inflammatory bowel disease histologic assessment. Therapeutic advances in gastroenterology 18: PMID: 17562848251325525 . doi:10.1177/17562848251325525
- [2] Horvath B, Liu G, Wu X, Lai KK, Shen B, Liu X. Overexpression of p53 predicts colorectal neoplasia risk in patients with inflammatory bowel disease and mucosa changes indefinite for dysplasia. Gastroenterol Rep (Oxf). 2015; 3 (4): 344–9. doi:10.1093/gastro/gov022 Epub 2015 Jun 10 PMID: 26063242 PMID: PMC4650973
- [3] Gregorio V, Maeda Y, Kudo SE, Kawabata Y, Kuroki T, Santacroce G, Puga-Tejada M, Takenaka K, Takabayashi K, Ohara J, Maeda C, Ichimasa K, Misawa M, Ogata N, Ogata H, Ohtsuka K, Iacucci M. Evolving Role of Artificial Intelligence in Endoscopic Management of Inflammatory Bowel Disease: Diagnosis, Surveillance, and Assessment. Dig Endosc 2025; 37: 1148–1161. doi:10.1111/den.15081 Epub 2025 Jul 4 PMID: 40613652
- [4] Noguchi T, Ando T, Emoto S, Nozawa H, Kawai K, Sasaki K, Murono K, Kishikawa J, Ishi H, Yokoyama Y, Abe S, Nagai Y, Anzai H, Sonoda H, Hata K, Sasaki T, Ishihara S. Artificial Intelligence Program to Predict p53 Mutations in Ulcerative Colitis–Associated Cancer or Dysplasia. Inflammatory Bowel Diseases Volume 28 (Issue 7): July 2022 Pages 1072–1080. doi:10.1093/ibd/izab350
- [5] Iacucci M. et al. Advancing IBD-Driven Colorectal Cancer Management: Molecular Insights and Endoscopic Breakthroughs Towards Precision Medicine. Clinical Gastroenterology and Hepatology. Article in press. 2025;
- [6] Gordon H, Biancone L, Fiorino G et al. ECCO guidelines on inflammatory bowel disease and malignancies. J Crohn Colitis 2023; 17: 827–854
- [7] Hirsch D, Hardt J, Sauer C et al. Molecular characterization of ulcerative colitis-associated colorectal carcinomas. Mod Pathol 2021; 34: 1153–1166
- [8] Nardone O.M., Zammarchi I., Santacroce G., Ghosh S., Iacucci M. 2023; Inflammation-Driven Colorectal Cancer Associated with Colitis: From Pathogenesis to Changing Therapy. Cancers 15 (8): 2389
- [9] Iacucci M et al. Artificial intelligence and endo-histo-omics: new dimensions of precision endoscopy and histology in inflammatory bowel disease. The Lancet Gastroenterology & Hepatology 2024; Volume 9 (Issue 8): 758–772

eP1085 Investigating the Characteristics of Bile Culture Organisms in Patients with Cholangitis Undergoing ERCP: A Systematic Review and Meta-analysis

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DOI 10.1055/s-0046-1822412

Aims Tokyo Guidelines 2018 (TG18) recommend providing empiric therapy to patients with moderate to severe (Grades III – IV) cholangitis before bile duct decompression through Endoscopic Retrograde cholangiopancreatography (ERCP). Current literature indicates an increase in antibiotic resistance, highlighting the importance of enhanced antibiotic management. If empiric antibiotic therapy is not sufficient, complications of cholangitis can result in bacteremia and subsequent organ failure. TG18 suggests taking bile culture to convert to targeted antibiotic therapy, while European Society for Gastrointestinal Endoscopy (ESGE) and American Society for Gastrointestinal Endoscopy (ASGE) guidelines do not yet specify taking bile culture during ERCP. This systematic review and meta-analysis aims to synthesize evidence that may guide conversion to earlier targeted antibiotic therapy in patients with cholangitis undergoing ERCP.

Methods This review follows the recommendations of the PRISMA 2020 guideline and has a registered protocol on PROSPERO (CRD420251164558). We systematically searched five major databases: MEDLINE (via PubMed), Embase, CENTRAL, SCOPUS, and Web of Science. Eligible studies include patients with cholangitis who undergo ERCP and receive empiric antibiotic therapy. We include comparative and single-arm studies reporting extractable or calculable prevalence data. Two reviewers independently performed title-abstract and full-text screening, data extraction, and risk of bias assessment using the Joanna Briggs Institute Critical Appraisal Checklist for Prevalence Studies. Planned analysis includes pooled proportions with 95% confidence intervals (CI), and heterogeneity will be assessed by Higgins and Thompson's I² statistics and variance measure (tau-square, t²).

Results Preliminary results from 11 studies showed a 27% prevalence of *E. coli* (Figure 1), 17% for *Klebsiella* (Figure 2), 6% for *Pseudomonas* (Figure 3), and 4% for *Staphylococcus* (Figure 4) in patients with cholangitis undergoing ERCP.

Conclusions Our preliminary data suggests *Escherichia coli* (*E. coli*) is the most common organism diagnosed from bile cultures in patients with cholangitis undergoing ERCP. Our meta-analysis will include an estimated 70 studies in the final analysis, and we will include results for more subgroups of bacteria, fungi, as well as an analysis of multidrug-resistant organisms (MDROs).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1086 Endoscopic management of post-gastric sleeve leaks using vacuum assisted closure stents (VacStents) and adjunct therapies: A retrospective review of 11 cases

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DOI 10.1055/s-0046-1822413

Aims We aimed to assess the outcomes of patients treated endoscopically for post-gastric sleeve leaks in a single tertiary referral centre in Ireland, with a

particular assessment of the use of VacStents. These patients had primary surgeries done various health centres.

Methods Retrospectively data was collected from EndoRaad (endoscopy reporting system) in the hospital was conducted to assess for all patient reports that contained 'VacsSent' or 'Post-sleeve leak' or similar variations for the years 2021-2025 and we collected the data from radiology system for same patients to assess the procedural burden until the leak was healed.

Results 11 patients had endoscopic treatment of post-bariatric leak, 9 of which were female. The median age was 48 (range 28-66). Surgeries were performed in Turkey (6), Ireland (3), Spain (1) and Poland (1).

Overall the median time from surgery to first stent was 17 days for patients for whom the date of operation is available.

7 patients (64%) have achieved healing with endoscopic therapy. A further 3 patients have had surgery, and the final patient is undergoing active surveillance to assess for healing. VacStent was used in 7 patients (64%) Three of these patients (43% of Vacstent cohort) achieved healing. The median number of OGDs was 6 (range 3-12). Median number of stents per patient was 3 (range 1-7) and these included SEMS, OTSC and EndoVac.

Patients were also noted to have significant overall use of healthcare resources. 10 patients had radiological drainage of collections. Median number of CXR was 14 (3-25) and median CT Abdomen & Pelvis was 4 (2-15). The median length of stay was 78 days (35-240).

Conclusions VacStents were used in 64% of patients, with a 43% healing rate within that subgroup and 64% overall healing across the cohort. There were 3 surgical failures (27%) and 1 non-surgical failure with persistent leak (9%). VacStents contributed meaningfully to closure in complex leaks but were rarely sufficient alone. Optimal outcomes depended on multimodal management integrating SEMS, OTSC, NJ feeding, and radiologic drainage. Despite the procedural burden, most patients achieved healing, underscoring the value of coordinated, stepwise care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1087 Surgical Emergency after EUS-guided gastroenterostomy for Malignant Gastric Outlet Obstruction: When the Mesentery Twists – A case of Petersen-type internal herniation

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DOI 10.1055/s-0046-1822414

Abstract Text

Case: A 59-year-old man, without prior medical history, presented with high-grade obstructive symptoms, including coffee-ground vomiting. CT revealed a pancreatic mass causing gastric outlet obstruction due to duodenal invasion. With partial encasement of the superior mesenteric vein and side branch of the superior mesenteric artery, the disease was deemed locally advanced, requiring neoadjuvant treatment. To facilitate oncological therapy, a bypass was indicated for which creation of an EUS-GE was elected.

The procedure was performed using a 20 × 10 mm electrocautery-enhanced Lumen Apposed Metal Stent (LAMS; Hot AXIOS) and the Wireless Endoscopic Simplified Technique (WEST). Utilizing an oro-enteric catheter for enteric distention, the LAMS was correctly deployed without immediate adverse events. The patient resumed intake and was discharged after achieving clinical success. Four days after, he was re-admitted with obstructive symptoms and a distended non-peritonitic abdomen. Laboratory findings were unremarkable. A CT scan confirmed LAMS patency but revealed a mesenteric "whirl sign" and caliber transition, diagnostic of acute mesenteric volvulus with closed-loop small bowel obstruction.

Emergency laparoscopy confirmed an intact EUS-GE with LAMS positioned 10–15 cm beyond the ligament of Treitz. However, a complete Petersen-type internal herniation of the small bowel through the mesenteric defect created by the gastrojejunostomy was found. After reduction, torsion of the efferent jejunal segment became apparent, but tissue appeared non-ischemic. To prevent recurrence, the Petersen space was closed and a distal side-to-side gastrojejunostomy in omega configuration was created. The postoperative course was favorable.

EUS-GE theoretically confers the same anatomical risk as surgical bypass procedures (e.g., Roux-en-Y gastric bypass): formation of a Petersen space, a mesenteric defect with a gateway for internal herniation and volvulus. The rarity of this complication suggests an unusual contributing mechanism in this patient. We hypothesize that herniation in this patient resulted from the combined effects of tumor-related distortion and the slightly more distal placement of the EUS-GE (~10–15 cm distal to Treitz), allowing for a larger Petersen space and more torsion.

Immediate detorsion, reduction and defect stabilization (closure of the Petersen space and creation of gastrojejunostomy performed here) yields favorable results. Whereas delayed diagnosis leads to bowel necrosis, perforation, and sepsis, carrying a mortality rate up to 30%.

Conclusion: Our case is a reminder that despite minimal invasiveness of EUS-GE, the resulting anatomical reconstruction might result in internal herniation with secondary mesenteric volvulus. Recurrent obstructive symptoms following EUS-GE should prompt early imaging to identify mesenteric abnormalities (the "whirl sign"). Early recognition and intervention are essential to prevent ischemic injury, morbidity and mortality risk associated with delayed management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1088 Clinical Factors Associated With Prolonged Caecal Intubation Time

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DOI 10.1055/s-0046-1822415

Aims To identify factors associated with prolonged cecal intubation time (CIT); to assess the impact of patients' anthropometric parameters on CIT; and to determine the influence of previous intra-abdominal surgical procedures on CIT.

Methods This retrospective, cross-sectional, single-center study included 201 patients who underwent total colonoscopy under procedural sedation/analgesia between January 2025 and August 2025. Data collected included age, sex, height, weight, body mass index (BMI), CIT, presence of diverticulosis and hemorrhoids, and history of intra-abdominal surgery. Exclusion criteria were failure to achieve cecal intubation, inadequate bowel cleansing, defined as Boston Bowel Preparation Scale (BBPS) score 0 and a history of colorectal resection. The association between CIT and demographic/anthropometric parameters, as well as prior surgical history, was evaluated [1–3].

Results A total of 100 male and 101 female patients participated in the study. Male patients had significantly lower CIT values (5.0 (4.0–7.0) min) compared with female patients (8.0 (5.5–10.0) min; $p < 0.001$). Patients who had undergone previous abdominal surgery had significantly higher CIT (7.0 (5.0–11.0) min) than those without prior surgery (6.0 (4.0–8.0) min; $p = 0.012$). BMI correlated significantly with CIT ($\rho = -0.308$; $p < 0.001$). In a linear regression model, lower BMI ($\beta = -0.375$, $p < 0.001$), female gender ($\beta = 0.267$, $p < 0.001$), and previous abdominal surgery ($\beta = 0.353$, $p < 0.001$) were independent predictors of prolonged CIT, explaining 26.4% of the variance ($R^2 = 0.264$).

Conclusions Female sex, low BMI, and a history of prior intra-abdominal surgical procedures emerged as independent predictors of prolonged CIT in a linear regression model.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] <https://pmc.ncbi.nlm.nih.gov/articles/PMC8133265/>
- [2] <https://pubmed.ncbi.nlm.nih.gov/28428714/>
- [3] <https://pubmed.ncbi.nlm.nih.gov/39138684/>

eP1089V Laser on: a case of laser assisted peroral endoscopic myotomy (POEM)

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DOI 10.1055/s-0046-1822416

Abstract Text

Per oral endoscopic myotomy (POEM) is currently the first-line treatment for achalasia. Myotomy is the step most prone to complications, namely bleeding or electrocoagulation organ injury, and its technique is still variable around expert centers. We report a case of type 1 achalasia with a 10-point Eckardt score, treated with laser-assisted POEM. After standard esophageal mucosal incision and submucosal tunnel creation with a TriangleTipKnife J (Olympus, Tokyo, Japan) a 9-cm selective myotomy was performed using a 365 μ m holmium laser fiber (Quanta System, Samarate, Italy). Patient resumed oral liquid diet on day 1 and was discharged after 24 hours. At 3-month follow-up patient achieved clinical remission and weight regain. Holmium laser fiber technology offers an easy, safe and precise myotomy method during POEM.

Video [http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/775f6b4f-ce61-4829-8cdd-c73ac4bcc2cf/Uploads/19978_Laser_\(1\).mp4](http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/775f6b4f-ce61-4829-8cdd-c73ac4bcc2cf/Uploads/19978_Laser_(1).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1090 Modified conservative hydration regimen combined with indomethacin as a prophylaxis in patients at high risk of post-ERCP pancreatitis

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DOI 10.1055/s-0046-1822417

Aims The overall documented PEP rate is 3.5% to 9.7%, while the rate of high-risk patients is 14.7%. The guidelines recommend a minimum standard of <10% of PEP, with a target of 5.1%.

There are well-recognized risk factors, including suspected SOD, previous pancreatitis, previous PEP, female sex, difficult cannulation, pancreatic guidewire passages >1 and pancreatic injection. There are likely risk factors as younger age, nondilated extrahepatic bile duct, normal serum bilirubin, end-stage renal disease, biliary balloon sphincter dilation, failure to clear bile duct stones. ESGE suggests that patients should be considered to be at high risk for PEP when at least one definite or two likely patient-related or procedure-related risk factors are present.

ESGE recommends PEP prophylaxis using rectal administration of 100mg of diclofenac or indomethacin immediately before ERCP in all patients in whom a contraindication does not exist. Current ESGE and ASGE do not recommend routine combination prophylaxis in all patients. Current studies demonstrated potential benefits in combining rectal NSAIDs with other strategies.

Methods Objective: There are studies that compares aggressive hydration with Ringer lactate versus moderate hydration with saline solution during and after procedures. We describe the first results of a combination of a conservative hydration regimen with Hartmann's solution and NSAIDs, since we already

using indomethacin. Among patients with high risk for PEP, compare indomethacin with moderate IV hydration versus indomethacin with modified aggressive IV hydration.

Material and methods: Prospective study, including adult patients > 18yo, with high risk of post-ERCP pancreatitis, from 2022 to 2024 at Hospital General de Tláhuac, a 2nd level hospital in México City.

The patients were randomly assigned to a combination of rectal indomethacin combined with a modified aggressive hydration (maximum 1.5ml/kg/hr during procedure, 20mg/kg bolus of Hartmann solution at the end of procedure, followed by 3ml/kg/hr for 8 hours) or indomethacin combined with moderate hydration (maximum 1.5ml/kg/hr during and after the procedure for 8 hours). Inclusion criteria: Adult patients > 18yo with at least one definite or two likely patient-related or procedure-related risk factors are present before undergoing to ERCP, with a documented indication. Patients with additional pancreatic stent were excluded.

Descriptive analysis with measures of central tendency for quantitative variables and frequency distribution for qualitative variables.

Results Between January 2021 and December 2024, 71 patients met the criteria for high-risk patients to develop PEP, with a total of 87 procedures. There was a total of 37 patients in the group of indomethacin with modified moderate hydration and 50 patients in the modified aggressive hydration group.

A total of 11 (12.7%) patients developed PEP, consistent with literature of 14.7% high-risk PEP patients. It is worth mentioning that if we break down the rate by year, the percentage of PEP fell to 5.7% during 2024, possibly due to the learning curve of the newly graduated endoscopist. Among high-risk patients receiving rectal indomethacin, the incidence of post-ERCP pancreatitis was 13.5% (5/37) in the indomethacin with modified moderate hydration group and 12.0% (6/50) in the indomethacin plus modified aggressive hydration regimen group. There was no statistically significant difference between groups (RR 1.13, 95% CI 0.37–3.41; OR 1.15, 95% CI 0.32–4.09; Fisher's exact test $p = 1.00$).

Conclusions At least in these early results, the modified hydration regimen shows that it is not inferior than the established one. There was **no significant difference** in the incidence of post-ERCP pancreatitis between both groups

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1091 Sedation practices in Gastrointestinal Endoscopy: Italian Society of Digestive Endoscopy (SIED) survey

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DOI 10.1055/s-0046-1822418

Aims Appropriate sedation is essential for safe and effective gastrointestinal endoscopy. The Italian Society of Digestive Endoscopy (SIED) conducted a survey to assess current sedation practices in gastrointestinal endoscopy among its members.

Methods The survey was carried out from 1 November 2024 to 30 January 2025 through an online self administered questionnaire.

Results Of the 1,337 SIED members, 592 (44.3%) completed the questionnaire. Most endoscopists (84.7%) reported routinely performing sedation following the SIED–SIAARTI good clinical practice recommendations (67.8%). However, almost all participants (93.4%) indicated the need for a national guideline on sedation in gastrointestinal endoscopy. Mild (benzodiazepine alone) to moderate (benzodiazepines + opioids) sedation was preferred for gastroscopy, colonoscopy, and endoscopic ultrasound (EUS), whereas deep

sedation (propofol) was mainly used for endoscopic retrograde cholangiopancreatography (ERCP) and enteroscopy. Anesthesiologist assistance was available at least once a week for 77.5% of participants, but only 20.5% reported availability on almost all working days. Notably, 22.5% of endoscopists reported no availability of anesthesiologist assistance for gastrointestinal endoscopy. Although almost all participants considered a training course on sedation in gastrointestinal endoscopy essential, only 36% had actually attended one. All endoscopists reported monitoring peripheral oxygen saturation and heart rate during mild-to-moderate sedation, while blood pressure, ECG, and capnography were frequently monitored during deep sedation [1–6].

Conclusions This nationwide survey provides essential information to improve and standardize sedation practices in gastrointestinal endoscopy in Italy. These findings may support the development of a national guideline on sedation in gastrointestinal endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Triantafyllou K, Sidhu R, Tham T et al. Sedation practices in Gastrointestinal Endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) survey. *Endoscopy* 2024; 56: 964–974
- [2] Fanti L, Agostoni M, Gemma M et al. Sedation and monitoring for gastrointestinal endoscopy: A nationwide web survey in Italy. *Digestive and Liver Disease* 2011; 43: 726–730
- [3] Petrini F, De Robertis E, Monzani R et al. ANALGO-SEDAZIONE IN ENDOSCOPIA DIGESTIVA Verso un approccio multidisciplinare per la qualità e la sicurezza: la posizione inter-societaria SIAARTI-SIED per un percorso di Buona Pratica Clinica. 2020;
- [4] Early DS, Lightdale JR, Vargo JJ et al. Guidelines for sedation and anesthesia in GI endoscopy. *Gastrointest Endosc* 2018; 87: 327–337
- [5] Sidhu R, Turnbull D, Haboubi H et al. British Society of Gastroenterology guidelines on sedation in gastrointestinal endoscopy. *Gut* 2023; 73: 219–245
- [6] Dumonceau JM, Riphaus A, Schreiber F et al. Non-anesthesiologist administration of propofol for gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy, European Society of Gastroenterology and Endoscopy Nurses and Associates Guideline – Updated June 2015. *Endoscopy* 2015; 47: 1175–1189

eP1092 Improving histological assessment of intraductal extension in papillary adenomas by guidewire cannulation of the ex vivo specimen

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DOI 10.1055/s-0046-1822419

Aims Endoscopic papillectomy (EP) is an effective treatment for papillary adenomas, but intraductal extension (IDE) is a known risk factor for incomplete resection and recurrence. Accurate histological assessment of IDE is often challenging due to specimen orientation. We evaluated whether ex-vivo guidewire cannulation of specimens improved histological assessment.

Methods Consecutive Patients undergoing EP with ex-vivo guidewire cannulation of major papilla at a tertiary centre over 30 months, to Oct 2025 were included. Specimens with non-adenomatous histopathology were excluded. Propensity score matching (1:1) was performed for size, en-bloc resection, and laterally spreading component (LSL) against a prior cohort. Outcomes included histological identification of the biliary duct orifice and intraductal extension.

Results 60 patients were included, 30 with ex-vivo guidewire cannulation (wired) and 30 propensity-matched controls without guidewire (non-wired). The groups were balanced for age (mean 64 years), sex (16 males per group), median lesion size (25 mm), en-bloc resection (21 per group), and lateral spreading component > 10 mm (12 per group). Histopathology comprised

tubular adenomas with low-grade dysplasia (LGD) in 38 patients (20 wired, 18 non-wired), tubulovillous adenomas with LGD in 15 (10 wired, 5 non-wired), high-grade tubulovillous adenomas in 2 (1 wired, 1 non-wired), and carcinoma in 9 (5 wired, 4 non-wired). The common bile duct orifice was identified in 23/30 (77%) wired versus 13/30 (43%) non-wired specimens ($p = 0.017$), and histologic intraductal extension was detected in 17/30 (57%) wired versus 10/30 (33%) non-wired specimens ($p = 0.119$).

Conclusions Ex-vivo guidewire cannulation of papillary specimens improved identification of the CBD orifice by 33% and nearly doubled the detection of intraductal adenoma. This technique allows identification of a subgroup at risk of intraductal recurrence, the primary means by which papillary adenomas reoccur. These findings have important implications for subsequent surveillance and therapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1093 Attitudes towards green endoscopy and sustainable conferences in Ireland, a nationwide survey

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DOI 10.1055/s-0046-1822420

Aims Environmental impacts of clinical practice are increasingly an area of focus internationally. In this study, we surveyed members of the Irish Society of Gastroenterology to get a better understanding of current attitudes towards Green Endoscopy practices and the environmental impact of conference attendance in Ireland. We hope that the results of this study can guide policy development in Green Endoscopy nationally, and contribute to strategies for reducing the carbon footprint of Conferences globally.

Methods An anonymous 21 question survey using Microsoft Forms was distributed via email to members of the Irish Society of Gastroenterology. The age profile and position of responders was recorded, as was their region of practice. We assessed the prevalence of Green Endoscopy initiatives in Endoscopy Units by region, awareness of Green Endoscopy policies, and what barriers exist to introducing such policies locally. Data regarding the number of conferences attended annually, both nationally and internationally, was recorded, as were the methods of transport used to attend these conferences. We collected data regarding responders attitudes towards virtual conference attendance and the environmental impact of conferences.

Results A total of 65 responses were received from Consultants ($n = 25$), GI trainees ($n = 14$), Endoscopy Nurses ($n = 21$), Nurse Endoscopists ($n = 4$). The majority (52%) were aged 30-39 ($n = 34$) and worked in urban areas (72%). 40% of those surveyed said that their unit had a Green endoscopy programme ($n = 26$), and 69% of those who responded stated that their endoscopy unit recycled green waste ($n = 45$). 55% of respondents confirmed that their endoscopy unit did adhere to guideline recommended biopsy protocols ($n = 36$). 18% of those who responded were aware of barriers to implementing a green endoscopy initiative ($n = 14$), reporting issues with waste segregation or a lack of leadership for policy rollout. 60% of respondents said that their unit had a digital system for endoscopy appointments ($n = 39$). 58% of respondents attended 1-2 conferences annually ($n = 38$), 38% attended 3-5 conferences annually ($n = 25$) and 3% attended more than 5 conferences annually ($n = 2$), with in-person attendance favoured by 91% ($n = 59$). The reasons for attending included CPD (46%, $n = 30$), abstract presentation (20%, $n = 13$), and networking purposes (22%, $n = 14$). Conference attendance increased for some (20%, $n = 13$), decreased for others (29%, $n = 19$) or had not changed (51%, $n = 33$). 94% of respondents attended 1-2 conferences in Ireland annually. 94% of those who responded stated that they attended 1-2 conferences outside of Ireland annually. For conferences within Ireland, the preferred method of transport was by car (single occupancy) (57%, $n = 37$), car pool (34%, $n = 22$), or train (9%,

$n = 6$). Most reported gaining more knowledge from in-person attendance (85%, $n = 55$). The environmental impact of attending a conference was a factor for 26% ($n = 17$) but not for 38% ($n = 25$). If available in advance, the predicted environmental impact of a conference would be a factor in attending for 66% ($n = 43$).

Conclusions This survey captured attitudes of various Endoscopy practitioners in Ireland. Responses showed there is scope for improved rollout of green endoscopy initiatives in Irish hospitals, particularly for recycling of green waste part. Our survey also showed that most individuals prefer in-person conference attendance for networking and learning opportunities. Surprisingly, only a third take the environmental impact of conferences into account when deciding to attend. This survey may suggest that advanced awareness of predicted environmental impact, along with choosing conference location with good public transport options, may help to reduce the environmental impact of conferences in the future. We hope that this study contributes to policy development for the reduction of the environmental impact of our practice nationally going forward.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1094 EUS-guided biopsies of an abdominal paraganglioma: A case report

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DOI 10.1055/s-0046-1822421

Abstract Text

A 40-year-old Iranian female patient with no relevant past medical history underwent an abdominal ultrasound (US) during evaluation of mildly elevated liver enzymes, revealing an incidental mass in the caudate lobe. Magnetic resonance imaging (MRI) demonstrated a 3.5 × 2.8 cm caudate lesion with a central scar and high T2 signal, raising strong suspicion for fibrolamellar hepatocellular carcinoma (FL-HCC). Given the lesion's deep location, percutaneous biopsy was deemed challenging, and an endoscopic ultrasound (EUS)-guided approach was recommended. EUS revealed a hypoechoic, hypervascular, oval mass measuring 32 × 27 mm with well-defined, smooth borders, located near the liver but with unclear site of origin. Fine-needle biopsies (FNB) were performed using a 22-gauge Acquire needle (Boston Scientific). Histopathology demonstrated a succinate dehydrogenase (SDH)-deficient paraganglioma (Ki-67 3.8%). A DOTATATE PET/CT showed moderate uptake confined to the lesion with no evidence of metastases. Biochemical evaluation revealed elevated plasma normetanephrine at 3 nmol/L (normal < 0.9 nmol/L), with normal chromogranin A. The patient reported only occasional night sweats without classical symptoms of catecholamine excess. Blood pressure remained stable throughout the evaluation, including after and during EUS-FNB. Given the functional nature of the tumor, surgical resection was advised. The patient is currently undergoing preoperative preparation with doxazosin [1-3].

Paragangliomas are rare neuroendocrine tumors that may present at any age and can cause secretory hypertension due to excessive catecholamine release. Most abdominal sympathetic paragangliomas arise from chromaffin tissue near the inferior mesenteric artery and the aortic bifurcation. Intra-abdominal paragangliomas are particularly uncommon, with an estimated incidence of 1 in 500,000. Diagnosis is typically established through plasma or urinary metanephrines and functional imaging, while tissue sampling is rarely performed due to bleeding and hypertensive risks.

This case highlights the diagnostic utility and safety of EUS-guided tissue acquisition for a functional abdominal paraganglioma. Despite the tumor's biochemical activity, the patient tolerated EUS-FNB without hemodynamic instability, underscoring that EUS-guided biopsy may be considered in select cases where the diagnosis is unclear and histology is essential. To our knowledge, EUS-guided biopsy of an abdominal paraganglioma is exceedingly rare. This case emphasizes the importance of maintaining a broad differential for liver masses and demonstrates the expanding role of EUS-guided tissue sampling.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Granberg D, Juhlin CC, Falhammar H. Metastatic Pheochromocytomas and Abdominal Paragangliomas. Vol. 106: Journal of Clinical Endocrinology and Metabolism. Endocrine Society 2021; p E1937–52
- [2] Neumann HPH, Young WF, Eng C. Pheochromocytoma and Paraganglioma. New England Journal of Medicine 2019; 381 (6): 552–65
- [3] Chen H, Sippel RS, Sue O'dorisio M, Vinik AI, Lloyd RV, Pacak K. The North American Neuroendocrine Tumor Society Consensus Guideline for the Diagnosis and Management of Neuroendocrine Tumors Pheochromocytoma, Paraganglioma, and Medullary Thyroid Cancer [Internet]. 2010;

eP1095 Evaluation of Low-Cost Non-Pharmacological Interventions for Reducing Patient Anxiety During Colonoscopy: A Cross-Sectional Study

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DOI 10.1055/s-0046-1822422

Aims Colonoscopy is a routinely performed procedure for diagnosing and managing large bowel pathology. Despite its clinical value, pre-procedural anxiety remains common and can adversely affect patient experience, cooperation, and compliance with future screening. Non-pharmacological interventions offer promising, low-cost strategies for minimising procedural anxiety without introducing clinical risks. This study aimed to evaluate the effectiveness of selected non-pharmacological interventions in reducing patient anxiety during colonoscopy and to explore patients' preferences and satisfaction with these interventions.

Methods A quantitative cross-sectional study was conducted at the Royal Gwent Hospital between April and July 2025. From 1,324 colonoscopy patients, those receiving pharmacological sedation and non-consenting individuals were excluded. The final sample comprised 130 participants who completed the State-Trait Anxiety Inventory (STAI) before their procedure and a post-procedure satisfaction questionnaire. Participants voluntarily selected one of four anxiety-reducing interventions: conversation, breathing exercises, guided relaxation, or music therapy. Data were analysed using SPSS version 23. Descriptive statistics, reliability analyses, assumption tests, and both parametric (ANOVA) and non-parametric (Kruskal–Wallis) group comparisons were performed. Associations between demographic variables and high anxiety (top quartile, STAI ≥ 44) were assessed using chi-square tests.

Results Intervention preferences were as follows: 35 % selected breathing exercises, 32 % conversation, 20 % guided relaxation, and 12 % music therapy. The overall mean anxiety score was 37.04 (SD = 9.94, range = 17–65). Conversation was associated with the lowest mean anxiety (M = 34.19, SD = 8.87), followed by music (M = 36.63, SD = 10.31), breathing exercises (M = 38.62, SD = 9.56), and guided relaxation (M = 39.23, SD = 10.03). Internal consistency of the anxiety scale was good (Cronbach's α = 0.82). Both Shapiro–Wilk and Levene's tests indicated partial violations of normality and homogeneity assumptions; thus, results from both ANOVA and Kruskal–Wallis tests were considered. No statistically significant differences were found in total anxiety scores across the four intervention groups ($p > .05$), and post hoc Mann–Whitney U tests confirmed no significant pairwise differences.

In terms of satisfaction (0–10 scale), guided relaxation (M = 8.92, SD = 0.97) and breathing exercises (M = 8.78, SD = 0.86) received the highest ratings, followed by conversation (M = 8.17, SD = 1.14) and music therapy (M = 5.63, SD = 1.52). Perceived helpfulness ratings (1–4 scale) were generally high (~3/4) across interventions. Chi-square analyses revealed no significant association between gender and high anxiety ($p > .05$), although participants with school-level education showed a higher proportion of high anxiety scores compared with those with university-level education.

Conclusions Breathing exercises and guided relaxation techniques demonstrated favourable patient satisfaction and potential in reducing anxiety during

colonoscopy. Although mean anxiety scores did not differ significantly between intervention groups, the overall positive response and low cost highlight the feasibility of integrating such interventions into routine endoscopy practice. Implementing simple, non-invasive, patient-selected anxiety management strategies could enhance the overall patient experience, reduce reliance on sedative medication, and support more patient-centred care delivery in endoscopy units. Future studies with larger samples and controlled designs are warranted to verify these findings and further optimize tailored anxiety reduction interventions in gastroenterological settings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1096 Improving Mucosal Visibility in EGD: A Comparative Study of Premedication Protocols

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DOI 10.1055/s-0046-1822423

Aims Foam and bubbles can interfere with the detection of small or early lesions during esophagogastroduodenoscopy (EGD), prolong procedures, and increase complication risks. Pre-procedural preparation may reduce the need for mucus removal. This study evaluated the efficacy and safety of various pre-EGD preparation methods. Simethicone is known to reduce foam and improve visibility, though it may be less effective in patients with dense mucus, such as those with autoimmune or atrophic gastritis.

Methods From July 2024 to July 2025, 192 patients aged 20–94 participated in a prospective, single-center, randomized, blinded study (Table 1). **Exclusion criteria:** prior gastrointestinal surgery, upper GI tract strictures, dysphagia, or allergy to premedications.

Premedication protocols:

Group A: no premedication

Group B: simethicone 40 ml

Group C: simethicone 20 ml + 5 % sodium bicarbonate 20 ml

Group D: 5 % sodium bicarbonate 20 ml

All solutions were administered 20 minutes before EGD.

Outcomes measured: mucosal visibility (GRACE scale), procedure duration, mucus removal time, and need for additional cleansing agents.

Results Group C (preparation with simethicone 20 ml + 5 % sodium bicarbonate 20 ml) showed the shortest mucus removal time (20.8 seconds), highest GRACE score (6.7 in Group A vs. 8.4 in Group C), and the best subjective mucosal cleanliness, rated “excellent” in 88.9 % of cases. The use of a combined preparation solution of simethicone and sodium bicarbonate demonstrated the highest efficiency in detecting pathological lesions – 51.1 %, while the proportion of lesions less than 1 cm in size was 65.2 %.

Conclusions The combination of sodium bicarbonate and simethicone is a safe, effective method to improve mucosal visibility during EGD and shorten procedure time, particularly in patients with dense mucus.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1097 Prospective Evaluation of the CAD EYE System for Computer-Aided Detection and Characterization of Colorectal Polyps: A Comparative Study

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DOI 10.1055/s-0046-1822424

Aims Computer-aided detection (CADe) and diagnosis (CADx) systems aim to improve colonoscopy quality. This study evaluated the real-time performance of the CAD EYE system (Fujifilm, Japan) for both polyp detection and

the optical characterization of colorectal lesions into hyperplastic vs. neoplastic categories.

Methods A prospective, comparative study was conducted. Consecutive patients undergoing colonoscopy were allocated to procedures either with (study group, n = 56) or without (control group, n = 54) CAD EYE assistance. The system was used in CADe mode with white light imaging (WLI) and linked color imaging (LCI). For characterization (CADx), blue light imaging (BLI) mode was used to predict histology (neoplastic vs. hyperplastic). Primary outcomes were the sensitivity and specificity of CADe for polyp detection and of CADx for optical diagnosis. Secondary endpoints included procedural metrics. Statistical analysis included calculation of performance metrics with 95 % confidence intervals and AUC.

Results A total of 241 lesions (mean size 7.9 mm) were analyzed from 110 patients: 135 (56 %) neoplastic and 106 (44 %) hyperplastic. Patient groups were well-matched for bowel preparation (Boston Bowel Prep Score > 7: 87.5 % vs 87 %) and cecal intubation (100 % each). The CADe system demonstrated a sensitivity of 97 %, specificity of 84 %, accuracy of 93 %, and an AUC of 0.95 for polyp detection. For optical characterization, the CADx mode achieved a sensitivity of 96 %, specificity of 99 %, accuracy of 98 %, and an AUC of 0.96 for differentiating neoplastic from hyperplastic lesions.

Conclusions The CAD EYE system shows high accuracy for both real-time polyp detection and optical characterization of colorectal lesions, performing at expert-level benchmarks. Its integration into clinical practice has the potential to enhance the quality of screening colonoscopy, increase adenoma detection rates (ADR), and support real-time endoscopic decision-making. Prospective multicenter studies are warranted to confirm its impact on long-term patient outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1098 “Occult” metachronous gastric cancer diagnosed by narrow-band imaging endocytoscopy in patient after endoscopic submucosal dissection for early neoplasia: clinical case presentation

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DOI 10.1055/s-0046-1822425

Abstract Text

A 80-year-old Caucasian male patient was referred to Yaroslavl Regional Cancer Hospital for follow up upper gastrointestinal (GI) endoscopy after endoscopic submucosal dissection (ESD) for early gastric cancer. In 2012 and 2015 patient underwent curative ESD for early neoplastic lesion of gastric body. Two postESD scars on the greater curvature of gastric body without any signs of cancer recurrence were detected during white light imaging upper GI endoscopy (Olympus EVIS X1, GIF H290EC). Advanced atrophic changes in gastric body and gastric antrum were confirmed at the background gastric mucosa, *Helicobacter pylori* infection was not detected, no suspicious lesion was identified. Narrow-band imaging (NBI) with magnification and NBI endocytoscopy (520× magnification) was performed for all local mucosal changes. A 2-mm flat area with microvascular irregularity and irregular cellular architecture and marginal crypt epithelium border was detected on ultra-magnifying NBI observation. Target forceps biopsy was taken for histological assessment of the lesion. Histology showed well-differentiated adenocarcinoma.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1099 First experience of using a new generation thulium laser for lithotripsy during cholangioscopy: case report

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DOI 10.1055/s-0046-1822426

Abstract Text

Therapeutic Thulium laser usually use in urology [1]. But now the indications for applying a new generation thulium laser in endoscopy are expanding [2]. In this case, we report one of the first experience of successful management of choledocholithiasis using cholangioscopy-assisted thulium laser lithotripsy.

A 68-year-old female showed typical symptoms of progressive jaundice. Chronic calculous cholecystitis was known from the medical history. Laboratory tests were consistent with obstructive jaundice: elevated hepatic enzymes (total bilirubin-207 mg/dL, direct bilirubin 138 mg/dL, ALT – 254 IU/L, AST – 353 IU/L). Transabdominal ultrasound (TUS) showed dilated intrahepatic and extrahepatic bile ducts with a 20 mm stuck stone in the common bile duct (CBD). MRI showed chronic calculous cholecystitis and signs of moderate biliary hypertension with obstruction at the middle and lower thirds of the CBD (fig.1.) We also performed EUS which showed the biliary hypertension and the bile stone (> 15 mm) at the level of the confluence of the cystic duct (fig.2.) Standard ERCP-litho-extraction with balloon sweep and basket retrieval was failed. Then our treatment plan included performing a repeat ERCP to visualize the biliary tree and facilitate cholangioscopy-assisted thulium laser lithotripsy to break down the stone and remove the fragments.

We performed cholangioscopy-assisted lithotripsy for a fixed CBD stone using a superpulse thulium laser (power: 30 W, pulse energy: 30 J, frequency: 1 Hz, fiber diameter: 365 µm, Urolase + Premium). (fig.3,4.) The design of thulium laser minimizes retropulsion compared to other lithotripsy lasers. The selected pulse frequency effectively fragments stones into small pieces, including sand-sized particles (fig.5.) The thulium laser features an innovative tissue sensor function that enhances the safety and efficacy of laser treatments by distinguishing between hard and soft tissues. During lithotripsy, this technology automatically halts laser emission when aimed at the mucosa, thereby reducing the risk of tissue damage. Following the lithotripsy procedure, all fragments were successfully removed from the CBD (fig.6.) The procedure was completed without any adverse events or complications, and the patient was subsequently discharged.

This case report aimed to explore the efficacy and safety of new generation thulium laser (fig.7.) Thulium laser lithotripsy can be applied in endoscopic management of biliary stones during ERCP to fragment large stones that cannot be removed by standard ERCP-techniques. There are no any published cases of in vivo experience using the thulium laser for bile stone fragmentation. Further research and clinical trials will help to refine thulium laser use and establish best practices for optimal patient outcomes in the management of bile duct stones.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1100 Fluoroscopy-Free Endoscopic Biliary Stenting using SpyGlass-cholangioscopy and Transabdominal Ultrasound Guidance for Malignant Obstruction : A Case Series

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DOI 10.1055/s-0046-1822427

Aims Standard ERCP with biliary stenting requires fluoroscopy, exposing patients and staff to radiation. We describe a novel technique using SpyGlass-cholangioscopy and transabdominal ultrasound (TUS) guidance to eliminate radi-

ation exposure entirely. Aim is to evaluate feasibility, safety and efficacy of fluoroscopy-free endoscopic biliary stenting using SpyGlass and TUS guidance.

Methods Twelve patients (8F/4M; mean age 72) with malignant distal biliary obstruction from pancreatic head cancer underwent standard duodenoscopy with selective bile duct cannulation. The length and localization of tumor stenosis were accessed by SpyGlass cholangioscopy. It's allow to choose right stent design, take biopsy. Guidewire advanced to upper part of biliary tree by direct visualization Stent deployment (8 plastic, 4 SEMS) were monitored in real-time using TUS instead of fluoroscopy. Adequate placement was confirmed by bile flow and resolution of biliary dilation on ultrasound. In case with SEMS placement, position control may be access with SpyGlass.

Results Technical success was achieved in all 12 cases (100%). Clinical success with jaundice resolution was 100%. Mean procedure time was shorter than conventional fluoroscopic ERCP. No complications occurred. The key advantage was zero radiation exposure for patients and staff.

Conclusions SpyGlass-cholangioscopy/TUS-guided endoscopic biliary stenting is feasible and safe, completely eliminating radiation exposure while maintaining high success rates. The technique is applicable for both: plastic and metal stents, offering a promising radiation-free alternative for palliative biliary drainage.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1101 Long-Term Risk of Major Gastrointestinal Bleeding After Antithrombotic Therapy in Atrial Fibrillation: Role of Hemoglobin and Albumin

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DOI 10.1055/s-0046-1822428

Aims Gastrointestinal bleeding (GIB) is a critical complication in patients receiving antithrombotic agents (ATs). We aimed to (1) investigate the incidence and timing of major GIB, (2) classify the etiologies of upper GIB (UGIB) and lower GIB (LGIB), and (3) identify the risk factors for GIB following AT initiation during long-term follow-up.

Methods A retrospective cohort study of 8,699 patients with atrial fibrillation (AFib) initiating ATs was conducted using electronic health records from a tertiary hospital. Major GIB was defined as bleeding requiring therapeutic intervention and classified anatomically as UGIB or LGIB. Incidence rates were calculated, and risk factors were examined via multivariable Cox regression and 1-year landmark analysis.

Results : During a mean follow-up of 6.5 years, 2.4% of patients experienced major GIB (1.7% UGIB; 0.8% LGIB), and incidence was the highest in the first year (79.0 per 10,000 person-years). Ulcers and angiodysplasia were the leading etiologies. In addition to well-known comorbidities, low baseline hemoglobin and albumin were independently associated with the increased GIB risk. As hemoglobin decreased, the risk increased progressively, beginning at ≤ 12 g/dL and peaking at ≤ 8 g/dL (adjusted HR 10.95, 95% CI 6.36–18.85). Landmark analysis confirmed that low hemoglobin predicted GIB in the first year and thereafter.

Conclusions : Major GIB is the most frequent in the first year following AT initiation but remains a long-term concern. Low baseline hemoglobin and albumin levels, as readily available markers, may be valuable in the early identification and risk stratification of high-risk patients with AFib.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1102V When the stent moves: immediate endoscopic repositioning of a displaced LAMS during EDGE

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DOI 10.1055/s-0046-1822429

Abstract Text

EUS-directed transgastric ERCP (EDGE) is an effective minimally invasive technique for ERCP in patients with Roux-en-Y gastric bypass (RYGB), though adverse events such as lumen-apposing metal stent (LAMS) displacement may occur [1]. We report a 69-year-old patient with RYGB and obstructive jaundice due to choledocholithiasis who underwent EDGE. ERCP achieved complete bile duct clearance, but LAMS displacement occurred during scope withdrawal, resulting in loss of anastomotic continuity. Endoscopic removal of the displaced stent and peritoneal navigation allowed successful deployment of a new LAMS, restoring the anastomosis. No delayed adverse events occurred. This case highlights the role of advanced endoscopic management in resolving complex EDGE-related complications and avoiding surgery.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/e9ae8ec5-e0c4-4687-ae79-4875730ef151/Uploads/19978_When_the%20stent%20moves.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] I-EUS Working Group Antonini F, Rizzo GEM, Vanella G, Fuccio L, Lisotti A, Bronswijk M, Pérez-Cuadrado-Robles E, Binda C, Mazza S, Anderloni A, Fabbri C, Tarantino I Endoscopic Ultrasound-Directed Transgastric Endoscopic Retrograde Cholangiopancreatography (EDGE): Techniques, Outcomes and Safety Profiles. J Clin Med. 2025; 14 (16): 5675. doi:10.3390/jcm14165675 PMID: 40869501 PMID: PMC12386752

eP1103V Endoscopic management of duodenal stump perforation in a Billroth II reconstruction after right hemicolectomy

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DOI 10.1055/s-0046-1822430

Abstract Text

Postoperative duodenal fistulas are associated with high morbidity, particularly in patients with surgically altered anatomy. We report successful endoscopic management of a complex duodenal fistula in a 69-year-old man with prior Billroth II gastrectomy, complicated by colon cancer-related duodenal perforation after surgery. Persistent high-output fistula following two surgical revisions prompted a multidisciplinary endoscopic rescue approach. Using a duodenoscope, biliary and pancreatic ducts were selectively cannulated and plastic stents placed with distal ends in the gastric remnant to divert bile and pancreatic secretions away from the fistula. A fully covered enteral metal stent was deployed across the duodenal defect, combined with continuous nasoduodenal suction drainage. Drain output progressively resolved. Four-week follow-up imaging confirmed fistula closure, allowing safe removal of all devices [1].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/b8035150-dc92-4fac-9f26-b35848298b6e/Uploads/19978_ENDOSCOPIC_MANAGEMENT%20OF%20DUODENAL%20STUMP%20PERFORATION%20IN%20A%20BILLROTH....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Mutignani M et al. "Endoscopic 'suction room' to treat complex enteral stump leaks after upper gastrointestinal surgery.". *Endoscopy international open* vol 9 (3): 2021; E371–E377. doi:10.1055/a-1336-2922

eP1104V Reconnecting the biliary-enteric anastomosis: EUS-directed EUS-guided biliary drainage for post-OLT hepaticojejunostomy disconnection

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DOI 10.1055/s-0046-1822431

Abstract Text

Biliary complications after orthotopic liver transplantation (OLT) remain a major cause of morbidity. Complete hepatico-jejunal anastomotic disconnection is rare and often refractory to conventional endoscopic treatment. We report a 60-year-old man who underwent OLT with Roux-en-Y biliodigestive anastomosis for primary sclerosing cholangitis and developed recurrent cholangitis. Percutaneous cholangiography suggested complete anastomotic disconnection, and enteroscopic ERCP attempts failed. EUS-guided duodenojejunostomy was created using a lumen-apposing metal stent (LAMS), followed by transenteric ERCP. Due to incomplete biliary access, EUS-guided hepaticojejunostomy through the LAMS with placement of a fully covered metal stent was performed. At three-month follow-up, cholestasis improved and no further cholangitis occurred [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/f4406212-c888-4e6d-b681-dbf51ad21867/Uploads/19978_ESGE_ACCONGIAGIOCO.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] EUS-guided biliary drainage in altered anatomy MDPI J Clin Med. 2023; 12 (7): 2736
[2] Van der Merwe SW et al. ESGE Guideline: Therapeutic Endoscopic Ultrasound. *Endoscopy* 2022; 54 (2): 185–205

eP1105V Multimodal endoscopic approach in the management of a severe adverse event following pancreaticoduodenectomy

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DOI 10.1055/s-0046-1822432

Abstract Text

A 72-year-old female underwent pylorus-preserving pancreaticoduodenectomy due to a non-ampullary HDG LST of the descending duodenum (R0). Post-surgical adverse events included a millimetric jejunal perforation due to the migration of the surgical pancreatic stent against the limb wall. During the endoscopic retrograde treatment attempt of the perforation, a dehiscence of the hepaticojejunostomy was noticed and addressed by placing an enteral fc-SEMS and through-the-meshes biliary fc-SEMS. Subsequent EUS-guided antegrade fc-SEMS was placed through the pancreaticojejunostomy to guarantee an access route to retrieve the migrated pancreatic surgical stent. Challenges with stent migration led to further interventions, highlighting the complexities of postoperative management following pancreatic surgery and the pivotal therapeutic role of a multimodal endoscopic approach.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/bd4f10be-ef72-4bec-b2b5-589a9d6f9818/Uploads/19978_Nuovo_progetto.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1106V A chimeric enteral stent for the management of post-EMR duodenal perforation: a case report

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DOI 10.1055/s-0046-1822433

Abstract Text

A 64-year-old man underwent piecemeal EMR of a 20-mm duodenal adenoma and developed delayed perforation with retroperitoneal free air. Endoscopy revealed a large duodenal wall defect. ERCP with biliary and pancreatic stenting was performed to divert secretions. The defect was treated with enteral self-expandable metal stents and continuous negative-pressure therapy using double-lumen tubes, combined with periduodenal drainage and enteral nutrition. Despite initial improvement, stent migration and infected retroperitoneal collection occurred. A step-up hybrid approach including deployment of a customized chimeric duodenal stent and combined endoscopic–percutaneous drainage achieved complete sealing of the defect and fistula. Follow-up imaging confirmed resolution of the collection. The patient resumed oral feeding and was discharged in good clinical condition [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/f0f2e6de-b49b-4e41-8e5e-74e37ce3ea6f/Uploads/19978_A_CHIMERIC%20ENTERAL%20STENT%20FOR%20THE%20MANAGEMENT%20OF%20POST-EMR%20DUODENAL....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mutignani M et al. Chimera" fully covered self-expandable metal stent for refractory esophageal anastomotic leak. *Endoscopy* vol. 47: (Suppl 1): UCTN 2015; E376–7. doi:10.1055/s-0034-1392238
[2] Mutignani M et al. "Endoscopic 'suction room' to treat complex enteral stump leaks after upper gastrointestinal surgery.". *Endoscopy international open* vol. 9 (3): 2021; E371–E377. doi:10.1055/a-1336-2922

eP1107 Endoscopic Closure of Iatrogenic Gastrointestinal Perforations in a High-Volume Centre: Technique, Outcomes, and Predictors of Failure

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DOI 10.1055/s-0046-1822434

Aims Endoscopic closure is the preferred therapy for iatrogenic gastrointestinal perforations, but real-world data, especially for the loop-and-clip technique, remain limited. This study evaluated technical success, clinical success, and adverse events, and the requirement of surgery across commonly used endoscopic closure methods [1–23].

Methods This retrospective cohort study analyzed all patients with iatrogenic perforations during 229,712 endoscopic procedures (upper endoscopy, colonoscopy, ERCP, EUS, enteroscopy) at Asian Institute of Gastroenterology, Hyderabad, India from November 2022 to November 2024. Endoscopic closure

strategy was determined by defect size, morphology, anatomical site, timing of recognition, and patient stability, with final discretion left to the endoscopist. Closure techniques included loop-and-clip, through-the-scope (TTS) clips and over-the-scope clips (OTSCs). The primary outcome was clinical success, while secondary outcomes included technical success, need of surgical intervention, and adverse events.

Results During the study period, 82 perforations occurred (0.039% of incidence). The mean age of patients was 58.9 ± 14.9 years; and 54% were male. The most frequent organs with iatrogenic perforation were the duodenum (32.9%) and colon (29.2%). Perforation was identified intraprocedurally in 90% of cases, with early diagnosis (< 12 hs) in 3.6% and delayed diagnosis (≥ 12 hs) in 6%. Endoscopic closure was attempted in 76 (92.6%) cases. Technical success was high across closure methods: Loop-and-clip achieved 92% (median size perforation size: 2.3 cm, range: 1–4 cm), TTS 100% (median size 0.5 cm, range: 0.5–1 cm), and OTSC 100% (median size: 1.5 cm, range: 1.0–2.0 cm). Clinical success was achieved in 88.2% of attempted closures (loop-and-clip achieved 90% clinical success, TTS 94.7%, OTSC 100%). Perforation size was an independent predictor of closure failure (OR 2.87; 95%CI: 1.38–6.07). Adverse events occurred in 28% of the cohort (AGREE II), and overall mortality was 2.4%. Eight patients (9.7%) required surgery, including six after failed endoscopic closure attempts. Among the six patients in whom endoscopic closure was not attempted, conservative management was successful in 66.7% (4/6).

Conclusions Endoscopic closure showed strong technical and clinical performance across modalities. The loop-and-clip technique demonstrated high effectiveness and broad applicability, supporting its role as a practical closure method with acceptable adverse event rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Putcha RV, Burdick JS. Management of iatrogenic perforation. *Gastroenterol Clin North Am* 2003; 32: 1289–309
- [2] Paspatis GA, Arvanitakis M, Dumonceau JM et al. Diagnosis and management of iatrogenic endoscopic perforations: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement – Update 2020. *Endoscopy* 2020; 52: 792–810
- [3] Lee JH, Kedia P, Stavropoulos SN et al. AGA Clinical Practice Update on Endoscopic Management of Perforations in Gastrointestinal Tract: Expert Review. *Clin Gastroenterol Hepatol* 2021; 19: 2252–2261 e2
- [4] Baron TH, Wong Kee Song LM, Zielinski MD et al. A comprehensive approach to the management of acute endoscopic perforations (with videos). *Gastrointest Endosc* 2012; 76: 838–59
- [5] Kothari ST, Huang RJ, Shaikat A et al. ASGE review of adverse events in colonoscopy. *Gastrointest Endosc* 2019; 90: 863–876 e33
- [6] Panteris V, Haringsma J, Kuipers EJ. Colonoscopy perforation rate, mechanisms and outcome: from diagnostic to therapeutic colonoscopy. *Endoscopy* 2009; 41: 941–51
- [7] Rutter MD, Nickerson C, Rees CJ et al. Risk factors for adverse events related to polypectomy in the English Bowel Cancer Screening Programme. *Endoscopy* 2014; 46: 90–7
- [8] Reumkens A, Rondagh EJ, Bakker CM et al. Post-Colonoscopy Complications: A Systematic Review, Time Trends, and Meta-Analysis of Population-Based Studies. *Am J Gastroenterol* 2016; 111: 1092–101
- [9] Kang DH, Ryu DG, Choi CW et al. Clinical outcomes of iatrogenic upper gastrointestinal endoscopic perforation: a 10-year study. *BMC Gastroenterol* 2019; 19: 218
- [10] Adebisi AA, Onobun DE, Adediran A et al. Evaluation of Morbidity and Mortality in Iatrogenic Colonic Perforation During Colonoscopy: A Comprehensive Systematic Review and Meta-Analysis. *Cureus* 2024; 16: e73302
- [11] Gatto NM, Frucht H, Sundararajan V et al. Risk of perforation after colonoscopy and sigmoidoscopy: a population-based study. *J Natl Cancer Inst* 2003; 95: 230–6
- [12] Rabeneck L, Paszat LF, Hilsden RJ et al. Bleeding and perforation after outpatient colonoscopy and their risk factors in usual clinical practice. *Gastroenterology* 2008; 135: 1899–1906 e1
- [13] Staudenmann D, Choi KKH, Kaffes AJ et al. Current endoscopic closure techniques for the management of gastrointestinal perforations. *Ther Adv Gastrointest Endosc* 2022; 15: 26317745221076705
- [14] Voermans RP, Le Moine O, von Renteln D et al. Efficacy of endoscopic closure of acute perforations of the gastrointestinal tract. *Clin Gastroenterol Hepatol* 2012; 10: 603–8
- [15] Schmidt A, Fuchs KH, Caca K et al. The Endoscopic Treatment of Iatrogenic Gastrointestinal Perforation. *Dtsch Arztebl Int* 2016; 113: 121–8
- [16] Zhong C, Tan S, Ren Y et al. Endoscopic management of iatrogenic gastrointestinal defects with the over-the-scope clip (OTSC) system: an updated systematic review. *Minim Invasive Ther Allied Technol* 2021; 30: 63–71
- [17] Martinek J, Ryska O, Tuckova I et al. Comparing over-the-scope clip versus endoloop and clips (KING closure) for access site closure: a randomized experimental study. *Surg Endosc* 2013; 27: 1203–10
- [18] Jung Y. Endoscopic Management of Iatrogenic Colon Perforation. *Clin Endosc* 2020; 53: 29–36
- [19] Ryu JY, Park BK, Kim WS et al. Endoscopic closure of iatrogenic colon perforation using dual-channel endoscope with an endoloop and clips: methods and feasibility data (with videos). *Surg Endosc* 2019; 33: 1342–1348
- [20] Ansari D, Toren W, Lindberg S et al. Diagnosis and management of duodenal perforations: a narrative review. *Scand J Gastroenterol* 2019; 54: 939–944
- [21] World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *JAMA* 2013; 310: 2191–4
- [22] Burgess NG, Bassan MS, McLeod D et al. Deep mural injury and perforation after colonic endoscopic mucosal resection: a new classification and analysis of risk factors. *Gut* 2017; 66: 1779–1789
- [23] Nass KJ, Zwager LW, van der Vlugt M et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc* 2022; 95: 1078–1085 e8

eP1108 Endoscopic submucosal dissection including papilla (ESDIP) for laterally spreading ampullary tumors in patients with pancreas divisum: A practical postoperative approach without pancreatic duct drainage

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DOI 10.1055/s-0046-1822435

Aims Endoscopic papillectomy enables resection of ampullary lesions but has notable limitations, including piecemeal resection and high recurrence rates. To overcome these limitations, we previously reported the feasibility of endoscopic submucosal dissection including the papilla (ESDIP) as an alternative approach. ESDIP extends conventional ESD to the ampullary region, allowing en bloc resection while dividing the sphincter of Oddi. However, this division increases postoperative exposure to bile and pancreatic juice, making biliary and pancreatic duct drainage essential to prevent complications. In patients with pancreas divisum, anatomical variation often renders endoscopic naso-pancreatic drainage (ENPD) unfeasible, resulting in more complex postoperative management. This study aimed to evaluate the feasibility and safety of ESDIP for ampullary tumors in patients with pancreas divisum.

Methods Among 70 patients who underwent ESDIP at our institution between August 2011 and October 2025, two patients with pancreas divisum and ampullary neoplasms were retrospectively analyzed.

ESDIP was performed by creating a distal mucosal incision, forming a mucosal flap from the oral side, conducting submucosal dissection with identification

and division of the sphincter of Oddi, and subsequently achieving en bloc resection of the lesion.

According to our standard ESDIP protocol, postoperative management typically involves ERCP-guided biliary and pancreatic drainage to prevent bile and pancreatic juice exposure to the resection defect. However, in the present two cases with pancreas divisum, ENPD was not feasible due to the anatomical configuration of the pancreatic duct.

After resection, endoscopic retrograde biliary drainage (ERBD) was performed. The mucosal defect, excluding the papilla, was partially closed using clips, and continuous duodenal suction was applied using a nasogastric tube placed near the duodenal ESD defect. Octreotide was additionally administered to minimize pancreatic juice exposure.

Primary outcomes included en bloc resection, intraoperative perforation, length of hospital stay, white blood cell count, C-reactive protein, serum amylase level, and post-ERCP pancreatitis.

Results En bloc resection was achieved in both cases. No intraoperative or delayed perforation, postoperative bleeding, or post-ERCP pancreatitis occurred. One patient experienced mild abdominal pain on postoperative day 1, and computed tomography revealed minor retroperitoneal emphysema, which resolved with conservative treatment. The nasogastric tube was removed on postoperative days 4–5, after which oral intake was resumed. Patients were discharged on postoperative days 10 and 12, respectively, with uneventful clinical courses.

Conclusions ESDIP for ampullary tumors in patients with pancreas divisum can be safely performed even when ENPD is not feasible. Continuous duodenal suction using a nasogastric tube, combined with partial ulcer closure and octreotide administration, effectively reduced pancreatic juice exposure and enabled safe postoperative management. This strategy may represent a practical therapeutic option for pancreas divisum cases in which pancreatic duct drainage cannot be achieved.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Colon and Rectum

14/05/2026, 09:05–09:25

ePoster Connect:
Station 1 (Level 0)

eP1109 An Umbrella review on Purgative Regimens in Colon Capsule Endoscopy

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DOI 10.1055/s-0046-1822436

Aims Colon capsule endoscopy (CCE) offers a minimally invasive alternative to conventional colonoscopy, yet its clinical impact is strictly dependent on achieving adequate colon cleansing rates (ACR) and completion rates (CR). These requirements impose more stringent preparatory demands than traditional colonoscopy, as capsules cannot rinse or flush the lumen. Existing systematic reviews (SRs) and meta-analyses (MAs) on CCE procedure laxatives and boosters' regimens show significant variability in recommendations and meth-

odological rigor, creating a barrier to clinical practice harmonization. The aim of this umbrella review is to synthesize and critically appraise findings from existing SRs/MAs to evaluate the comparative effectiveness of CCE bowel preparation strategies, and identify areas of consensus and uncertainty [1–15].

Methods A literature search to November 2025 identified SRs/MAs evaluating preparation regimens for CCE. Methodological quality was assessed using AMSTAR-2. Primary study overlap was quantified using the Corrected Covered Area (CCA). Primary outcomes were ACR and CR; data were stratified by regimen components (laxatives, boosters, prokinetics, diet) and specific populations. AI assistance (Google Gemini 3 Pro) was used for data organization.

Results Fourteen SRs (comprising 11 MAs) including 102 unique primary studies and over 16,000 patients were included. The CCA was 8.59%, indicating moderate overlap and confirming that reviews provide complementary evidence. Methodological quality was variable, with only two reviews rated as high quality, while the majority were classified as low or critically low due to reporting limitations. Overall pooled ACR (72.5%–76.8%) and CR (79.8%–83.0%) remained suboptimal compared to colonoscopy standards. In patients with Inflammatory Bowel Disease (IBD), efficacy varied widely (ACR 49–98.5%) with no significant difference between regimens. However, component analysis identified superior strategies: low-volume polyethylene glycol (PEG, <4L) yielded numerically higher ACR (77.5%) compared to high-volume regimens (72.9%). Sodium phosphate (NaP) boosters consistently outperformed PEG boosters, with the NaP + Gastrografin combination achieving the highest absolute CR (93.1%). Castor oil significantly improved excretion rates (92% vs 73%), and routine prokinetics were superior to selective use (OR 1.86). Finally, a low-fiber diet was associated with better cleansing than a clear liquid diet (ACR 78.5% vs 70.0%).

Conclusions CCE bowel preparation regimens frequently result in suboptimal CR and ACR, highlighting the need for protocol standardization. Meta-analytic evidence consistently demonstrates that the optimization of regimens by combining low-volume PEG, NaP-based or Gastrografin boosters, and routine prokinetics yield superior outcomes, though specific needs may vary in IBD populations. The substantial heterogeneity across reviews, driven by variable definitions and protocols, underscores the need for consensus. The 2025 Nyborg Consensus recommendations, such as the adoption of the CC-CLEAR scale and mandatory reporting fields, are critical next steps. Since ACR and CR are significant inverse predictors of follow-up endoscopy rates, the future adoption of optimized and personalized protocols is crucial for cost-effectiveness.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lei II et al. Unifying terminology, reporting, and bowel preparation standards in colon capsule endoscopy: Nyborg Consensus. *Endosc Int Open* 2025; 13:a24955427
- [2] Vuik FER et al. Colon capsule endoscopy in colorectal cancer screening: a systematic review. *Endoscopy* 2021; 53: 815–824
- [3] Sulbaran M et al. Systematic review and meta-analysis of colon capsule endoscopy accuracy for colorectal cancer screening. An alternative during the Covid-19 pandemic? *J Med Screen* 2022; 29: 148–155
- [4] Spada C et al. Accuracy of First- and Second-Generation Colon Capsules in Endoscopic Detection of Colorectal Polyps: A Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol* 2016; 14: 1533–1543.e8
- [5] Rosa B et al. What Is the Optimal Bowel Preparation for Capsule Colonoscopy and Pan-intestinal Capsule Endoscopy? A Systematic Review and Meta-Analysis. *Dig Dis Sci* 2023; 68: 4418–4431
- [6] Rasmussen MS et al. Applicability of colon capsule endoscopy for monitoring ulcerative colitis: a systematic review. *Scand J Gastroenterol* 2025; 60: 336–342
- [7] Möllers T et al. Second-generation colon capsule endoscopy for detection of colorectal polyps: Systematic review and meta-analysis of clinical trials. *Endosc Int Open* 2021; 9: E562–E571
- [8] Lei II et al. Follow-up endoscopy rates as an indicator of effectiveness in colon capsule endoscopy: a systematic review and meta-analysis. *BMJ Open Gastroenterol* 2025; 12:e001800

- [9] Kjølhede T et al. Diagnostic accuracy of capsule endoscopy compared with colonoscopy for polyp detection: systematic review and meta-analyses. *Endoscopy* 2021; 53: 713–721
- [10] Jensen SS et al. Effect of chewing gum in bowel preparation for patients undergoing small bowel and colon capsule endoscopy: Systematic review with meta-analysis. *Endosc Int Open* 2024; 12: E887–E894
- [11] Deding U et al. Castor Oil in Bowel Preparation Regimens for Colon Capsule Endoscopy: A Systematic Review with Meta-Analysis. *Diagnostics (Basel)* 2022; 12: 2795
- [12] Cortegoso Valdivia P et al. Clinical feasibility of panintestinal (or panenteric) capsule endoscopy: a systematic review. *Eur J Gastroenterol Hepatol* 2021; 33: 949–955
- [13] Bjoersum-Meyer T et al. Efficacy of bowel preparation regimens for colon capsule endoscopy: a systematic review and meta-analysis. *Endosc Int Open* 2021; 9: E1658–E1673
- [14] Ali H et al. Diagnostic Accuracy for Per-Patient Polyp Detection of Second-Generation Capsule Endoscopy Compared to Colonoscopy: A Meta-Analysis of Multicenter Studies. *Cureus* 2021; 13: e17560
- [15] Lei H et al. The Diagnostic Accuracy of Colon Capsule Endoscopy in Inflammatory Bowel Disease—A Systematic Review and Meta-Analysis. *Diagnostics* 2024; 14: 2056

eP1111 Comparison of Serrated Lesion Detection Rates Using High-Definition Versus Standard-Definition Endoscopes: A Retrospective Analysis of BowelScreen patients in a Model 4 Irish Hospital

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DOI 10.1055/s-0046-1822438

Aims Serrated polyps are diverse lesions that encompass hyperplastic polyps (HPs) proximal to the rectum, sessile serrated lesions (SSLs) with or without dysplasia, and traditional serrated adenomas (TSAs) [1]. Although most sporadic colorectal cancers (CRCs) arise from adenomas, it is believed that about 15-30% of CRCs [2] arise through an alternate serrated neoplasia pathway. This is particularly true for proximal and interval cancers. Serrated lesions can be flat, with a mucous cap, and are easily missed compared to adenomas. Improving detection rates is crucial to reducing CRC incidence and mortality. We aim to compare the ability to detect sessile serrated lesions with high definition scopes (HD) versus standard definition scopes (SD) in a faecal immunochemical test (FIT) – positive national screening cohort.

► Table 1

	High Definition	Standard Definition	P Value
Total number of procedures	200	200	
Serrated Polyps (HP, SSL w and w/o dysplasia, TSA)	70	56	0.162
Hyperplastic Polyps	51	37	0.116
SSL	30	25	0.561
SSL w Dysplasia	1	0	>0.999
Traditional Serrated Adenoma	1	1	>0.999
Adenomas	166	170	0.682

Methods A retrospective analysis was conducted of 400 BowelScreen (NCSS) participants in Ireland's national colorectal screening program who underwent colonoscopy after a positive faecal immunochemical test (>45 ug/g) and had polyps removed. All colonoscopies were performed by a BowelScreen endos-

copist. They were evenly split between HD and SD. Detection rates were calculated for SSLs and HPs, and statistical analysis was performed with chi-square testing with a two-sided significance level of $\alpha = 0.05$. Adenomas, serrated lesions with dysplasia, traditional serrated adenomas and identifying serrated polyposis syndromes were also assessed in this cohort (► Table 1).

Results The mean age of the cohort was 66.6 years, with data collected between 2018 and 2025. Among 200 HD scopes performed, 30 SSLs were detected (15%) compared to 25 in the SD group (12.5%) ($p = 0.561$). For hyperplastic polyps, 51 HD scopes detected HPs (25.5%) compared to 37 (18.5%) in SD ($p = 0.117$). One SSL with dysplasia was detected in the HD arm, and 1 TSA was detected in each arm. It is worth noting that there was one patient in whom serrated polyposis syndrome was diagnosed with a high-definition endoscope. No observed statistical significance achieved.

Conclusions Although this initial retrospective analysis did not show statistical significance, an observed higher absolute detection rate of serrated lesions with HD scopes suggests a potential benefit. Post hoc power considerations indicate that a substantially larger sample size would be required to reflect the actual technology effect. Key limitations include the lack of standardised withdrawal times and unmeasured variation in bowel preparation quality, especially in the proximal colon, which can affect lesion detection rate. Given the established contribution of serrated lesions to proximal and interval CRC, and emerging quality metrics such as SSL detection rate, prospective, adequately powered studies are needed to clarify if HD colonoscopy should be mandated as standard, especially for population-based screening programmes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] East JE, Atkin WS, Bateman AC, Clark SK, Dolwani S, Ket SN, Leedham SJ, Phull PS, Rutter MD, Shepherd NA, Tomlinson I. British Society of Gastroenterology position statement on serrated polyps in the colon and rectum. *Gut*. 2017; 66 (7): 1181–96
- [2] Mankaney G, Roupheal C, Burke CA. Serrated polyposis syndrome. *Clinical Gastroenterology and Hepatology* 2020; 18 (4): 777–9

eP1112 Texture And Color Enhancement Imaging (TXI) Versus High-Definition White Light Imaging For Detection Of Colorectal Lesions During Colonoscopy: A Systematic Review And Meta-Analysis

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DOI 10.1055/s-0046-1822439

Aims Conventional white light imaging (WLI) frequently fails to detect subtle colorectal lesions, which contributes significantly to the incidence of interval colorectal cancer. Texture and Color Enhancement Imaging (TXI™) is a novel endoscopic technology utilizing a proprietary algorithm to enhance image clarity, thus facilitating the detection, particularly of subtle lesions. Preliminary studies have reported conflicting evidence: one trial indicated that TXI improved the adenoma detection rate (ADR), while another demonstrated improvement only in the detection of flat lesions [1, 2]. This systematic review and meta-analysis was therefore conducted to comprehensively assess the efficacy of TXI compared to WLI for colorectal lesion detection.

Methods We performed a systematic literature search in accordance with the PRISMA guidelines up to 3th november 2025 after protocol registration on OSF. Articles were retrieved from PubMed and EMBASE, limited to English, full-text, original research papers on adults comparing the efficacy of TXI vs WLI. Two independent, blinded reviewers will perform the selection process. Primary endpoint was evaluate the performance in ADR of TXI vs. WLI. Secondary endpoints include serrated polyp detection rate (SPDR), right ADR (rADR), and flat polyp detection rate (FDR).

Results Overall, seven studies were included in the analysis [1–7]. For the primary endpoint, five studies involving 6377 participants were included. The pooled random-effects model showed a statistically significant improvement in ADR with TXI (RR 1.19; 95% CI 1.07–1.32; $p = 0.0015$) compared to WLI. The right ADR was evaluated across three studies including 2451 patients. The pooled analysis demonstrated a statistically significant improvement with TXI (RR 1.26; 95% CI 1.13–1.42; $p < 0.0001$) compared to WLI. The serrated polyp detection rate was evaluate in four studies comprising 5907 patients. The pooled analysis evidenced a significant, but borderline, benefit for TXI compared to WLI (RR 1.13; 95% CI 1.00–1.27; $p = 0.048$). Lastly, for the flat polyp detection rate, two studies involving 4687 patients, showed a pooled RR of 1.19 (95% CI 0.98–1.46; $p = 0.0845$), indicating a non-significant trend toward improved detection with TXI. General heterogeneity across outcomes was low to moderate (ADR: $I^2 = 70\%$; SPDR, rADR; $I^2 = 0\%$; FDR: $I^2 = 26\%$)

Conclusions This systematic review and meta-analysis including recent RCTs, evidences that TXI provides a significant improvement compared to WLI in overall ADR, SPDR and especially rADR, suggesting enhanced recognition of clinically relevant lesions, including serrated and right-sided precursors associated with interval colorectal cancer risk. While the benefit for flat lesions was not statistically significant, the direction of effect aligns with the broader pattern favoring TXI. Further studies are needed to evaluate its impact on mortality.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Young E, Rajagopalan A, Tee D, Sathananthan D, Hoile S, Singh R. Texture and Color Enhancement Imaging Improves Colonic Adenoma Detection: A Multicenter Randomized Controlled Trial. *Gastroenterology* 2024; 166 (2): 338–340.e3. doi:10.1053/j.gastro.2023.10.008
- [2] Toyoshima O, Nishizawa T, Hiramatsu T et al. Colorectal adenoma detection rate using texture and color enhancement imaging versus white light imaging with chromoendoscopy: a propensity score matching study. *J Gastroenterol Hepatol* 2024; 39 (10): 2105–2111. doi:10.1111/jgh.16655
- [3] Sakamoto T, Ikematsu H, Tamai N et al. Detection of colorectal adenomas with texture and color enhancement imaging: Multicenter observational study. *Dig Endosc* 2023; 35 (4): 529–537. doi:10.1111/den.14480
- [4] Inagaki Y, Yoshida N, Hashimoto H et al. An Additional 30-s Observation of the Right-Sided Colon Using a Novel Endoscopic System with Texture and Color Enhancement Imaging Decreases Polyp Miss Rates: A Multicenter Study. *Diagnostics (Basel)*. 2025; 15 (14): 1759. Published 2025 Jul 11. doi:10.3390/diagnostics15141759
- [5] Biwata Y, Sakai E, Nomura Y et al. Efficacy of Texture and Color Enhancement Imaging for Identification of Colorectal Polyps: A Prospective Crossover Randomized Trial. *Dig Endosc* 2025; 37 (11): 1162–1169. doi:10.1111/den.70001
- [6] Toyoshima N, Sakamoto T, Shinmura K et al. The Efficacy of Texture and Color Enhancement Imaging Observation in the Detection of Colorectal Lesions: A Multicenter, Randomized Controlled Trial (deTXIon Study. *Gastroenterology* 2025; 169 (2): 337–345 e2. doi:10.1053/j.gastro.2025.03.007
- [7] Antonelli G, Bevivino G, Pecere S et al. Texture and color enhancement imaging versus high definition white-light endoscopy for detection of colorectal neoplasia: a randomized trial. *Endoscopy* 2023; 55 (12): 1072–1080. doi:10.1055/a-2129-7254

ePoster Connect: Endoscopy service

14/05/2026, 09:05–09:25

ePoster Connect:
Station 2 (Level 0)

eP1113 Antibiotic Strategies, ESGE-Guideline Adherence, and Pre-interventional Inflammation as Determinants of Post-PEG Infection and Survival

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DOI 10.1055/s-0046-1822440

Aims Percutaneous endoscopic gastrostomy (PEG), used for long-term enteral nutrition is associated with postprocedural infections. Therefore, the European Society of Gastrointestinal Endoscopy (ESGE) recommends periinterventional intravenous antimicrobial prophylaxis. This study aimed to evaluate guideline adherence, determine the impact of different antibiotic strategies on infection rates and analyze their association with 90-day survival post PEG-implantation [1, 2].

Methods This retrospective single-center study included all patients who underwent PEG placement between January 2017 and December 2023. Patients were categorized into four groups based on their periinterventional antibiotic status: no antibiotics, ongoing antibiotic treatment, pre-interventional ESGE-compliant prophylaxis and pre-interventional non-compliant prophylaxis. Infections were defined as newly elevated CRP values > 5 mg/dl and/or clinical or microbiological signs of infection within 7 days post-PEG. Group comparisons used Fisher's exact test and Mann-Whitney U tests; pairwise odds ratios (OR) with confidence intervals (CI) were calculated. Ninety-day mortality was analyzed using Kaplan-Meier estimates with log-rank tests. Effect sizes were expressed as rank-biserial correlation coefficients (r). Analyses were performed using RStudio (4.4.3).

Results A total of 689 patients, median age 68 years (IQR 18.2), 39% female, were included. Indications for PEG were tumors (45.6%), cerebrovascular events (35.1%), and neurological diseases (19.3%). Pre-interventional single-shot prophylaxis was administered in 427 cases (62%), 148 patients (21.5%) were already on antibiotic treatment at the time of PEG placement, and 90 (13.1%) received no antibiotics, 24 patients (3.5%) were excluded. Cephalosporins (51.1%) and penicillin combined with β -lactamase inhibitors (29.3%) were most frequently used, resulting in an overall ESGE-adherence of 91.4%, with some leniency (i.e., considering broader coverage as ESGE-compliant). The overall postprocedural infection rate was 22.6% ($n = 128$), the most common sources were unclear (40.6%), local infections at the insertion site (19.5%), peritonitis (10.9%), and pneumonia (10.2%). Infection rates did not differ significantly between ESGE-complaint vs. non-complaint prophylaxis (18.5% vs. 26.7%; OR 0.62, 95%CI 0.17–2.77, $p = 0.49$). The numerically highest postprocedural infection rate was observed in patients receiving no antibiotics (28.4%; OR 1.74, 95%CI 0.93–3.20, $p = 0.07$). Patients on systemic antibiotics at the time of PEG placement had the second highest infection rate (27%, OR = 1.63, 95%CI 0.95–2.70, $p = 0.053$ – vs. ESGE-compliant prophylaxis). Overall, 90-day survival differed statistically significantly between the subgroups ($p = 0.019$). The highest survival was seen with ESGE-complaint prophylaxis (83.1%), followed by non-complaint prophylaxis (78.6%) and no prophylaxis (78.7%). The lowest survival occurred in patients with ongoing antibiotic therapy (73.4%), significantly worse than ESGE-complaint prophylaxis ($p = 0.0015$). Comparative analysis of baseline and inflammatory parameters demonstrated that patients with ongoing antibiotic therapy exhibited a higher systemic inflammatory burden, with elevated CRP (3.05 vs. 1.; $r = 0.36$, $p < 0.001$) and leukocyte levels (8.8 vs

8.16; $r=0.12$; $p<0.01$). They also presented with higher comorbidity (CCI 6 vs 5; $r=0.1$, $p=0.025$) and poorer functional status (ECOG ≥ 3 : 45.6% vs. 26%; $r=0.22$, $p<0.001$). Also, PEG indication differed significantly between antibiotic groups ($p<0.001$), with tumor-patients being less often on ongoing antibiotic therapy (29.1% vs. 51.1%, $p<0.001$), and stroke more often (50% vs. 32.9%, $p<0.001$).

Conclusions Overall adherence to ESGE-recommended prophylaxis was high, when also accepting broader coverage. The lowest rate of infection and highest 90-day survival was observed in patients receiving ESGE-compliant prophylaxis, while some of the analyses were not statistically significant, possibly being underpowered due to high compliance rates. Patients on ongoing systemic antibiotics exhibited the lowest 90-day survival. This finding reflected both their higher comorbidity burden and elevated inflammatory activity, confirming that systemic inflammation, frailty and comorbidities substantially contribute to post-PEG mortality. Future studies could focus on finding subgroups where optimization of patients and delaying PEG placement may improve outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lipp A, Lusardi G. Systemic antimicrobial prophylaxis for percutaneous endoscopic gastrostomy. *Cochrane Database Syst Rev* 2013; 2013 (11):CD005571. doi:10.1002/14651858.CD005571.pub3 PMID: 24234575 PMID: PMC6823215
- [2] Gkolfakis P, Arvanitakis M, Despott EJ, Ballarin A, Beyna T et al. Endoscopic management of enteral tubes in adult patients – Part 2: Peri- and post-procedural management. *European Society of Gastrointestinal Endoscopy (ESGE) Guideline*. *Endoscopy*. 2021; 53 (2): 178–195. doi:10.1055/a-1331-8080 Epub 2020 Dec 21 PMID: 33348410

eP1114 Antiplatelet and anticoagulant therapy in endoscopy: Do we follow the same ESGE hymn sheet in clinical practice?

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DOI 10.1055/s-0046-1822441

Aims An audit to assess the adherence to British Society of Gastroenterology (BSG) and European Society of Gastrointestinal Endoscopy (ESGE) guidelines in patients on antiplatelet or anticoagulant therapy in clinical practice in a UK endoscopy service.

Methods A prospective analysis of patients on anticoagulant and antiplatelet undergoing endoscopy over a period of six weeks from September 2025 at a district general hospital in North London was undertaken. Electronic patient notes along with the endoscopy reports were scrutinized for management of antiplatelet/anticoagulation during the time of their diagnostic or therapeutic endoscopy and compared to the recommendations according to BSG and ESGE guidance.

Results 55 patients were included, median age 72 and 62% were male. A low-risk diagnostic endoscopy was performed in 69% of patients, whilst 31% of patients had a high-risk therapeutic procedure which included either polypectomy ($n=16$) or oesophageal stricture dilatation ($n=1$).

BSG/ESGE guidelines were followed in 42% of patients. Lower adherence rates were seen in low-risk diagnostic endoscopy (37%).

Of those having a low-risk diagnostic procedure, 50% of patients stopped their antiplatelet medication unnecessarily; this includes clopidogrel ($n=10$), aspirin ($n=5$) and dual antiplatelet therapy (DAPT, $n=3$). For patients taking DOACs (direct oral anticoagulants), guidelines were not followed appropriately in any of the five patients- three patients did not omit their medication on the morning of the procedure, and two patients omitted them for an unnecessarily long period of time.

For high-risk therapeutic procedures, BSG/ESGE guidelines were correctly followed in 53% of patients. Non-adherence with guidelines included not discuss-

ing strategy for temporarily stopping P2Y12 receptor antagonists with an interventional cardiologist for high-risk conditions (coronary artery stents, $n=3$), stopping aspirin unnecessarily prior to procedure ($n=3$), and stopping apixaban for 24 hours only, instead of the required 72 hours ($n=2$).

Conclusions The audit found a significant gap between current practice and best practice guidelines with only 42% following recommendation guidelines. The largest gap identified was the unnecessary cessation of aspirin for both diagnostic and therapeutic procedures, as well as the unnecessary prolonged cessation of P2Y12 receptor antagonists for diagnostic procedures. Of concern was the lack of communication with cardiologists regarding the cessation of dual antiplatelet therapy in high-risk patients.

Possible reasons for this are that patients are predominantly counselled and booked for procedures by nursing colleagues, who may not be familiar with BSG/ESGE guidance. In addition, patients referred for endoscopic procedures come from multiple referral pathways which may be the reason for variability of practice.

From this study we recommend better implementation and adherence antiplatelet or anticoagulant therapy for endoscopic procedures.

The findings of this audit will be presented at the next endoscopy user group meeting to highlight non-adherence to guidelines, and to remind members of the multidisciplinary team of best practice guidance. Patient information leaflets and counselling protocols will be reviewed to ensure they are in-line with BSG/ESGE guidance. The service will be re-audited following these changes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1115 Classification of gastric mucosal patterns associated with *Helicobacter pylori* infection using electronic chromoendoscopy: a prospective single-center study

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DOI 10.1055/s-0046-1822442

Aims *Helicobacter pylori* (Hp) infection remains the leading cause of chronic gastritis and gastric cancer worldwide. Asian studies described specific gastric mucosal patterns observed by electronic chromoendoscopy, the “spotty” and “cracked” patterns, which are associated with active and past Hp infection, respectively [1]. However, no prospective European study evaluated their diagnostic performance. This study aimed to assess the reproducibility and diagnostic accuracy of mucosal pattern recognition by Blue Light Imaging (BLI) for the identification of active or past Hp infection.

Methods This was a prospective, single-center study conducted between 2023 and 2025. Adult outpatients (≥ 18 years) undergoing gastroscopy for dyspepsia, gastroesophageal reflux, post-eradication follow-up (≥ 6 months after therapy), or first-degree family history of gastric cancer were enrolled. An expert endoscopist performed endoscopic examinations. For each patient, five non-magnified BLI images (two antrum, one angulus, two corpus) were prospectively selected and anonymized. Three experienced endoscopists independently evaluated all images, classifying each as normal, spotty, or cracked. A fourth expert adjudicated discordant evaluations. For diagnostic performance, the final pattern assigned to each image was defined when all three or at least two endoscopists agreed; in cases of complete disagreement, the final classification was established after discussion with the fourth expert. Histological assessment, following the updated Sydney System, served as the reference standard. Analyses were performed at the image level. Interobserver agreement was quantified by Fleiss' κ and pairwise Cohen's κ . Diagnostic performance was calculated for each mucosal pattern, overall, and stratified by gastric region and proton pump inhibitor (PPI) status. Comparisons between diagnostic performance proportions were conducted using two-sided z-tests.

Results A total of 120 patients (mean age 54.2 ± 17.0 years; 65.0% female) were enrolled, yielding 600 BLI images, of which 29 were excluded after con-

sensus for insufficient quality, resulting in 571 images. Overall interobserver agreement among the three endoscopists was substantial (Fleiss' $\kappa = 0.74$; $p < 0.001$), with comparable values in the antrum ($\kappa = 0.73$) and corpus ($\kappa = 0.75$). Pairwise κ values ranged from 0.72 to 0.77, and the overall proportion agreement was 0.79, confirming high reproducibility across endoscopists. Using histology as the reference, the spotty and cracked patterns showed very high specificities of 98.9% (95% CI 97.5–99.6) and 87.9% (95% CI 84.3–91.0), diagnostic accuracies of 96.1% (95% CI 94.2–97.6) and 86.0% (95% CI 82.9–88.8), and sensitivities of 43.5% (95% CI 34.3–53.0) and 50.6% (95% CI 43.1–58.0), respectively. Conversely, the normal pattern achieved high sensitivity of 95.7% (95% CI 92.5–97.9) but a moderate specificity of 58.5% (95% CI 52.8–64.0), with a diagnostic accuracy of 75.3% (95% CI 71.6–78.8). Regional analyses revealed complementary diagnostic behavior across gastric sites: the normal pattern was more accurately identified in the antrum (72.6%; 95% CI 67.5–77.3) than in the corpus (42.4%; 95% CI 36.0–49.1; $p < 0.0001$), while the cracked pattern performed better in the corpus (90.8%; 95% CI 86.4–94.1) than in the antrum (83.1%; 95% CI 78.7–87.0; $p = 0.0089$). When stratified by PPI use, diagnostic performance remained stable for the spotty and cracked patterns, but the normal pattern showed lower accuracy in patients receiving PPIs (53.1%; 95% CI 46.7–59.5) compared with those not receiving PPIs (64.8%; 95% CI 59.3–70.0; $p = 0.0048$).

Conclusions This first European prospective study showed substantial interobserver agreement and consistent diagnostic accuracy in BLI-based assessment of gastric mucosal patterns associated with active and past *Hp* infection. Electronic chromoendoscopy may contribute to defining the infection status, although awareness of PPI use remains important to avoid potential misinterpretation of mucosal patterns.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Nishikawa Y et al. Classification of atrophic mucosal patterns on Blue LASER Imaging for endoscopic diagnosis of *Helicobacter pylori*-related gastritis: A retrospective, observational study. *PLoS One*. 2018; 13 (3):

eP1116 Subcecal Appendix is Associated with the Failure of Visual Endoscopic Retrograde Appendicitis Therapy: A Comparative Analysis of Clinical and Laboratory Characteristics

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DOI 10.1055/s-0046-1822443

Aims Visual endoscopic retrograde appendicitis therapy (V-ERAT) has emerged as a promising minimally invasive alternative for acute appendicitis. While its safety and efficacy have been extensively validated, comprehensive understanding of risk factors associated with V-ERAT failure remains limited. This study aimed to compare clinical and laboratory characteristics between V-ERAT success and failure groups to identify potential associations [1].

Methods A retrospective analysis was conducted on patients aged 18–65 years who underwent V-ERAT between January 1, 2024, and July 1, 2025. All patients had confirmed or suspected acute appendicitis by computed tomography (CT) and declined surgical intervention. The cohort was stratified into a success group ($n = 140$) and a failure group ($n = 12$). Demographic characteristics, clinical features, and laboratory parameters were collected for analysis. Continuous variables were analyzed using the Mann-Whitney U test, while categorical variables were compared using the Chi-square test or Fisher's exact test, as appropriate. $P < 0.05$ was considered statistically significant.

Results The overall success rate of V-ERAT was 92.1%, with a failure rate of 7.9%. Patients in the failure group were significantly older (48 years, 95% CI: 34.5–58.5 vs. 36 years, 95% CI: 34–38; $P = 0.026$). The failure group also demonstrated substantially longer procedure duration (78 min, 95% CI: 51–100 vs. 29 min, 95% CI: 26–33; $P < 0.001$) and extended hospitalization (6 days, 95% CI:

4.5–7.5 vs. 3 days, 95% CI: 3–3; $P < 0.001$). Laboratory findings revealed significantly elevated white blood cell counts in the failure group ($11.38 \times 10^9/L$, 95% CI: 9.63–12.70) compared to the success group ($6.93 \times 10^9/L$, 95% CI: 6.43–8.39) ($P = 0.0182$). Similarly, neutrophil percentage was markedly higher in failure cases (81.30%, 95% CI: 75.15–83.40) than in the successful cases (65.90%, 95% CI: 62.60–68.32) ($P = 0.0034$). Furthermore, the presence of complicated acute appendicitis ($P < 0.001$) and peritonitis ($P < 0.001$) were significantly associated with the failure of V-ERAT. Notably, subcecal appendix was identified in 91.6% cases of the failure group, representing a critical anatomical predictor of unsuccessful outcomes.

Conclusions Subcecal appendix shows a strong association with V-ERAT failure, along with advanced age, elevated inflammatory markers, and peritonitis. Pre-procedural identification of appendix position through CT three-dimensional reconstruction combined with clinical and laboratory parameters may help identify patients at higher risk of V-ERAT failure.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Yang B, Kong L, Ullah S et al. Endoscopic retrograde appendicitis therapy versus laparoscopic appendectomy for uncomplicated acute appendicitis. *Endoscopy*. 2022; 54 (8): 747–754. doi:10.1055/a-1737-6381 Epub 2022 Mar 7 PMID: 35021234 PMID: PMC9329065

ePoster Connect: Esophagus

14/05/2026, 09:05–09:25

ePoster Connect:
Station 3 (Level 0)

eP1117 Retrospective, single-centre evaluation of endoscopic vacuum therapy for leaks in the upper gastrointestinal tract

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DOI 10.1055/s-0046-1822444

Aims Endoscopic vacuum therapy (EVT) is an established procedure for treating leaks in the gastrointestinal tract (GIT). This study aimed to investigate overarching factors influencing the success of therapy and the effects of EVT in the upper GIT. Patient characteristics associated with prolonged or complicated courses of EVT should be identified.

Methods All patients who underwent EVT treatment at a tertiary care centre between 2019 and 2024 were included in this retrospective analysis ($n = 35$). EVT was performed by placing an open-cell polyurethane sponge either endoluminally or intracavitarily at the site of the leak, typically using a standard gastroscope with an overtube or piggyback technique. Continuous debridement and enhanced secretion drainage were achieved by applying a constant negative pressure of -125 mmHg. Sponge changes were carried out every 3–4 days under endoscopic guidance. Commercially available systems were used (Eso-/Endo SPONGE, B. Braun Melsungen AG, Melsungen, Germany; Suprasorb CNP wound foam, Lohmann & Rauscher GmbH & Co. KG, Neuwied, Germany; VacStent Medtech AG, Steinhausen, Switzerland).

The defect size was categorised as small (0–9 mm), medium (10–20 mm) or large (> 20 mm) for the leakage and small (≤ 20 mm), medium (21–50 mm) or large (> 50 mm) for the insufficiency cavity.

Therapeutic success was defined as an endoscopically verified complete closure of the leak.

Results EVT achieved an overall success rate of 83.3% in this cohort, with a mean treatment duration of 33 days and an average of 9 sponge changes per patient.

A higher Charlson Comorbidity Index (CCI) and ASA score were associated with a poorer therapeutic outcome ($p = 0.023$ and $p = 0.031$, respectively). The sponge location significantly influenced the total duration of therapy ($p = 0.009$), with intraluminal placement being associated with a shorter total duration of EVT. BMI, sex, age, number of sponge changes and intervals of change showed no statistically significant effects on therapeutic success. Patients who had received neoadjuvant chemotherapy tended to have significantly smaller fistula cavities ($p = 0.031$). Larger insufficiency cavities as well as larger leakages were associated with poorer outcomes ($p = 0.0015$ and $p = 0.006$). Kruskal–Wallis analyses demonstrated that medium-sized ($p = 0.016$) and large cavities ($p = 0.001$) were significantly associated with longer treatment duration. In contrast, no significant effect was found on the total duration of EVT in this cohort. Complications occurred in 22.9% of cases ($n = 12$), including therapy-related issues (e.g. suction problems), endoscopic complications and late complications (e.g. stenosis). However, no significant association with treatment duration ($p = 0.122$) or therapeutic success ($p = 0.127$) was found.

Conclusions Our results confirm EVT as an established and clinically relevant treatment option for leaks, with high success rates and a low incidence of serious complications. Compared to surgical methods, EVT is significantly less invasive.

This study also identifies initial risk factors for prolonged treatment courses (fistula cavity, cavity size, high CCI and ASA score) and provides further evidence of EVT effectiveness.

Conflicts of Interest O. Pech: speaker fee from Boston Scientific

eP1118 Spray coagulation reduces bleeding and improves efficiency during endoscopic submucosal dissection compared with swift coagulation mode: the SPRAY study

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DOI 10.1055/s-0046-1822445

Aims Spray coagulation mode provides a powerful non-contact coagulative effect that may facilitate bleeding control and increase the efficiency of endoscopic submucosal dissection (ESD). [1] However, evidence supporting its use is limited. We aimed to compare bleeding control, safety and technical outcomes between spray-coagulation ESD (SP-ESD) and swift-coagulation ESD (SW-ESD).

Methods We conducted a retrospective cohort study of consecutive ESDs performed at a tertiary referral center between December 2021 and December 2024. Two predefined time-based cohorts were analysed using complete procedural video review: SW-ESD and SP-ESD. Procedures with mixed energy modes or incomplete video/data were excluded. ESDs were performed by experts and fellows using various techniques (conventional, pocket-creation method, traction, saline-immersion).

Primary outcomes were: number of intraprocedural bleedings, bleeding time (duration of intraprocedural bleeding), dissection speed (mm²/min), effective dissection rate ($1 - [\text{bleeding time}/\text{dissection duration}]$), ESD completion without coagulation forceps, and intraprocedural perforation.

Secondary outcomes included R0 resection rate and adverse events (delayed bleeding, delayed perforation).

We employed non-parametric tests and evaluated covariate imbalance between groups to ensure comparability.

Results 141 ESDs (SP-ESD: $n = 114$; SW-ESD: $n = 27$) were included, performed in the oesophagus (52/141, 36.9%), stomach (16, 11.3%), duodenum (2, 1.4%), colon (39, 27.7%), and rectum (32, 22.7%). Baseline patient, lesion, and operator characteristics were similar between groups.

The mean number of intraprocedural bleeding events (2.2 ± 4.1 vs. 4.4 ± 2.6 ; $P = 0.007$) and median bleeding time (0.6 min, IQR 0–3.7 vs. 5.8 min, IQR 1.4–11.8; $P < 0.001$) were significantly lower in SP-ESD than in SW-ESD.

The median dissection speed (16.8 mm²/min, IQR 12.2 vs. 11.2 mm²/min, IQR 9.2; $P = 0.003$), effective dissection rate (99.3% vs. 95.5%; $P = 0.001$), and rate of ESD completion without coagulation forceps (95% vs. 26%; $P < 0.001$) were significantly higher in SP-ESD compared with SW-ESD.

SP-ESD and SW-ESD did not differ significantly in delayed perforation (0.8% vs. 0%; $P = 1.00$), delayed bleeding (6.7% vs. 3.7%; $P = 1.00$), or R0 resection rates (85% vs. 81%; $P = 0.77$).

Conclusions Spray coagulation during ESD significantly reduces both the frequency and duration of intraprocedural bleeding, resulting in faster dissection, fewer device exchanges, and improved procedural efficiency without compromising safety or the completeness of resection. SP-ESD may also reduce the environmental and financial footprint of ESD by lowering the need for coagulation forceps. Given the possibility of confounding from learning curve effects, prospective multicenter validation is warranted.

Conflicts of Interest D.J. Tate is a consultant for and has received research support from Fujifilm and Olympus. The other authors declare that they have no conflict of interest.

References

[1] Li AA, Zhou MJ, Hwang JH. Understanding the Principles of Electrosurgery for Endoscopic Surgery and Third Space Endoscopy. *Gastrointest Endosc Clin N Am* 2023; 33 (1): 29–40. doi:10.1016/j.giec.2022.07.001 PMID: 36375884

eP1119 Case Selection and Clinical Outcomes of Upper GI Endoscopic Submucosal Dissection: A Four-Year Experience at a Regional UK Centre

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DOI 10.1055/s-0046-1822446

Aims Upper gastrointestinal (GI) endoscopic submucosal dissection (ESD) is an increasingly adopted technique in the United Kingdom. This study presents a prospective analysis of clinical outcomes associated with the establishment of an ESD service at a single tertiary referral centre over four years. The findings aim to contribute to the growing national experience in advanced endoscopic resection [1].

Methods A prospective cohort study was conducted of all patients who underwent upper GI ESD at Imperial College Healthcare NHS Trust between 2021 and 2025. The Trust serves as a regional referral centre for complex endoscopic resections in North West London and has provided an ESD service since December 2021. All referrals were discussed with a multidisciplinary team (MDT) involving gastroenterologists, surgeons, oncologists, radiologists, and pathologists. Treatment decisions followed ESGE guidance. ESDs were performed under general anaesthesia, and patients discharged the same day, unless clinically indicated otherwise. Data included procedure count, lesion type (epithelial vs subepithelial), site, histology, size, duration, R0 and curative rates, and complications.

Results A total of 67 ESDs were performed, 86% epithelial and 14% subepithelial. Seventy percent were in males, mean age 69.6 years. Most resections were gastric (59.7%), followed by oesophageal (26.9%), gastro-oesophageal

junction (9.0 %) and duodenal (4.5 %). Histology varied by site: among oesophageal lesions, 44 % contained intramucosal carcinoma (IMC) and 56 % high-grade squamous dysplasia; of gastro-oesophageal junction (GOJ) lesions, 83 % were IMC, with half of IMC cases in the oesophagus or GOJ arising in Barrett's oesophagus. Gastric lesions were heterogeneous—IMC (27 %), low-grade dysplasia (23 %), stromal tumours (12 %)—with occasional lipomas, neuroendocrine tumours (NETs) and inflammatory polyps. Duodenal lesions comprised 66 % NETs and 33 % IMC.

Mean lesion size was 21 mm. Oesophageal lesions were largest (23.5 mm), followed by gastric (21.9 mm) and duodenal (12 mm). Mean resected lesion size increased from 16.6 mm in 2022 to 26.4 mm in 2025. In the oesophagus, squamous HGD measured 27.8 mm on average, IMC with Barrett's 18.5 mm, and IMC without Barrett's 13.1 mm. Mean procedure time was 70.6 ± 38.3 minutes, increasing from 56 minutes in 2022 to 74 minutes in 2025; oesophageal ESDs were longest (77 minutes) and duodenal shortest (52 minutes). Mean resection time was 70 minutes for a 20mm lesion.

Among epithelial lesions, the en bloc resection rate was 95 %, R0 rate 88 %, and curative rate 83 %. Same-day discharge occurred in 78 % of cases. The overall complication rate was 7 % (n = 9): perforations (n = 5, mainly duodenal or gastric) and strictures (n = 2, all oesophageal). There were no ESD-related deaths.

Conclusions ESD is the gold-standard therapy for selected epithelial lesions of the upper GI tract. As per ESGE guidance (1), it is indicated for all T1 oesophageal squamous lesions without deep submucosal invasion (T1a M2), Barrett's-related neoplasia > 2 cm or with submucosal invasion or fibrosis, and all dysplastic gastric lesions (T1a and limited T1b). Its capacity for en bloc resection reduces the need for surgery and enables accurate histological assessment. No definitive guidelines currently exist for subepithelial endoscopic resection.

A dedicated Upper GI Endoscopy MDT was established to optimise case selection and accept regional referrals for endoscopic resection, leading to a marked increase in procedural volume. Challenges in expanding an ESD service include case volume, operator training, endoscopy capacity, anaesthetic support, and multidisciplinary availability. Our results demonstrate a correlation between experience, referral volume, and case complexity, reflected by increasing mean lesion size and procedure time. Between 2023 and 2025, mean procedure time rose 18 minutes and lesion size 10 mm. Despite this, high en bloc (>90 %) and R0 (87 %) rates were maintained, with a stable curative rate (76 %) and low complication rate.

Our experience shows that a structured regional ESD service in the UK, supported by specialist MDT discussion, can achieve excellent outcomes comparable to international standards while safely managing increasingly complex cases.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pimentel-Nunes P, Libânio D, Bastiaansen BA, Bhandari P, Bisschops R, Bourke MJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy* [Internet]. 2022; 54 (6): 591–622. Available from <https://pubmed.ncbi.nlm.nih.gov/35523224/>

eP1120 Endoluminal vacuum therapy to treat leaks or perforations in the upper gastrointestinal tract: A meta-analysis

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DOI 10.1055/s-0046-1822447

Aims Anastomotic leakage has been reported in up to 30 % of patients who have esophagectomy or gastrectomy, with an associated morbidity and mortality rate of 20 %–50 % [1]. Treatment options for upper gastrointestinal (UGI) leaks include endoscopic, surgical, and conservative therapy [2]. Endoluminal vacuum therapy (EVT) uses the principles of vacuum-assisted closure of external wounds to improve and accelerate healing by removing infected secretions, reducing edema, increasing local perfusion, and promoting granulation tissue formation [3]. Most studies of EVT for UGI leaks and perforations have been retrospective case series or case reports to date. We conducted a meta-analysis of the efficacy and safety of EVT to treat UGI defects in adults.

Methods An expert librarian conducted searches of the MEDLINE full file (via Ovid) and Embase databases to identify studies of Eso-SPONGE (Boston Scientific Corporation, Massachusetts, USA) published in English January 1, 2008–May 30, 2025. Clinical studies (including meta-analyses & systematic reviews) and case reports/series including more than 10 patients were included. Efficacy and safety outcomes were assessed using a random-effects meta-analysis to estimate the proportion of patients with the outcome. Efficacy outcomes were UGI EVT technical success, clinical success, and reinterventions. The safety outcome was the proportion of patients with ≥ 1 serious adverse event (SAE).

Results Data from 301 patients who participated in 8 observational studies were included in the analysis of all eligible publications. The estimated pooled proportions of patients with technical success and clinical success were 100 % (95 % CI 99.7–100 %) and 77.4 % (95 % CI 65.2–87.6 %), respectively. Patients had reinterventions associated with closure management (15.3 %, 95 % CI 8.4–23.8 %) or adverse events (8.2 %, 95 % CI 1.2–20.7 %). The estimated pooled proportion of patients with ≥ 1 SAE during the study period was 21.3 % (95 % CI 6.6–41.5 %), with a mortality rate of 5.9 % (95 % CI 3.5–8.9 %). Among 127 patients with an anastomotic leak from 5 studies with available data, 7 (5.5 %) patients died from one of the following causes: acute respiratory distress syndrome with or without multiorgan failure (2), sepsis (4), pneumonia (1). Among 10 patients with a perforation in a single study, no deaths were reported.

Conclusions EVT using Eso-SPONGE for UGI anastomotic leaks and perforations showed high technical success and good clinical success. High rates of adverse events and mortality occurred in ill patient populations at high baseline risk of complications. (Funded by Boston Scientific Corporation)

Conflicts of Interest Carly Mahoney: full-time employee of Boston Scientific; Jeanette Ahrens: full-time employee of Boston Scientific; Kapil Gupta: full-time employee of Boston Scientific; Seung-Hun Chon: BS Consultant, Leufen Medical Consultant, Olympus Lectures

References

[1] Richter F, Hendricks A, Schniewind B et al. Eso-Sponge(R) for anastomotic leakage after oesophageal resection or perforation: outcomes from a national, prospective multicentre registry. *BJS Open*. 2022; 6

[2] Schorsch T, Muller C, Loske G. Endoscopic vacuum therapy of anastomotic leakage and iatrogenic perforation in the esophagus. *Surg Endosc* 2013; 27: 2040–2045

[3] Smallwood NR, Fleshman JW, Leeds SG et al. The use of endoluminal vacuum (E-Vac) therapy in the management of upper gastrointestinal leaks and perforations. *Surg Endosc* 2016; 30: 2473–2480

ePoster Connect: Hepatopancreaticobiliary

14/05/2026, 09:05–09:25

ePoster Connect:
Station 4 (Level 0)

eP1121 EUS-guided antegrade transanastomotic intrapancreatic stenting with fully covered metal stent: a novel approach to the management of leaks after pancreaticoduodenectomy

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DOI 10.1055/s-0046-1822448

Aims Pancreatic leak (PL) following pancreaticoduodenectomy (PD) remains one of the most challenging and potentially life-threatening complications in pancreatic surgery. When retrograde endoscopic access to the pancreaticojejunum (PJ) anastomosis is not feasible, treatment options are limited, and surgical revision carries high morbidity and mortality.

Currently, no clear or standardized guidelines exist regarding the optimal endoscopic management of these leaks. In our experience, retrograde approach becomes necessary when the pancreatic fistula coexists with biliary anastomotic dehiscence and/or necrosis of the jejunal limb, as these situations require a complex, multi-target intervention. Conversely, in isolated PLs, retrograde access is often technically demanding and ultimately redundant [1–3].

We aimed to evaluate the feasibility, safety, and clinical outcomes of a novel endoscopic technique for the management of PLs after PD: EUS-guided antegrade transanastomotic intrapancreatic stenting (EUS-ATIS) using a fully covered self-expandable metal stent (FCSEMS).

Methods This was a single-center, retrospective case series (July 2022–August 2025) of consecutive PD patients with PLs secondary to PJ dehiscence who underwent EUS-ATIS. Primary endpoints were technical and clinical success. Secondary endpoints included time to leak closure, adverse events (AEs), need for rescue therapy, recurrence, and follow-up outcomes (► **Table 1**).

► **Table 1**

Faesability, n	13/15 (86.7)
Indication for surgery, n (%)	Malignant 9 (69); Benign 4 (31)
Sepsis before EUS, n (%)	13 (100)
Associated BDA leak, n (%)	5 (38)
Necrosis of afferent limb/PJ anastomosis, n (%)	7 (53.8)
Therapeutic delay (days), median [IQR]	10 [6,5–13,5]
Technical success, n (%)	13 (100)
Clinical success overall *, n (%)	13 (100)
Median time to PL closure (days), median [IQR]	7 [5.5–11.5]
Leak recurrence, n (%)	0 (0)
Procedure-related mortality, n (%)	0 (0)

Results Fifteen patients were evaluated; EUS-ATIS could not be performed in 2 due to lack of a safe and adequate endosonographic window for puncture, resulting in a feasibility rate of 86.7%. Thirteen patients underwent successful

EUS-ATIS (61.5% male; median age 68 years [IQR 59–73.5]). All had International Study Group on Pancreatic Surgery (ISGPS) grade B postoperative pancreatic fistula; 10/13 presented with high-output PLs, and all were septic at the time of the EUS intervention. In two cases, shorter FCSEMSs (40 mm in length) were initially placed, resulting in persistent leakage. Leak resolution was achieved after placement of a second, coaxial FCSEMS to extend the intrajejunal segment and divert pancreatic flow further downstream within the jejunal limb. Median endoscopic sessions per patients were 1 (IQR 1–2). Median therapeutic delay was 10 days (IQR 6.5–13.5). Technical success and clinical overall success rates were both 100%. Median time to leak closure was 7 days (IQR 5.5–11.5). Early AEs occurred in 3/13 (23%), all non-severe and successfully managed either endoscopically or conservatively. No late AEs or leak recurrences were observed during a median follow-up of 189 days (IQR 95–410). No patient required radiologic or surgical rescue. One death (7.7%) occurred, unrelated to the procedure or PL persistence. Pancreaticogastrostomy stents were removed in 7/13 patients after a median of 3 months (IQR 2–3). FCSEMS were removed in only 2 patients, as retrograde endoscopic access was often unfeasible.

Conclusions To our knowledge, this represents the first reported use of EUS-ATIS with FCSEMS placement for the treatment of PLs caused by PJ dehiscence after PD. This innovative approach provides a safe, effective, and minimally invasive alternative to surgery by restoring anastomotic continuity, diverting pancreatic flow from the dehiscence site, and promoting definitive healing. Early outcomes are favorable. Continued patients' enrollment and longer follow-up will be essential to confirm long-term safety and reproducibility.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Mutignani M, Bonato G, Dioscoridi L et al. Expanding endoscopic treatment strategies for pancreatic leaks following pancreato-duodenectomy: a single centre experience. *Surg Endosc* 2021; 35 (4): 1908–1914. doi:10.1007/s00464-020-08199-8
- [2] Krafft MR, Croglia MP, James TW, Baron TH, Nasr JY. Endoscopic endgame for obstructive pancreatopathy: outcomes of antegrade EUS-guided pancreatic duct drainage. A dual-center study. *Gastrointest Endosc* 2020; 92 (5): 1055–1066. doi:10.1016/j.gie.2020.04.061
- [3] Chen YI, Levy MJ, Moreels TG et al. An international multicenter study comparing EUS-guided pancreatic duct drainage with enteroscopy-assisted endoscopic retrograde pancreatography after Whipple surgery. *Gastrointestinal Endoscopy* 2017; 85 (1): 170–177. doi:10.1016/j.gie.2016.07.031

eP1122 First results of therapeutic response of the EUS-guided intra-tumoral implantation of Radioactive Phosphorus (32P) in seventeen patients with Local Advanced Pancreatic Cancer

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DOI 10.1055/s-0046-1822449

Aims Radioactive phosphorus (³²P) is an innovative therapy for locally advanced pancreatic cancer that is implanted through endoscopic ultrasound (EUS). One of the most innovative therapies is the implantation of radioactive phosphorus-32 which is a type of brachytherapy. It is indicated for the treatment of patients with Locally Advanced Pancreatic Cancer (LAPC) in combination with gemcitabine-based chemotherapy. The primary goal of this study is to determine the safety of the intra-tumoral implantation of radioactive phosphorus (³²P) through EUS and the complications of the procedure of implantation. The secondary goals are to determine the Local Disease Control Rate (LDCR) at 16 weeks and the effectiveness of the implantation of radioactive phosphorus by measuring Overall Survival (OS), Progression Free Survival (PFS) and Local Progression Free Survival (LPFS). They receive gemcitabine-based

chemotherapy in combination with an intra-tumoral therapy with radioactive phosphorus (^{32}P) through a 22-gauge FNA needle guided by EUS [1–3].

Methods The adverse events of the implantation are evaluated by the Common Terminology Criteria for Adverse Events (CTCAE) version 4.0. The LDCR is evaluated at 16 weeks and the alteration of Tumor Volume every two months for the first year after implantation and every three months the second year after implantation according to RECIST 1.1.

Results We currently have made the implantation in seventeen patients (10 male and 7 female) with similar clinical and demographic features who suffer from locally advanced pancreatic cancer. All the procedures (median age of patients: 67,9 years) were unremarkable and no complication during the procedures was noted. The patients did not have any major adverse events during the day of the procedure. 13 out of 17 patients (76,4%) revealed mild abdominal pain on the second day which recovered with typical pain killers. The LDCR, for all patients, at 16 weeks, was 100%. Two of the patients had a major reduction in the tumor and underwent surgery (resection rate 12%) – R0 100%. Three patients died after a median overall survival of 20,3 months. 12 patients showed stable disease (70,6%) and 5 showed partial response (29,4%) during the eight months of follow-up. During the first four months the median reduction of the tumor was 0,64cm.

Conclusions We must include more patients to conduct more useful results, but the initial results look promising.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Audrey V, Joseph H, Rich S et al. Pancreatic cancer. *Lancet*. 2011; 378 (9791): 607–620. doi:10.1016/S0140-6736(10)62307-0
- [2] OncoSil System: Instruction for Use
- [3] Wungki P, Akhil C, Eileen M. Pancreatic Cancer: A Review. *JAMA* 2021; 326 (9): 851–862

eP1124 Impact of ESGE key performance measures on ERCP quality and safety: a multicenter study

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DOI 10.1055/s-0046-1822451

Aims The aim of this study is to investigate the impact of the ESGE quality improvement initiative with respect to the performance in ERCP in multicenter setting. We strived to evaluate whether there have been any changes in clinical outcomes, particularly in the incidence of post-ERCP pancreatitis, since the guideline was introduced in 2017.

Methods A total of six hospitals are included in this multicenter study: three academic teaching (Warendorf, Ibbenbüren, Trier) and three university hospitals (Münster, Kiel, Oldenburg). The study examined how the introduction of the ESGE guideline affected defined quality indicators [1].

Three groups were formed:

- Group I: Examinations prior to implementation of the guideline (retrospective, until 2017)
- Group II: Studies after implementation of the guideline (retrospective, 2018–2023)
- Group III: Studies after implementation of the guideline (prospective, from 2024)

The primary endpoint was the occurrence of post-ERCP pancreatitis (PEP). Secondary endpoints were the bile duct cannulation rate, stent placement in cases of biliary obstruction, and the success rate of stone extraction.

In addition, a subgroup analysis was performed to assess the relationship between the number of examiners and the frequency of PEP.

The study is approved by the local Ethics Committee of University in Münster and registered at ClinicalTrials.gov (NCT06727851).

Results Data from over 1,200 ERCPs from four clinics are currently available. The incidence of post-ERCP pancreatitis was significantly reduced in the prospective cohort to <5%, thereby achieving the primary endpoint of the study. The bile duct cannulation rates in all clinics met the threshold value of over 90% required by the ESGE. The further secondary endpoints, stone extraction and stent placement, were also close to the required target values, but still showed some potential for optimization.

The subgroup analysis revealed that a higher number of examiners and thereby a lower number of investigations per person was associated with a slightly increased incidence of PEP.

Conclusions The introduction of the ESGE guideline with defined key performance measures led to an improvement in quality parameters and a reduction in post-ERCP pancreatitis in the four clinics studied.

By adhering to key performance measurements, we were able to demonstrate that complications were avoided, hospital stays were shorter, and there were fewer repeat examinations.

The observation that a higher number of examiners is associated with a slightly increased incidence of PEP underscores the importance of examiner experience and indicates that the level of training and the supervision structure in endoscopy continue to be of central importance. Further studies should specifically address the question of what level of experience and training characteristics are necessary to ensure consistently high quality and patient safety in ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Domagk D, Oppong KW, Aabakken L, Czako L, Gyökeres T, Manes G, Meier P, Poley JW, Ponchon T, Tringali A, Bellisario C, Minozzi S, Senore C, Bennett C, Bretthauer M, Hassan C, Kaminski MF, Dinis-Ribeiro M, Rees CJ, Spada C, Valori R, Bisschops R, Rutter MD. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy*. 2018; 50 (11): 1116–1127. doi:10.1055/a-0749-8767 Epub 2018 Oct 19 PMID: 30340220

ePoster Connect: Small intestine

14/05/2026, 10:35–10:55

ePoster Connect:
Station 1 (Level 0)

eP1125 Inflammatory lesions of the small bowel: correlation between capsule endoscopy and double balloon enteroscopy

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DOI 10.1055/s-0046-1822452

Aims Inflammatory disorders of the small bowel represent a heterogeneous spectrum of diseases, in which endoscopic lesions show considerable variability in terms of location, extent, and morphological features. The aim of the

study was to investigate the correlation between capsule endoscopy (SBCE) and double balloon enteroscopy (DBE) in the evaluation of inflammatory lesions of the small bowel [1–5].

Methods This is a retrospective, single-center observational study including all SBCE and DBE performed at an Italian tertiary referral center between January 2018 and June 2025. The selected study period was determined by the availability of complete endoscopic data within the hospital's Picture Archiving and Communication System (PACS) which ensured a comprehensive and standardized data source for retrospective analysis. Patients with at least one inflammatory small-bowel mucosal lesion on SBCE or DBE were included. These inflammatory findings were defined according to the Delphi consensus on Crohn's disease capsule endoscopy lesions and the I-CARE international consensus on atrophic patterns. Patients with a conclusive diagnosis of neoplasia were excluded. SBCE PillCam SB3 or PillCam Crohn's were used according to clinical indication. Fujifilm DBE was performed antegrade or retrograde based on presumed lesion location. The diagnostic performance of SBCE for inflammatory lesions was assessed using DBE as the reference standard; sensitivity, specificity, and Cohen's kappa were calculated.

► **Table 1** SBCE performance compared to DBE.

SBCE	Sensitivity (%)	Specificity (%)	Cohen's Kappa (95% CI)
Aphthoid lesions	100	85	0.376 (0.197 – 0.793)
Deep ulceration	70	85	0.474 (0.189 – 0.715)
Superficial ulceration	50	80	0.300 (0.047 – 0.565)
Stenosis	70	90	0.599 (0.284 – 0.836)
Edema	67	86	0.599 (0.284 – 0.836)
Hyperemia	20	84	0.402 (-0.032 – 0.837)
Denudation	67	92	0.402 (-0.032 – 0.837)
Atrophy	85	87	0.709 (0.520 – 0.857)
Mosaicism	53	97	0.503 (0.189 – 0.800)
Scalloping	70	89	0.602 (0.382 – 0.876)
Fold reduction	0	98	-0.033 (-0.090 – 0.000)
Granular mucosa	0	89	-0.057 (-0.094 – 0.000)

Results 295 endoscopic procedures were analyzed, 195 SBCE (145 PillCam SB3, 50 PillCam Crohn) and 100 DBE (73 antegrade, 27 retrograde). Among these, 102 paired enteroscopies were performed (51 SBCE and 51 DBE) within six months thus allowing comparison of the two techniques. SBCE demonstrated an overall high specificity, greater than 80%, for all inflammatory lesions. Sensitivity was more variable: high (>80%) for aphthoid lesions and villous atrophy, good (70%) for deep ulceration, stenosis and scalloping, and lower for the other lesions. Agreement was excellent ($\kappa \geq 0.6$) for stenosis, edema and villous atrophy; good ($\kappa 0.4$ – 0.6) for deep ulceration, hyperemia, mucosal denudation and mosaicism; and only fair to weak for aphthoid lesions and superficial ulcerations. Fold reduction and granular mucosa showed very low κ values, probably due to the small number of cases. Data are reported in the ► **Table 1**.

Conclusions SBCE demonstrated an overall good performance in the evaluation of inflammatory lesions of the small bowel. It showed good agreement with DBE, the reference standard for enteroscopy, in detecting most inflammatory lesions, including both ulcerative–stenosing and atrophic patterns. Further multi-center studies with larger sample sizes and external validation in different study populations are needed to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lewis SK, Semrad CE. Capsule Endoscopy and Enteroscopy in Celiac Disease. *Gastroenterol Clin North Am* [Internet]. 2019; cited 2025 48 (1): 73–84
- [2] Al-Toma A, Volta U, Auricchio R et al. European Society for the Study of Coeliac Disease (ESsCD) guideline for coeliac disease and other gluten-related disorders. *United European Gastroenterol J* [Internet]. 2019;[cited 2025 7 (5): 583–613. Available from <https://pubmed.ncbi.nlm.nih.gov/31210940/>
- [3] Kopylov U, Ben-Horin S, Seidman EG, Eliakim R. Video capsule endoscopy of the small bowel for monitoring of Crohn's disease. *Inflamm Bowel Dis* 2015; 21 (11): 2726–35
- [4] Leenhardt R, Buisson A, Bourreille A et al. Nomenclature and semantic descriptions of ulcerative and inflammatory lesions seen in Crohn's disease in small bowel capsule endoscopy: An international Delphi consensus statement. *United European. Gastroenterol J* 2020; 8 (1): 99–107
- [5] Elli L, Marinoni B, Sidhu R et al. Nomenclature and Definition of Atrophic Lesions in Small Bowel Capsule Endoscopy: A Delphi Consensus Statement of the International CAPsule endoscopy REsearch (I-CARE) Group. *Diagnostics*. 2022; 12 (7):

eP1126 Endoscopic and EUS features of deep infiltrating intestinal endometriosis: novel diagnostic markers and clinical implications

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DOI 10.1055/s-0046-1822453

Aims Deep infiltrating endometriosis (DIE) of the bowel remains an under-recognized challenge in endoscopic practice. Lesions frequently mimic subepithelial tumors or infiltrative neoplasia, leading to diagnostic errors reported in up to 60–70% of reviews and resulting in delayed diagnosis. Rectosigmoid involvement predominates, whereas small-bowel and duodenal disease are exceptionally rare. The absence of reproducible endoscopic criteria and the infrequent use of EUS further complicate preoperative recognition, contributing to misclassification as malignancy.

Aims: To describe reproducible endoscopic and EUS markers of bowel DIE with histological confirmation and to evaluate the role of EUS-FNB in diagnosing atypical subepithelial lesions.

Methods Two patients with histologically confirmed intestinal DIE complicated by gastrointestinal bleeding were analyzed. A comprehensive correlation of endoscopic, EUS, and histopathological findings was performed, including EUS-guided fine-needle biopsy (FNB).

A structured literature search and analysis were conducted using PubMed, Embase, and Scopus databases (2019–2025), focusing on bowel endometriosis and its endoscopic visualization.

Results 1. Sigmoid involvement

Colonoscopy: segmental wall rigidity, concentric luminal narrowing, mucosal deformation with preserved epithelium.

EUS: hypoechoic thickening of the muscularis propria with mesenteric involvement.

Histology: confirmed DIE.

2. Duodenal involvement (exceptionally rare)

EGD: nodular, bleeding protuberant lesions distal to the major papilla.

EUS: deep hypoechoic infiltrate with loss of wall stratification and extension into paraduodenal tissue.

EUS-FNB: morphological confirmation of endometriosis (PAX8+, ER+).

Morphologically verified cases of duodenal DIE diagnosed by EUS-FNB are exceedingly rare or absent in the published literature.

3. Literature data

Bowel DIE occurs in ~5–12% of patients with endometriosis, predominantly affecting the rectosigmoid segment.

EUS demonstrates high sensitivity for assessing depth of infiltration (~82–94% in clinical series), whereas standard endoscopy remains limited in detecting submucosal disease.

Practical implications / Reproducible markers

Based on clinical observations and literature analysis, the following reproducible endoscopic and EUS markers of bowel DIE were identified:

1. Wall rigidity and luminal narrowing without ulceration.
2. Mucosal deformation with preserved epithelial surface.
3. Atypical bleeding nodular lesions in the duodenum.
4. Hypoechoic infiltrative contour on EUS with involvement of adjacent tissues.

These markers emphasize the diagnostic value of combined endoscopy and EUS, supporting accurate preoperative recognition of bowel DIE and reducing the risk of misinterpretation as neoplasia.

Conclusions These observations enhance clinical awareness of endoscopic and EUS features of bowel DIE and demonstrate the diagnostic value of EUS-FNB even in extremely rare duodenal involvement. The findings may serve as a foundation for developing standardized imaging criteria and for future multicenter prospective validation under the auspices of ESGE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1127 Dysplasia and Malignancy Risk in Resected Hamartomatous Polyps in Peutz-Jeghers Syndrome: A Case Series

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DOI 10.1055/s-0046-1822454

Aims Introduction: Peutz Jeghers Syndrome (PJS) is a rare, autosomal dominant hereditary polyposis syndrome characterised by hamartomatous polyps, mucocutaneous pigmentation and confirmatory testing of a genetic mutation of serine/threonine kinase 11 or liver kinase B1 (STK11/LKB1). PJS is recognised as a cancer predisposition syndrome with a very high relative risk of gastrointestinal cancers. Some studies, including meta-analysis have suggest a relative risk of up to 13 % of small bowel cancers in PJS patients compared to less than 1 % of the general population. However, the European Hereditary Tumour Group Guideline caution that the described risks are likely to be an overestimation due to retrospective review and selection bias. The malignant potential of hamartomatous polyps in PJS has been debated in the literature, controversy exists but presently PJS hamartomatous polyps are not considered precancerous lesions [1–7].

Aim: To evaluate the presence of dysplasia or malignancy in resected PJS polyp specimens in our tertiary referral centre.

Methods We performed a retrospective review of our histological specimens from patients with a clinical or histological diagnosis of PJS between 2008 to 2025. The histological database was screened for keywords such as “Peutz-Jeghers” “PJS” “Peutz-Jegher’s Syndrome” and “hamartomatous polyps”. Baseline demographic data and histological findings were extracted from electronic patient record and pathology reports.

Results Seventeen patients with confirmed PJS were identified, with a male predominance (70%). The median patient age was 31 years (range 12–72). The median follow-up time was 64 months (range 1–135), accounting to 90.6 patient years. There were 65 polyp specimens of which 47 (72%) were consistent with hamartomatous PJS polyps. The table below characterises the location of the polyps.

PJS polyps: The median patient age for PJS-type polyps was 26 (12–72). The median polyp size for PJS polyps was 20mm (range 4–100mm). 56% of procedures (n = 34) for PJS polyps were via device assisted enteroscopy (n = 22), ADBE (n = 17), RDBE (n = 5) remainder were obtained via OGD(n = 9), Colonoscopy (n=3). Indications for procedures included polypectomy based on size criteria, symptomatic polyps for intussusception, anaemia and surveillance. The majority (62 %) of these procedures were performed for polypectomy of a polyp ≥ 15mm (n = 21), two cases were performed for anaemia; the remainder of

the cases were part of routine surveillance procedures. Following MDT consensus review, no polyps demonstrated dysplasia or malignancy, resulting in an estimated incidence of 0 per patient year (95 % CI: 0–0.033) (► **Table 1**).

► **Table 1**

Location	PJS polyps n = 47	Non-PJS polyps n = 18
Stomach	2	3
Duodenal	7	3
Jejunal	13	0
Ileal	14	0
Undifferentiated Small Bowel	8	1
Colon	3	11

Non PJS polyps: Of the non PJS polyps; the histological morphology was predominately hyperplastic (50 %, n = 9). Other morphology included; Tubular adenoma with LGD (n = 2), Serrated adenoma (n = 1), Pseudopolyp (n = 1), epithelial atypia favoured reactive (n = 1) normal small bowel mucosa (n = 4). The median age in the non-PJS polyps' group was 59 (19–66), for those who had adenomas the median age was 62 (range 59–66). Adenomatous polyps were present in 16.7 % (95 % CI: 4.6%–38.9%).

Conclusions Our study found that our cohort of PJS patients had no evidence of dysplasia or malignancy in any of their polyp specimens over 91 patient years in our tertiary referral centre. This study supports previously published studies from PJS registries and supports the argument from the European Hereditary Tumour Group who suggest that previous studies may overestimate risk of cancer due to selection bias and retrospective analysis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Jenne D.E. et al. 'Peutz-Jeghers Syndrome Is Caused by Mutations in a Novel Serine Threonine Kinase'. *Nature Genetics* 18 no. 1: 1998; 38–43. doi:10.1038/ng0198-38

[2] Jeghers H, McKusick VA., Katz KH. 'Generalized Intestinal Polyposis and Melanin Spots of the Oral Mucosa, Lips and Digits: A Syndrome of Diagnostic Significance'. *New England Journal of Medicine* 241 no 25: 1949; 993–1005. doi:10.1056/NEJM19491222412501

[3] Latchford A.R. et al. Peutz-Jeghers Syndrome: Intriguing Suggestion of Gastrointestinal Cancer Prevention From Surveillance'. *Diseases of the Colon & Rectum* 54 (no. 12): 2011; 1547–51. doi:10.1097/DCR.0b013e318233a11f

[4] Ishida H et al. Update on Our Investigation of Malignant Tumors Associated with Peutz-Jeghers Syndrome in Japan'. *Surgery Today* 46 (no. 11): 2016; 1231–42. doi:10.1007/s00595-015-1296-y

[5] Giardiello F.M. et al. 'Increased Risk of Cancer in the Peutz-Jeghers Syndrome'. *The New England Journal of Medicine* 316 (no. 24): 1987; 1511–14. doi:10.1056/NEJM198706113162404

[6] Giardiello F.M. et al. 'Very High Risk of Cancer in Familial Peutz-Jeghers Syndrome'. *Gastroenterology* 119 (no. 6): 2000; 1447–53. doi:10.1053/gast.2000.20228

[7] Wagner A et al. The Management of Peutz-Jeghers Syndrome: European Hereditary Tumour Group (EHTG) Guideline'. *Journal of Clinical Medicine* 10 (no. 3): 2021; 473. doi:10.3390/jcm10030473

eP1128 Sporadic Duodenal Adenomas: An Alert on Associated Risk Factors

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DOI 10.1055/s-0046-1822455

Aims Sporadic duodenal adenomas are uncommon in comparison to other gastro-intestinal adenomas and often an incidental finding in upper gastro-intestinal endoscopy. Recent studies indicate an increasing incidence of these lesions.

Methods A retrospective review of upper endoscopies performed over the past 10 years was conducted to identify cases of duodenal adenomas. Patients with polyposis syndromes and ampullary adenomas were excluded, resulting in a sample of 41 patients with sporadic duodenal adenomas. In addition, a control group of 41 randomly selected individuals from the same 10-year span, matched by age and gender, was used for comparison. Potential risk factors for duodenal adenomas were collected [1, 2].

Results The prevalence of duodenal adenomas was 0.22 %. The mean age of affected individuals was 69 years, out of which 24 were males. Most of the adenomas were endoscopically removed (68.3 %), three patients had recurrent adenomas and one progressed into adenocarcinoma. A significant association was observed between smoking and the presence of duodenal adenomas ($p = 0.037$). Family history of gastrointestinal neoplasia was related to the occurrence of duodenal adenomas ($p = 0.043$). In addition, in comparison to the control group, the duodenal adenoma group had a significantly higher number of affected family members with gastrointestinal neoplasia ($p = 0.001$). Furthermore, the duodenal adenoma group had a significantly higher number of colorectal adenomas compared to the control group ($p < 0.001$). No statistically significant associations or differences to the control group were found amongst other variables.

Conclusions Although sporadic duodenal adenomas are rare, their potential for recurrence and progression to adenocarcinoma warrants careful surveillance. Smoking and family history of gastrointestinal neoplasia appear to be potential risk factors for sporadic duodenal adenomas. Additionally, the higher prevalence of colorectal adenomas in these patients highlights the importance of colorectal cancer screening in this population.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanbiervliet G. et al. 2021; Endoscopic management of superficial non-ampullary duodenal tumors: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 53 (5): 522–534
- [2] El C., McIntyre A.S. 2011; Sporadic duodenal polyps: classification, investigation, and management. *43* (2): 144–155

ePoster Connect: Stomach and Duodenum

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eP1129 Ten-Year EUS Surveillance of Gastric and Duodenal GISTs: Implications for ESGE Recommended Intervals

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DOI 10.1055/s-0046-1822456

Aims Current ESGE guidance advises early gastroscopy within a few months of diagnosis for small subepithelial lesions, followed by periodic long-term surveillance with shorter intervals for larger lesions. These recommendations are based on low-quality evidence, and the true growth behavior of GISTs remains uncertain. Our 10-year review of EUS-detected gastric and duodenal GIST aims to assess growth patterns and evaluate whether current surveillance intervals are justified or could be safely extended.

Methods A retrospective study was conducted at a district general hospital, reviewing EUS examinations of endoscopically or biopsy-confirmed gastric and duodenal GISTs between January 2015 and October 2025. For patients with at least one qualifying EUS, any prior EUS before 2015 was included to preserve surveillance continuity. Data collected includes lesion size, location, EUS intervals, biopsy status, and management plan. Lesions were grouped by baseline size (≤ 10 mm, > 10 –15 mm, > 15 –20 mm, and > 20 mm). Growth was defined as an increase of ≥ 5 mm or ≥ 20 % in maximal diameter between first and last EUS. Event rates per person-year were calculated to estimate growth incidence, with 95 % confidence intervals (CI) derived using binomial or Poisson methods.

Results A total of 105 patients (274 EUS procedures) were reviewed and categorized by initial GIST size.

For lesions ≤ 10 mm, 11 of 17 patients underwent more than one EUS, representing 32.8 person-years. No growth events were recorded (0/11; 0 %, 95 % CI 0–27.3 %). The event rate per person-year was therefore 0 (upper 95 % bound = 0.0915 per person-year). Using this upper confidence limit to model the worst plausible scenario, the theoretical cumulative probability of growth was estimated at ≤ 24 % over 3 years and ≤ 31 % over 4 years. These values represent the statistical ceiling implied by zero events, not observed risk. In practice, all ≤ 10 mm lesions remained entirely stable.

For lesions > 10 –15 mm, 12 of 32 patients had serial follow-up representing 40.8 person-years. One lesion (1/12; 8.3 %, 95 % CI 0.2–38.5 %) enlarged from 15 mm to 30 mm after 24 months, yielding an event rate of 0.0246 per person-year (95 % CI 0.0006–0.136). The modeled upper 95 % cumulative risk was 7.23 % at 3 years and 9.52 % at 4 years. Although the upper cumulative risk is numerically smaller than that for the ≤ 10 mm group, this reflects narrower statistical uncertainty from one observed event; the true growth probability in ≤ 10 mm lesions is lower, but its confidence interval is wide due to the absence of events.

In the > 15 –20 mm category, 9/22 patients had serial EUS (25.2 person-years). 3 patients had growth events (3/9; 33.3 %, 95 % CI 7.5–70.1 %), giving an event rate of 0.119 per person-year (95 % CI 0.025–0.347), corresponding to an upper 95 % cumulative risk of about 30 % at 3 years and 40 % at 4 years.

Among lesions > 20 mm, 11 of 50 patients had serial EUS (35.2 person-years). 8 patients had growth events (8/11; 72.7 %, 95 % CI 43–90 %). The event rate was 0.228 per person-year (95 % CI 0.098–0.450), equivalent to an upper 95 % cumulative growth risk of 74.08 % at 3 years and 83.47 % at 4 years.

Conclusions This review demonstrates that GISTs ≤ 10 mm show no measurable growth. Although Poisson modeling allows a theoretical 31 % risk at 4 years, this reflects statistical uncertainty rather than clinical risk. The absence

of any true growth events supports extending surveillance for ≤ 10 mm GISTs every 3–4 years. For 10–15 mm lesions, a single event over 40 person-years corresponds to a modeled cumulative risk of 9.52 % at 4 years, making the current ESGE recommendation justified. Lesions > 15 mm showed substantially higher event rates, confirming that shorter surveillance remains appropriate for this subgroup.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1130 Neglected extra-colonic malignancies in Lynch syndrom : insights from a prevention-oriented centre

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DOI 10.1055/s-0046-1822457

Aims Despite the increasing number of individuals diagnosed with Lynch syndrome, few studies have reported prospective follow-up data in this high-risk population. While colorectal surveillance is well established, international consensus remains limited regarding optimal surveillance strategies for other organ systems, largely due to a lack of robust evidence.

Methods This study is based on a retrospective analysis of prospectively collected data from a single prevention-oriented center. All included individuals were confirmed carriers of a pathogenic or likely pathogenic variant in one of the mismatch repair (MMR) genes associated with Lynch syndrome and were followed according to a structured surveillance protocol.

The primary objective of this study was to estimate the incidence of cancers diagnosed during prospective follow-up in this genetically defined population. The secondary objective was to assess the concordance between observed cancers and current organ-specific surveillance recommendations as outlined in regional French guidelines.

Results 517 patients carrying a P/LP variant in an MMR gene and enrolled in prospective follow-up. A total of 201 cancers were diagnosed during prospective follow-up.

203 patients (39.3 %) carried MSH2 or EPCAM P/LP variant, 181 had MLH1 (35 %), 90 (17.4 %) had MSH6 and 42 (8.1 %) had PMS2. One patient carried two distinct variants affecting both EPCAM and MLH1. The median age at inclusion was 43 years (IQR: 32–52 years), and was 52 years (IQR: 40–64 years) at last follow-up. 52.8 % were males and 47.2 % were females, with a median follow-up duration of 8 years (IQR: 4–13 years). A total of 281 patients were cancer-free at the start of surveillance.

132 were subject to specific recommendations based on the underlying genetic predisposition. These included tumors of the upper and median GI tract (stomach, duodenum, jejunum, $n = 14$), lower GI tract (colon and rectum, $n = 84$), urinary tract (renal, bladder, and urothelial tumors, $n = 27$), and gynecologic cancers ($n = 7$).

The organ-specific incidence rates were as follows:

- Lower GI tract ($n = 84$): 1.74 % (95 % CI, 1.37–2.11)
- Urinary tract ($n = 27$): 0.56 % (95 % CI, 0.35–0.77)
- Upper and median GI tract ($n = 14$): 0.29 % (95 % CI, 0.14–0.44)
- Gynecologic cancers ($n = 7$): 0.15 % (95 % CI, 0.04–0.25)

Outside of the recommended surveillance organs, 69 cancers were diagnosed (1.43 %; 95 % CI 1.09–1.77). The most frequent sites were skin-related tumors (cutaneous, sebaceous, basal cell, or melanoma; $n = 26$; 0.54 %; 95 % CI 0.33–0.75), followed by breast ($n = 12$; 0.25 %; 95 % CI 0.11–0.39), pancreas ($n = 7$; 0.15 %; 95 % CI 0.04–0.25), and prostate ($n = 6$; 0.12 %; 95 % CI 0.03–0.22).

Urinary tract tumors were predominantly diagnosed in an asymptomatic setting ($n = 21$) through surveillance imaging, cytology, or incidental findings, while 2 cases were diagnosed due to symptoms. Among upper GI tumors ($n = 14$), 6 were detected during routine endoscopic surveillance, and the remaining 8 were identified in symptomatic contexts. Of the 84 lower GI tumors, the vast majority ($n = 71$) were diagnosed during scheduled surveillance colonoscopies, with only 11 cases detected due to symptoms. Gynecologic cancers ($n = 7$) included 2 asymptomatic and 5 symptomatic cases.

Characteristics of the study population

Conclusions This study provides robust prospective evidence supporting the value of structured, multidisciplinary surveillance in patients with Lynch syndrome. The majority of cancers covered by recommendations were detected at an asymptomatic stage, particularly in the lower GI and urinary tracts—underscoring the effectiveness of current surveillance protocols. The high rate of symptomatic upper and median GI tumors highlights the need to reassess surveillance strategies for this site. In addition, our findings support the integration of dedicated skin, breast, and prostate surveillance into personalized and comprehensive care plans for patients with Lynch syndrome.

Conflicts of Interest Thierry André has received consulting fees from Servier, MSD, Amgen, and Merck; a travel grant from Ipsen and Merck; and has a non-remunerated interest as a member of the Fondation Française de Cancérologie Digestive, Groupe des Tumeurs Neuroendocrines, and the ESMO Real-World Data and Digital Health Group. TS has received honoraria and congress fees from Merck Serono. RC has received honoraria from AstraZeneca/Daiichi Sankyo, Bristol-Myers Squibb, MSD Oncology, and Servier, as well as congress and travel fees from Bristol-Myers Squibb, MSD Oncology, and Servier. TA has received consulting fees or honoraria from AbbVie, Aptitude Health, Biocartis, Bristol-Myers Squibb, GlaxoSmithKline, MSD Co., Inc., Medicenna, Nimbus, Sanofi, Seagen, Servier, Takeda, and Pfizer. He has also served as a data monitoring committee member for Inspira and received support for meetings from Bristol-Myers Squibb, Merck & Co. Inc., and Takeda. All other authors declare no competing interests. Romain Cohen has received honoraria from Amgen, AstraZeneca/Daiichi Sankyo, Bristol Myers Squibb, Exeliome Bioscience, Merck, MSD Oncology, Servier; travel fees and congress invitations from Bristol Myers Squibb, Enterome, MSD Oncology, Servier. Dray, Xavier: co-founder and shareholder of Augmented Endoscopy; lectures or consulting fees from Abbvie, Alfasigma, AnX Robotica, Fujifilm, Jinshan, Medtronic, Norgine.

eP1131 Gastric Biopsies During G-POEM in Patients with Refractory Gastroparesis: Histological, Transcriptomics and Meta-Transcriptomics Analysis, And Correlation with Clinical Outcomes

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DOI 10.1055/s-0046-1822458

Aims Gastroparesis (GP) is a chronic gastric motility disorder that is frequently underdiagnosed and underestimated, with a major impact on quality of life. The underlying tissue mechanisms remain poorly defined. G-POEM is an emerging endoscopic therapy for refractory GP, but robust predictors of response are lacking. This study aimed to characterize gastric transcriptomic and metatranscriptomic profiles in patients with refractory idiopathic or diabetic GP and to correlate these features with post-G-POEM outcomes.

Methods In this single-center prospective study, we enrolled adults with refractory idiopathic or diabetic GP undergoing G-POEM (clinical cohort). All patients underwent standardized additional mucosal gastric biopsies from the antrum, body, and fundus. Clinical success at 3 months after G-POEM was defined as a ≥ 1.0 -point reduction in total GCSI and a $\geq 25\%$ improvement in at least one GCSI subscale.

A nested molecular cohort (9 GP patients) was selected for RNA sequencing. A control group of patients without GP symptoms, undergoing EGD for non-motility-related indications, underwent the same biopsy protocol; nine controls were age- (± 3 years) and sex-matched to GP cases. Host transcriptomic and microbial metatranscriptomic data were analyzed using differential expression, GSEA, UMAP, cell-type deconvolution, microbial alpha-diversity, and species-level differential analyses. Correlations with G-POEM outcomes were also assessed.

Results Between February 2023 and June 2025, 21 refractory GP patients (57% idiopathic, 43% diabetic; median age 52 years; 71.4% female) undergoing G-POEM and 16 controls were enrolled. Clinical and functional success rates after G-POEM were 47.6% and 42.9%, respectively. G-POEM significantly improved GCSI, SF-36, and GES parameters.

In the molecular cohort, a marked and region-specific transcriptional shift was observed in the antrum of GP patients (1,793 genes upregulated and 1,006 downregulated vs controls). Pathway enrichment in the antrum revealed up-regulation of programs related to tissue remodeling, cell migration and adhesion, vascular regulation, and neuromuscular organization. Microbial alpha-diversity was preserved across groups and regions, although a distinct, region-specific shift in bacterial community composition at the species level was identified in the antrum of GP patients. No significant correlations emerged between molecular features and G-POEM outcomes.

Conclusions In refractory GP, G-POEM provides a moderate short-term clinical and functional benefit. GP patients exhibit a distinct, antral-specific transcriptomic reprogramming together with localized alterations in bacterial community composition. These findings support the concept of a regionally confined, functionally oriented molecular phenotype in GP, which may contribute to disease mechanisms and help inform future, more personalized therapeutic strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

we evaluated whether patients with aortic stenosis (AS) or aortic regurgitation (AR) had higher risks of developing colorectal polyps, benign colorectal polyps, or colorectal cancer compared with echocardiography-confirmed individuals without valvular disease. By leveraging a large real-world dataset from a global collaborative network, we sought to clarify potential links between valvular pathology, systemic inflammation, and colorectal tumorigenesis.

Methods We conducted a retrospective cohort study using the TriNetX Global Collaborative Network. Adults aged 18 years or older who underwent echocardiography between January 1, 2015 and January 1, 2020 were included. Two exposure cohorts, aortic stenosis (AS) and aortic regurgitation (AR), were compared with echocardiography-confirmed controls without valvular disease. Patients with inflammatory bowel disease, acute abdomen, prior colectomy, or preexisting colorectal neoplasia were excluded. The outcomes included incident colorectal polyp, benign polyp, and colorectal cancer. Propensity score matching in a 1:1 ratio was performed to balance demographics, comorbidities, and lifestyle factors. Cox proportional hazards models were used to estimate hazard ratios (HRs) with 95 percent confidence intervals (CIs).

Results After matching, 250,255 patients with AS and 254,023 with AR were analyzed, each matched to an equal number of controls. In the AS cohort, risks were significantly higher for colorectal polyp (HR 1.21; 95% CI 1.17–1.24; $p < 0.0001$), benign polyp (HR 1.19; 95% CI 1.16–1.22; $p < 0.0005$), and colorectal cancer (HR 1.20; 95% CI 1.13–1.29; $p = 0.0008$). Similarly, in the AR cohort, risks were elevated for colorectal polyp (HR 1.17; 95% CI 1.14–1.21; $p < 0.0001$), benign polyp (HR 1.21; 95% CI 1.18–1.24; $p = 0.0083$), and colorectal cancer (HR 1.07; 95% CI 1.00–1.15; $p = 0.034$). Kaplan–Meier analysis showed consistently lower event-free survival among AS and AR groups compared with controls (log-rank $p < 0.001$ for most outcomes).

Conclusions Both aortic stenosis and aortic regurgitation were associated with increased risks of colorectal polyps and malignancy, suggesting potential shared inflammatory or hemodynamic mechanisms linking valvular disease and colorectal neoplasia. Further studies integrating molecular and hemodynamic parameters are warranted to elucidate causal pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1133 Clinical Efficacy of Snare Tip Precutting Endoscopic Mucosal Resection in 15-20 mm Non-Pedunculated Colorectal Neoplasms: A Prospective Randomized Multicenter Study

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DOI 10.1055/s-0046-1822460

Aims The optimal endoscopic resection technique for non pedunculated colorectal polyps 15-20mm in size remained unclear. This study therefore aimed to evaluate the efficacy of snare tip precutting endoscopic mucosal resection (STP-EMR) compared to conventional EMR (C-EMR) for these lesions

Methods This prospective randomized comparative study recruited 126 patients with 128 colorectal neoplasms of 15-20 mm in size and randomly assigned them in a 1:1 ratio to undergo STP-EMR or C-EMR at four university hospitals from June 2022 to November 2023. The primary outcomes were en bloc resection rate (EBR) and complete resection rate (CRR), determined by gastrointestinal pathologists based on histopathological findings. Adverse events and procedure time were also carefully analyzed. This prospective randomized comparative study recruited 126 patients with 128 colorectal neoplasms of 15-20 mm in size and randomly assigned them in a 1:1 ratio to undergo STP-EMR or C-EMR at four university hospitals from June 2022 to November 2023. The primary outcomes were en bloc resection rate (EBR) and

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eP1132 Association Between Aortic Valve Diseases and the Risk of Colorectal Polyps and Cancer: A Real-World Cohort Study Using a Global Collaborative Network

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DOI 10.1055/s-0046-1822459

Aims This study aimed to examine the association between aortic valve diseases and the subsequent development of colorectal neoplasia. Specifically,

complete resection rate (CRR), determined by gastrointestinal pathologists based on histopathological findings. Adverse events and procedure time were also carefully analyzed (► **Table 1**).

► **Table 1**

variables	C-EMR(n = 65)	STP-EMR(n = 63)	P value
En bloc resection, no (%)	46(70.8)	55(87.3)	0.022
Number of resected pieces, mean(±SD)	1.35 ± 0.62	1.22 ± 0.68	0.257
Complete resection, no (%)	38(58.5)	48(76.2)	0.033
Pathologic findings			0.730
Serrated lesions	22 (33.8)	26 (41.3)	
Adenoma	42 (64.6)	36 (57.1)	
Carcinoma in situ	1 (1.5)	1 (1.6)	
Submucosal cancer	0	0	
Total procedure time, mean(±SD), min	5.0 ± 3.9	8.1 ± 2.5	<0.001
Precut time, mean(±SD), min		4.8 ± 1.8	
Admission rate, no (%)	34 (52.3)	48 (76.2)	0.005
Hospital stays, , mean (±SD)	1.92 ± 0.973	2.14 ± 0.820	0.169
post polypectomy bleeding, no (%)			0.480
Immediate(<24h)	7 (10.8)	6 (9.5)	
Delayed(≥24h)	1 (1.5)	0	
Perforation, no (%)	0	1 (1.6)	0.492

Results A total of 128 eligible colorectal neoplasms were successfully resected using C-EMR and STP-EMR. The overall mean lesion size, EBR, and CRR were 17.2 ± 1.9 mm, 78.9%(101/128), and 67.1%(86/128), respectively. The baseline characteristics such as location, size, morphology, and histologic findings of the polyps showed no significant differences between the two groups. The EBR and CRR were significantly higher in the STP-EMR group compared to the C-EMR group. Additionally, the mean total procedure time was significantly longer in the STP-EMR group. There were no significant differences in the post-procedural bleeding rate and hospital stays between the two groups. A perforation occurred in the STP-EMR group, but this was not statistically different from the C-EMR group.

Univariate analysis revealed that the resection method was the sole significant factor associated with both EBR and CRR. Pathologic findings and polyp type also significantly influenced CRR. In the multiple logistic regression analysis, the resection method remained the only significant factor of both EBR and CRR (OR 3.03, 95% CI 1.29–7.07, P = 0.011).

Conclusions STP-EMR seems to significantly improve en bloc and complete resection compared to C-EMR for non-pedunculated colorectal polyps of 15–20 mm, even though the procedure time of STP-EMR was longer than that of C-EMR.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1134V Presence of mucin droplets during endoscopic submucosal dissection at the submucosa and beyond

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DOI 10.1055/s-0046-1822461

Abstract Text
Mucinous adenocarcinoma is an uncommon subtype of colorectal cancer (10–20%), defined by extracellular mucin comprising more than half of the tumor and is associated with increased lymphatic involvement in early stages. Endoscopically, mucin may appear as “droplet-like” material, a nonspecific but important finding during endoscopic submucosal dissection (ESD). We present two cases in which mucin droplets were visualized in the resection plane, with different distribution and histology. In the first case, a recurrent 30-mm rectal lesion contained mucin infiltrating deeper layers, and histology confirmed mucinous adenocarcinoma. In the second case, a 30-mm colonic lesion showed mucin confined to the submucosa; en bloc resection revealed high-grade dysplasia with mucin-draining glands. Mucin during ESD may indicate malignancy, although it can also occur in benign lesions [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/bb808b39-aaca-40cb-abfa-c3cdb0d07959/Uploads/19978_Presence_of_%20mucin_%20droplets_%20during_%20endoscopic_%20submucosal_%20dissect....mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References
[1] Inal E, Zhang L, Salimian K, Ngamruengphong S. Submucosal mucin droplets: a rare endoscopic sign of colorectal adenocarcinoma with mucinous features. *Gastrointestinal Endoscopy* 2024; 99 (2): 297–298
[2] Xu X, Zhang C, Ni X et al. Population-based analysis on predictors for lymph node metastasis in T1 colon cancer. *Surgical Endoscopy* 2020; 34 (9): 4030–4040
[3] Luo C, Cen S, Ding G, Wu W. Mucinous colorectal adenocarcinoma: clinical pathology and treatment options. *Cancer Communications* 2019; 39 (1): 13

eP1135 Neoplasia detection rates in IBD surveillance

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DOI 10.1055/s-0046-1822462

Aims In inflammatory bowel disease (IBD) surveillance, current ESGE guidelines recommend a minimum neoplasia detection rate of > 8%, whilst desirable detection rates have not been defined. [1] These recommendations, however, are based on a limited number of studies, predominantly carried out in academic referral centres. We therefore aimed to evaluate neoplasia detection rates in IBD surveillance at a nationwide level, assessing performance across all endoscopists to determine whether existing detection rate thresholds should potentially be adjusted. Furthermore, to assess if conventional adenoma detection rate (ADR) in colorectal cancer screening correlates with neoplasia detection rate in IBD surveillance.

Methods We utilized data from the Swedish Registry for Colorectal Cancer Screening and Colonoscopy (SveReKKS), a prospectively entered, web-based national register. Data were retrieved for the period April 2019 to October 2025.

Variables extracted from the registry included indication for colonoscopy, bowel preparation, ileocecal intubation, presence of suspected malignancy, polyp detection, biopsy or removal of polyp, and corresponding histopathological results. Neoplasia detection was defined as dysplasia in lesions that were removed or biopsied. Data were not available for lesions that were not classified as polyps or cancer in the registry, nor for cases of “invisible” dysplasia (i.e., dysplasia in random biopsies). Adequate bowel preparation was defined as Boston Bowel Preparation Scale score >6 in total, with an individual segment score of ≥ 2 .

Results In total, 8,757 IBD surveillance colonoscopies were performed by 333 endoscopists. After excluding endoscopists that had registered less than 50 IBD surveillance colonoscopies, 3,386 endoscopies and 40 endoscopists remained. The mean age of the patients in the cohort was 53 (SD 15) years and the proportion of males was 58%. Bowel preparation was adequate in 95% of colonoscopies and ileocecal intubation was achieved in 97%. The overall neoplasia detection rate was 8.8% (95% CI 7.9, 9.8%), and cancer detection rate was 0.15% (95% CI 0.05, 0.34%). Endoscopist-specific detection rates ranged from 0.8% to 21.8%. The second-highest quintile (60–80%) and highest quintile (80–100%) of endoscopists had detection rates of 9.6–13.0% and 13.2–21.8%, respectively. Overall, 22 endoscopists registered more than 50 colonoscopies for both colorectal cancer screening and IBD surveillance. Among these endoscopists, adenoma detection rate (ADR) and neoplasia detection rate demonstrated a moderate-to-strong correlation ($R^2 = 0.59$; $\beta = 0.37$ [95% CI 0.23–0.52]). However, among endoscopists with a neoplasia detection rate <8%, ADR still ranged widely from 32% to 58%.

Conclusions These results indicate that the current European guidelines for neoplasia detection in IBD surveillance seem reasonable, however, higher detection rates can be achieved. Therefore, raising the minimum neoplasia detection threshold in IBD surveillance, and setting desirable thresholds, can be considered. Furthermore, although a high ADR in colorectal cancer screening correlated with neoplasia detection, this correlation was not absolute, suggesting that dedicated training in neoplasia detection in IBD surveillance may be required.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dekker E et al. Performance measures for colonoscopy in inflammatory bowel disease patients: European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy*. 2022; 54 (9): 904–915. doi:10.1055/a-1874-0946 Epub 2022 Jul 29 PMID: 35913069

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eP1136 Cost-Effectiveness of a Universal Rectal Endoscopic Submucosal Dissection Strategy Compared with Selective Resection Practice

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DOI 10.1055/s-0046-1822463

Aims Endoscopic submucosal dissection (ESD) provides superior en-bloc and curative resection rates for rectal neoplasia but at higher upfront cost. The cost-effectiveness of a universal rectal ESD strategy compared to EMR/ESD is unexplored within western practice. To evaluate the cost-effectiveness of universal rectal ESD compared with the current mixed EMR/ESD practice from St. Michael's Hospital in Toronto, Ontario, Canada (► **Table 1**).

► **Table 1** Base-Case and Sensitivity Analysis Results Comparing Universal Rectal ESD versus Current EMR/ESD Practice

Outcome	Status Quo (EMR/ESD mix)	Universal Rectal ESD	Incremental Difference (ESD – SQ)
Expected cost per patient (CAD)	\$2,650	\$7,850	+ \$5,200
Recurrence rate	10.6%	3.1%	– 7.5%
Hospital admission	30% (weighted)	80.8%	—
En-bloc resection	19.1%	75.8%	—
R0 resection	95.5%	96.4%	—
Curative resection (carcinoma)	9.3%	74.3%	—
ICER (CAD per recurrence avoided)	\$34,700		
Probability cost-effective of \$50,000 WTP	72%		

Methods A decision-analytic model was developed using rectal outcomes from an institutional registry (n = 195; EMR = 89, ESD = 106). Inputs included weighted probabilities of adverse events, admission, and recurrence. Costs were derived from micro-costing and provincial reimbursement schedules (Ministry of Health Schedule of Benefits 2024 in CAD). The primary outcome focused on cost per recurrence avoided within a 12-month horizon. Sensitivity analyses examined admission policy, recurrence rates, and resource costs; uncertainty was explored using 5,000 Monte Carlo simulations.

Results Base procedural costs were \$1,348 (EMR) and \$7,007 (ESD). Incorporating adverse events and retreatments, the mean expected cost per patient was \$2,650 for the current practice and \$7,850 for universal ESD. Recurrence for ESD decreased from 10.6% to 3.1% ($\Delta = 0.075$), yielding an ICER of \$34,700 per recurrence avoided. In a one-way analysis, ESD was cost-saving when admission probability fell below 25% or when EMR recurrence exceeded 13%. Probabilistic analysis demonstrated ESD to be cost-effective in 72% of iterations at a willingness-to-pay threshold of \$50,000 per recurrence avoided.

Conclusions Universal rectal ESD substantially reduces recurrence and retreatment risk compared to current practice. Although associated with higher upfront procedural cost, it is cost-effective in centers with optimized anesthesia and selective admission protocols. These findings support expansion of rectal ESD capacity where procedural expertise and resources are available.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

eP1137 A Retractable Robotic Device for Esophageal Endoscopic Submucosal Dissection: Preclinical Evaluation in an In Vivo Porcine Model

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DOI 10.1055/s-0046-1822464

Aims Endoscopic submucosal dissection (ESD) is an effective but technically challenging treatment for esophageal neoplasms, with significant complication risks. To address these limitations, various tissue traction techniques have been developed. This study evaluates the feasibility and efficacy of a novel retractable robotic traction device designed to facilitate tissue traction during esophageal ESD.

Methods Three endoscopists performed ESD procedures on live porcine esophagus using both the robotic device and the conventional technique. Artificial lesions involving 50 % and 30 % of the esophageal circumference were created in both the mid and lower esophagus and assigned to either group. Primary outcomes included procedure time, dissection speed, incidence of procedure-related adverse events, and blind dissection rate.

Results We performed 12 robotic ESDs (RES) and 12 conventional ESDs (CES) across six pigs. RES showed a significantly shorter total procedure time (30.1 ± 13.1 minutes) compared to CES (42.3 ± 17.4 minutes, $p < 0.05$). RES also achieved a significantly higher submucosal dissection speed (48.3 ± 7.8 mm²/min versus 20.2 ± 7.4 mm²/min, $p < 0.05$), along with a lower rate of blind dissection (8.5 ± 2.7 % versus 24.2 ± 11.1 %, $p < 0.05$) and muscle damage (3.0 ± 1.4 versus 5.9 ± 3.2 %, $p < 0.05$). The advantage of RES over CES was more pronounced in lesions involving 50 % of the esophageal circumference than in those involving 30 %.

Conclusions The robotic gripper facilitated efficient ESD by providing controlled, multidirectional traction. These findings suggest the device may enhance procedural performance and overcome technical challenges of ESD, particularly in large esophageal lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1138 Withdrawal time and CAdE are independent predictors of Adenoma Detection Rate: Result from a national prospective study

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DOI 10.1055/s-0046-1822465

Aims Withdrawal time (WT) is a key quality indicator and technical determinant of colonoscopy performance. The integration of artificial intelligence (AI), particularly computer-aided detection (CAdE) systems, has demonstrated potential to enhance adenoma detection rate (ADR). However, the interaction between the CAdE and procedural dynamics, including its potential to inadvertently prolong WT, remains poorly understood. In this study, we sought to evaluate the independent and combined effects of CAdE and WT on ADR in a real-world multicentre setting.

Methods Data were analysed from the NAIAD trial, a prospective, stepped-wedge, multicentre study conducted across 25 hospitals involving 4,514 colonoscopies. The study comprised three phases: Phase 1 (baseline), Phase 2 (CAdE active), and Phase 3 (post-intervention). Changes in WT were examined across phases. Mixed-effects logistic regression was employed to assess the independent contributions of CAdE (Phase 2 vs Phases 1 + 3) and WT (per minute) to ADR, adjusting for patient age, endoscopist expertise and gender, bowel preparation quality, and hospital type, with random effects for site and endoscopist.

Results Implementation of CAdE (Phase 2) was associated with increased procedural duration and improved detection. Mean WT increased from 10.2 ± 5.5 minutes at baseline to 10.9 ± 5.7 minutes during AI-assisted colonoscopy, accompanied by an ADR increase from 30.0 % to 34.8 % ($p < 0.001$). In multivariable mixed-effect regression analysis, both CAdE use and WT were

independent predictors of ADR. CAdE use increased the odds of adenoma detection by 17 % (aOR 1.17; 95 % CI, 1.01–1.35; $p = 0.040$), while each additional minute of WT increased ADR by 11 % (aOR 1.11; 95 % CI, 1.09–1.13; $p < 0.001$). Following CAdE withdrawal (Phase 3), mean WT and ADR declined to 8.9 minutes and 27.6 %, respectively, below baseline levels.

Conclusions CAdE implementation and withdrawal time independently and synergistically improve adenoma detection. Although AI use incidentally prolongs WT, its impact on ADR extends beyond this effect. The decline in WT and ADR after CAdE withdrawal suggests a transient behavioural adaptation. While CAdE can augment endoscopic performance, sustained meticulous withdrawal technique remains fundamental to high-quality colonoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1139 High volume training of fellows in colorectal endoscopic submucosal dissection is feasible and safe in western centres

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DOI 10.1055/s-0046-1822466

Aims Adoption of ESD has been limited and gradual in western centres due to the complexity of the procedure, a long learning curve, limited opportunities to train and a lack of standard guidelines for training. Most ESD practitioners embark on training “in-post” after specialisation and ESD fellowships are scarce. There are no reports from western centres of high volume ESD training of endoscopy fellows. The ESGE have published a recommended curriculum for ESD training, including a recommendation for 10 ESDs to be completed under mentorship before independent practice. We report the experience of ESD training in a structured fellowship toward achieving this standard.

Methods Patients who underwent colorectal ESD at a tertiary referral centre were included. Data recorded included procedure time, en bloc and R0 resection, complications and proficiency of resection in cm²/hr. Outcomes of ESD performed by fellows were reported and time to achieve 10 independent resections under mentorship was calculated for those following a dedicated ESD training program

Results 1077 lesions were treated using ESD. Fellows performed part or complete ESD of 277 lesions at an average of 23 cases per fellow (range 3–105). 80 % of fellow performed ESD were rectal lesions versus 57 % of expert performed ESD. En bloc and R0 resection rates for ESD involving fellows were 99 % and 85 %. There was no difference in complications ($p = 0.75$) between trainers and fellows. Mean proficiency of ESD involving fellows was 8.3cm²/hr, 5 of 12 fellows who performed ESD followed a dedicated ESD training program, all achieving 10 independently performed ESDs. 2 had interrupted training periods due to research and other commitments. For the rest, the time from first ESD experience in patients of any kind to completing the 10th independent ESD was 46, 52, and 33 weeks

Conclusions In one of the first reports of fellow training in significant volume of ESD in western centres, we demonstrate that structured training consistently results in achieving ESGE ESD training curriculum requirements within an acceptable fellowship period. Training can be achieved with high quality outcomes and acceptable proficiency without compromising patient safety.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Esophagus

14/05/2026, 13:00–13:30

ePoster Connect:
Station 1 (Level 0)**eP1140 Role of Preprocedural Biopsies in Upper Gastrointestinal Tumors Undergoing Endoscopic Submucosal Dissection (ESD) and Impact on Fibrosis and Resection Rates****Authors** Youssef M¹, Ching Hui Yee C², Ghobrial S³, Khalaf K¹, Bechara R⁴**Institutes** 1 St. Michael's Hospital, Toronto, Canada; 2 McGill University, Montréal, Canada; 3 University of Manitoba, Winnipeg, Canada; 4 Queen's University, Kingston, Canada**DOI** 10.1055/s-0046-1822467

Aims Endoscopic submucosal dissection (ESD) is a minimally-invasive procedure widely used for resection of upper gastrointestinal lesions (GI) including esophageal and gastric tumors. Although preprocedural biopsies are routinely performed, their role is limited due to sampling error and risk of fibrosis which may impact technical outcomes of ESD. This study aims to evaluate the diagnostic performance of pre-ESD biopsies and the associated risk of fibrosis as well as the impact on technical outcomes of ESD.

Methods This is a retrospective cohort study of all patients who underwent ESD for upper GI lesions at Kingston Health Sciences Center (KHSC) between October 2016–September 2025. We analyzed clinical, endoscopic, and histopathologic characteristics of lesions as well as patient outcomes. Histological diagnoses were categorized using the WHO Classification criteria for GI lesions, 5th edition. Rates of concordance and upstaging were calculated comparing the initial and final resected pathology. Univariate analysis between the presence of fibrosis and technical outcomes such as resection time, procedural efficiency, en-bloc, R0, curative resections, and adverse events were used to calculate odds ratios with 95 % confidence intervals. P-value of <0.05 was considered statistically significant.

Results This cohort study included 183 patients with upper GI lesions (esophageal = 120, gastric = 63) that underwent ESD at KHSC. 158/183 (86.3 %) of patients had preprocedural biopsies prior to their ESD at KHSC. The overall histologic concordance rate between tissue biopsy and ESD specimens was 48.4 % (38.8 % for esophageal and 68.0 % for gastric lesions). 46.4 % (n = 71) of lesions were upstaged from initial biopsy with 84.5 % (n = 60) of those final resections being neoplastic lesions. The risk of fibrosis was similar between patients with and without pre-ESD biopsies (23.9 % vs 36.0 %, p = 0.115). Lesions with fibrosis affected the procedural efficiency (mean 11.2 min/cm² vs. 7.4 min/cm², p = 0.026). However, the presence of fibrosis did not have a statistically significant impact on en-bloc resections (p = 1.00), R0 resections (p = 0.763), curative resections (p = 0.647), or on periprocedural adverse events (p = 0.719). Subgroup analysis showed that fibrosis did affect ESD efficiency in gastric lesions (14.0 min/cm² vs 6.1 min/cm², p = 0.005) but not in esophageal lesions (p = 0.296). Technical outcomes and adverse events remained consistent between site-specific analyses and the overall cohort.

Conclusions Preprocedural biopsies have poor concordance rate with post-ESD tissue histology. Biopsies of upper GI lesions do not seem to increase the risk of fibrosis. Fibrosis may limit ESD procedural efficiency but does not impact ESD technical outcomes or periprocedural adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1141 Endoscopic band ligation in randomized controlled trials of primary prophylaxis of variceal bleeding: Influence of study and patient characteristics on event outcomes**Authors** Kalafateli M¹, Papantoniou K², Lekakis V³, Aggeletopoulou I², Triantos C²**Institutes** 1 Department of Metabolism, Digestion and Reproduction, Imperial College London, London, United Kingdom; 2 Division of Gastroenterology, Department of Internal Medicine, University of Patras, 26504, Patras, Greece; 3 Academic Department of Gastroenterology, Laiko General Hospital, Athens, Greece**DOI** 10.1055/s-0046-1822468

Aims Both endoscopic band ligation (EBL) and non-selective beta-blockers are used for primary prophylaxis of variceal bleeding, but the performance of EBL may vary across trials. We aimed to evaluate how study design and patient characteristics influence EBL-related outcomes in this context [1–6].

Methods We performed a comprehensive search of MEDLINE, Embase, Cochrane Library, and major conference proceedings from 1995 to April 2025 to identify randomized controlled trials comparing EBL with placebo or alternative interventions. Sample-weighted univariate and multivariate linear regression models were applied to examine factors associated with bleeding events, variceal eradication, and mortality. Weighting was based on the number of patients undergoing ligation in each study.

Results Forty RCTs were included, comprising 2055 patients treated with EBL. The pooled incidence of procedure-associated bleeding was 3 % (95 % CI 2–4 %), while post-ligation bleeding occurred in 11 % (95 % CI 9–15 %). In multivariate models, overtube use was independently associated with increased procedure-related bleeding ($\beta = 0.710$; 95 % CI 5.389–26.124; p = 0.007). Alcohol-related liver disease showed a borderline association with higher post-ligation bleeding risk ($\beta = 0.427$; 95 % CI –0.019–0.324; p = 0.078). Variceal eradication was achieved in 94 % of cases (95 % CI 88–97 %), and a higher prevalence of red wale marks correlated with improved eradication rates ($\beta = 0.537$; 95 % CI 0.002–0.335; p = 0.048). The overall mortality estimate was 18.3 % (95 % CI 14.0–22.2 %), with longer follow-up duration significantly linked to higher mortality ($\beta = 0.651$; 95 % CI 0.366–1.072; p < 0.001).

Conclusions Outcomes of EBL for primary prophylaxis show substantial heterogeneity across trials. Procedural factors, patient profiles, and follow-up duration significantly influence bleeding, eradication, and mortality outcomes. Recognizing these determinants is essential for designing and interpreting future EBL studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaplan D.E., Ripoll C., Thiele M., Fortune B.E., Simonetto D.A., Garcia-Tsao G., Bosch J. AASLD Practice Guidance on risk stratification and management of portal hypertension and varices in cirrhosis. *Hepatology* 2024; 79: 1180–1211. doi:10.1097/hep.0000000000000647
- [2] Drolz A., Schramm C., Seiz O., Groth S., Vettorazzi E., Horvatits T., Wehmer M.H., Schramm C., Goeser T., Roesch T. et al. Risk factors associated with bleeding after prophylactic endoscopic variceal ligation in cirrhosis. *Endoscopy* 2021; 53: 226–234. doi:10.1055/a-1214-5355
- [3] Tevethia H.V., Pande A., Vijayaraghavan R., Kumar G., Sarin S.K. Combination of carvedilol with variceal band ligation in prevention of first variceal bleed in Child-Turcotte-Pugh B and C cirrhosis with high-risk oesophageal varices: the 'CAVARY TRIAL'. *Gut* 2024; 73: 1844–1853. doi:10.1136/gut-jnl-2023-331181
- [4] Funakoshi N., Duny Y., Valats J.C., Ségalas-Largey F., Flori N., Bismuth M., Daurès J.P., Blanc P. Meta-analysis: beta-blockers versus banding ligation for primary prophylaxis of esophageal variceal bleeding. *Ann Hepatol* 2012; 11: 369–383
- [5] (NICE), N.I.f.H.a.C.E. Clinical and cost-effectiveness of non-selective beta-blockers and endoscopic variceal band ligation for the primary prevention of bleeding in people with oesophageal varices due to cirrhosis. 2023;

[6] De Franchis R., Bosch J., Garcia-Tsao G., Reiberger T., Ripoll C. Baveno VII – Renewing consensus in portal hypertension. *J Hepatol* 2022; 76: 959–974. doi:10.1016/j.jhep.2021.12.022

eP1142 Unveiling The Risk Of Esophageal Squamous Cell Carcinoma In Achalasia: End-Stage Disease Carries a Markedly Higher Prevalence and Incidence. A Single-Referral Center Study With Systematic Review And Meta-Analysis

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DOI 10.1055/s-0046-1822469

Aims Achalasia is a rare esophageal motility disorder defined by impaired lower esophageal sphincter (LES) relaxation and complete aperistalsis of the esophageal body. Its incidence is estimated at ~1/100,000 per year, with a prevalence near 10/100,000. A recognized long-term complication is esophageal squamous cell carcinoma (ESCC), occurring at rates ranging from 0.4% to 9.2% and significantly exceeding that of the general population. Despite compelling evidence of elevated risk, international guidelines still do not recommend routine endoscopic surveillance for achalasia patients. This study quantifies ESCC risk in end-stage achalasia — defined by longstanding stasis and sigmoid-shaped megaesophagus — and evaluates whether surgical correction mitigates cancer risk. We report a single-center cohort of patients undergoing Laparoscopic Heller-Dor (LHD), supplemented by a systematic review and meta-analysis of published literature.

Methods All consecutive patients with radiologically confirmed end-stage achalasia undergoing LHD at the University of Padova between 2000–2025 were enrolled. Pre-operative diagnostics included endoscopy, barium swallow, and manometry. Post-operative surveillance consisted of endoscopy one year after surgery and every two years thereafter, aimed at detecting malignant transformation. Cancer prevalence and incidence rates were calculated. We additionally conducted a systematic search of MEDLINE, EMBASE, and the Cochrane Library (from inception to January 2025) to identify studies reporting ESCC in achalasia. Pooled prevalence, pooled incidence, rate ratios, and 95% confidence intervals (CIs) were estimated according to PRISMA standards.

Results Among 1,782 patients who underwent LHD for achalasia, 115 exhibited radiological stage IV disease (median age 55 y, IQR 42–63). After a median follow-up of 8.2 years (IQR 5.1–15.6), 4 patients (3.47%) developed ESCC, only one at early stage despite systematic postoperative endoscopic surveillance (► **Table 1**). Three cases arose more than 10 years after surgery, and one occurred in a patient with persistent dysphagia after failed surgical outcome. By contrast, no ESCC cases were detected among the remaining 1,667 patients with stage I–III disease (median follow-up 10.2 y).

The systematic review identified 26 eligible studies spanning 13 countries, comprising 12,962 achalasia patients. Overall ESCC prevalence in achalasia was ~2%, with an incidence of 173 cases per 100,000 patient-years. Stratified analysis demonstrated substantially higher risk in end-stage disease, with an incidence of 724 vs 114 cases per 100,000 patient-years (rate ratio 6.34; 95% CI 3.24–12.38). Most tumors occurred in males (81%) and predominantly in the mid-thoracic esophagus (52%).

Conclusions Conclusion: Patients with end-stage achalasia and sigmoid megaesophagus exhibit a significantly elevated ESCC risk that persists even after surgical correction. These findings support reconsideration of current guidelines and emphasize the need for structured, targeted endoscopic surveillance in this high-risk subgroup. Further prospective studies are warranted to define evidence-based surveillance strategies and to refine risk-stratification thresholds for early detection.

Conflicts of Interest Edoardo Vincenzo Savarino has served: as a speaker for Abbvie, Agave, AGPharma, Alfasigma, Aurora Pharma, CaDiGroup, Celltrion, Dr Falk, EG Stada Group, Fenix Pharma, Fresenius Kabi, Galapagos, Janssen, JB Pharmaceuticals, Innovamedica/Adacyte, Malesci, Mayoly Biohealth, Omega Pharma, Pfizer, Reckitt Benckiser, Sandoz, SILA, Sofar, Takeda, Tillots, Unifarco; as a consultant for Abbvie, Agave, Alfasigma, Biogen, Bristol-Myers Squibb, Celltrion, Diadema Farmaceutici, Dr. Falk, Fenix Pharma, Fresenius Kabi, Janssen, JB Pharmaceuticals, Merck & Co, Nestlé, Reckitt Benckiser, Regeneron, Sanofi, SILA, Sofar, Synformulas GmbH, Takeda, Unifarco; and he received research support from Pfizer, Reckitt Benckiser, SILA, Sofar, Unifarco, and Zeta Farmaceutici. None of these activities are related to the present article All other authors declare no conflicts of interest.

eP1143 Spectrum, Etiology, and Outcomes of Esophageal Strictures in Patients Presenting With Dysphagia: A Three-Year Endoscopic Experience From a Resource-Limited Tertiary Care Center

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DOI 10.1055/s-0046-1822470

Aims To evaluate the frequency, etiological patterns, and clinical outcomes of esophageal strictures diagnosed on endoscopy in patients presenting with dysphagia, and to highlight challenges in management within a resource-limited environment [1, 2].

Methods This prospective observational study was conducted at Naimat Begum Hamdard University Hospital from January 2022 to January 2025. A total of 200 consecutive patients presenting with dysphagia (120 males, 80 females) underwent upper gastrointestinal endoscopy. Findings were categorized into stricturing lesions and non-stricturing causes (candida esophagitis, motility disorders, or normal examination). Patients with strictures were further clas-

► **Table 1**

Patient	Years after LHD	Tumor Location	Stage	Outcome
1 (M)	2	Upper third	IIA (pT2N1M0)	Disease-free after esophagectomy + adjuvant chemotherapy
2 (M)	14	Middle third	IIIB (pT4aN1M0)	Deceased 2 years after esophagectomy + adjuvant chemotherapy
2 (F)	13	Middle third	IA (pT1aN0M0)	Disease-free after esophagectomy
4 (F)	13	Lower third	IVB (cT4N2M1)	Palliative chemotherapy

sified by etiology, clinical presentation, need for repeated dilatation, complications, and requirement of palliative interventions.

Results Of the 200 dysphagia patients, **130 (65%)** were found to have esophageal strictures. Among these:

- **55 (42.3%)** had benign peptic strictures related to chronic GERD.
- **43 (33.1%)** had malignant strictures, predominantly in the mid and distal esophagus.
- **5 (3.8%)** had radiation-induced strictures following treatment for head and neck cancer.
- **9 (6.9%)** had corrosive strictures secondary to caustic ingestion.
- **18 (13.8%)** had proximal smooth strictures/webs linked to iron deficiency anemia.
- Patients with corrosive and peptic strictures frequently required multiple sessions of endoscopic dilatation. **Five patients (3 corrosive, 2 peptic)** developed perforations during dilatation. Tumor-related strictures typically presented late, with most patients requiring **palliative self-expandable metal stent placement** due to inoperability.

Conclusions Esophageal strictures constitute a major cause of dysphagia in our population, with peptic and malignant strictures being the most prevalent etiologies. Corrosive and peptic strictures pose significant management challenges, often requiring repeated interventions and carrying a risk of perforation. Late presentation of malignant strictures limits curative options, necessitating palliative stenting. In resource-constrained settings, **early referral and timely endoscopy are essential to improve outcomes and reduce morbidity.**

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hussain I et al. Etiology And Outcome Of Esophageal Stricture Among Children: Local Data From Tertiary Care Children Hospital Of Multan, Pakistan". *Khyber Medical University Journal* VOL 13 (NO. 2): 2021; PP 86–90. doi:10.35845/KMUJ.2021.20915
- [2] Endoscopic management of patients with esophageal stricture in the oncology practice: a narrative review Tomonori Yano[^], Hironori Sunakawa, Keiichiro Nakajo, Tomohiro Kadota, Yusuke Yoda Department of Gastroenterology and Endoscopy, National Cancer Center Hospital East, Kashiwa, Japan

eP1144 Impact of the Double Scope Method on Incomplete LES Myotomy and the Occurrence of Blown-out Myotomy During POEM

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DOI 10.1055/s-0046-1822471

Aims The Double Scope Method (DS), performed during peroral endoscopic myotomy (POEM) for esophageal achalasia, is a technique used to objectively confirm complete myotomy of the lower esophageal sphincter (LES). Although several reports have demonstrated the usefulness of DS, no studies have investigated its association with the development of blown-out myotomy (BOM). In this study, we retrospectively evaluated the impact of DS on incomplete LES myotomy and the occurrence of BOM in POEM cases at our institution.

Methods We included 490 patients who underwent POEM at our institution between September 2011 and November 2023 and had at least two years of postoperative follow-up. BOM was defined according to Joseph et al. (GIE 2021) as "a distal esophageal diverticulum corresponding to the previous myotomy site, characterized by a wide opening > 2 cm and ≥ 50% dilation of the esophageal body." Patients with pre-existing diverticula were excluded. DS was introduced in the 109th case in January 2015 and thereafter performed routinely except in technically difficult cases. Patients were divided into a DS group (n = 380) and a non-DS group (n = 108). We compared the rates of incomplete LES myotomy, overall BOM occurrence, and BOM caused by incomplete LES myotomy between groups. Fisher's exact test was used for statistical comparisons, with p < 0.05 considered statistically significant.

Results The success rate of DS was 99.5% (380/382). The rate of incomplete LES myotomy was 0% (0/380) in the DS group and 3.7% (4/108) in the non-DS group, with a significantly lower rate in the DS group (p = 0.002). The incidence of BOM was 0.5% (2/380) in the DS group and 0.9% (1/108) in the non-DS group, with no significant difference (p = 0.53). BOM attributable to incomplete LES myotomy was not observed in the DS group (0%) but occurred in 0.9% (1/108) of the non-DS group; however, this difference was not statistically significant (p = 0.22). No severe adverse events associated with DS were observed.

Conclusions DS is a reliable technique for objectively confirming complete LES myotomy during POEM, and routine use is advisable. The introduction of DS significantly reduced the incidence of incomplete LES myotomy. Although the overall incidence of BOM in this series was lower than previously reported and statistical significance regarding the impact of DS on BOM occurrence was not demonstrated, the reduction in incomplete LES myotomy suggests that DS may theoretically contribute to preventing BOM. Further accumulation of cases is warranted to clarify this relationship.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1145 Double Trouble, Double Myotomy: Simultaneous D-POEM for Two Blown-Out Myotomy Segments Post-POEM

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DOI 10.1055/s-0046-1822472

Introduction Blown-out myotomy (BOM) is a rare complication following Heller myotomy or Peroral Endoscopic Myotomy (POEM), characterized by pseudodiverticular dilation at the site of the previous myotomy [1, 2]. It results from mucosal herniation through the muscular defect and can lead to food stasis and symptom recurrence. Risk factors include type III achalasia, elevated integrated relaxation pressure (IRP), and inadequate myotomy extension [3–5]. Diverticular-Peroral Endoscopic Myotomy (D-POEM) has emerged as a promising minimally invasive treatment [6, 7].

Case Presentation A 68-year-old man with type III achalasia, who had previously undergone an anterior POEM in 2017, presented with recurrent dysphagia, retrosternal pain, and mild weight loss (Eckardt score 7). Upper GI endoscopy revealed two pseudodiverticular ectasias—BOMs—in the middle and distal esophagus. Barium swallow confirmed esophageal dilation. The patient underwent endoscopic treatment utilizing a D-POEM approach involving double septotomy.

Procedure Under general anesthesia, endoscopy revealed food debris inside the BOMs, which was removed using a Roth-Net. A mucosal incision was performed 8 cm above the squamocolumnar junction. Submucosal tunneling and full-thickness myotomy were extended 8 cm (with 3 cm on gastric side), including the distal diverticular septum. Mucosal closure was achieved with four endoclips. To address the middle BOM, a second mucosal entry was created. A 7 cm tunnel and septotomy were performed in a similar manner, followed by clip closure.

Outcome Postoperative endoscopy after 24 hours confirmed proper clip placement and mild mucosal trauma. The patient resumed oral intake within 24 hours and was discharged on postoperative day 2. At three-month follow-up, symptoms had resolved (Eckardt score 2).

Conclusion This is the first reported case of simultaneous double D-POEM for BOM in two esophageal segments. D-POEM is safe, effective, and should be considered for symptomatic BOM.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sakaguchi H, Tanaka S, Abe H, Motomura D, Hori H, Toyonaga T et al. A new treatment for blown-out myotomy, a diverticulum formed after peroral endoscopic myotomy. *Endoscopy*. dicembre 2024; 56 (S 01): E74–5

- [2] Zhang ZC, Xu JQ, Pan HT, Liu XY, Chen SY, Zhong YS et al. Peroral endoscopic myotomy for symptomatic blown-out myotomy following previous myotomy for achalasia. *Endoscopy*. 28: marzo 2025; a-2552–8282
- [3] Triggs JR, Krause AJ, Carlson DA, Donnan EN, Campagna RAJ, Jain AS et al. Blown-out myotomy: an adverse event of laparoscopic Heller myotomy and peroral endoscopic myotomy for achalasia. *Gastrointestinal Endoscopy*. aprile 2021; 93 (4): 861–868.e1
- [4] El Abiad R, Ashat M, Khashab M. Complications related to third space endoscopic procedures. *Best Practice & Research Clinical Gastroenterology*. agosto 2024; 71: 101908
- [5] Halder S, Acharya S, Kou W, Campagna RAJ, Triggs JR, Carlson DA et al. Myotomy technique and esophageal contractility impact blown-out myotomy formation in achalasia: an in silico investigation. *American Journal of Physiology-Gastrointestinal and Liver Physiology*. 1 maggio 2022; 322 (5): G500–12
- [6] Kuipers T, Ponds FA, Fockens P, Bastiaansen BAJ, Pandolfino JE, Brede-noord AJ. Focal Distal Esophageal Dilation (Blown-Out Myotomy) After Achalasia Treatment: Prevalence and Associated Symptoms. *Am J Gastroenterol*. ottobre 2024; 119 (10): 1983–9
- [7] Rubesin SE, Kennedy M, Levine MS, Rosato EF, Laufer I. Distal esophageal ballooning following Heller myotomy. *Radiology*. maggio 1988; 167 (2): 345–7

ePoster Connect: Hepatopancreaticobiliary

14/05/2026, 13:00–13:30
Station 2 (Level 0)

ePoster Connect:

eP1146 SECONDARY BILIARY CIRRHOSIS — The Tip Of Iceberg: Our Experience, Insights, And Evolving Perceptions

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DOI 10.1055/s-0046-1822473

Aims : Secondary biliary cirrhosis (SBC) arises from sustained obstruction of the biliary tract, culminating in progressive cholestatic injury and fibrosis. Despite its clinical significance, literature delineating its etiological spectrum, onset chronology, and biochemical–radiological characteristics remains remarkably scarce. Emerging evidence suggests that timely and appropriate biliary intervention may partially reverse fibrosis. Our aim is to elucidate the prevalence, delineate the relative contribution of benign and malignant causes, determine the temporal evolution from disease onset to cirrhosis, and evaluate post-interventional outcomes [1–2]

Methods The study was conducted at Gastroenterology Department of a major tertiary referral centre in north-west India. Among all admitted 1950 extrahepatic biliary obstruction (EHBO) patients, patients of SBC were selected. Primary objective of this study is to assess prevalence of SBC in all EHBO patients. Secondary objectives were to assess sociodemographic pattern, clinico-biochemical characteristics, aetiological spectrum, duration of onset of secondary biliary cirrhosis, radiological presentation, severity of cirrhosis and outcomes of biliary decompression

Results Out of a total of 1,950 individuals enrolled, 149 patients developed SBC & prevalence came out to be 7.6%. Among them, 53.7% patients were females & 46.3% were males. 33.6% patients were benign ones while the rest, 66.4% were of malignant aetiologies. Most common aetiology repercussion into SBC is carcinoma gall bladder which accounts for 33.6% cases. Among benign aetiologies, common bile duct (CBD) stricture is the most common one reported with 23.5% cases. Median duration for the development of SBC is less for malignant aetiologies which is 2(2–4) months, whereas for benign causes it is 96 (57–123) months with significant p value of <0.001. In all benign aetiologies of SBC, free fluid was present in all patients. The frequency of intervention

varied significantly between the two groups with p value 0.01. The decrease in liver stiffness measurements (LSM) over the 12 months period was statistically significant in cholangiocarcinoma, carcinoma head of pancreas, metastatic lymphadenopathy and among all benign aetiologies with p value <0.05.

Conclusions In summation, SBC exhibited a conspicuous predilection for the female cohort, with malignant aetiologies predominating and demonstrating a truncated latency to overt manifestation. Notably, the institution of biliary drainage engendered a marked attenuation of LSM, corresponding to fibrosis, across both investigative arms, underscoring its potent therapeutic efficacy and capacity to ameliorate disease trajectory.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jeng K, Shih S, Chiang H, Chen B. Secondary Biliary Cirrhosis: A Limiting Factor in the Treatment of Hepatolithiasis. *Arch Surg* 1989; 124 (11): 1301–1305. doi:10.1001/archsurg.1989.01410110059012
- [2] Hammel P, Couvelard A, O'Toole D, Ratouis A, Sauvanet A, Fléjou JF et al. Regression of liver fibrosis after biliary drainage in patients with chronic pancreatitis and stenosis of the common bile duct. *N Engl J Med* 2001; 344 (6): 418–23

eP1147 Global lifetime risks of developing and dying from pancreatitis from 1990 to 2050: a cross-sectional analysis from the Global Burden of Disease Study 2021

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DOI 10.1055/s-0046-1822474

Aims Limited research has been conducted on the lifetime risks of pancreatitis, defined as the chance of developing or dying from the disease over one's lifetime. This study aims to estimate the global lifetime risks of pancreatitis from 1990 to 2021 [1–3].

Methods We used the Global Burden of Disease (GBD) Study 2021 estimates of pancreatitis incidence and the competing risks of death from any cause other than pancreatitis to calculate the cumulative lifetime risks of pancreatitis. Regional and gender disparities, health inequalities, temporal trends, and future projections were explored.

Results In 2021, the global lifetime risks of developing and dying from pancreatitis were 2.93% (95% CI: 2.92%–2.94%) and 0.16% (95% CI: 0.16%–0.16%), respectively. The Socio-demographic Index (SDI) was positively correlated with lifetime incidence risk ($r = 0.707$, $p < 0.001$) and exhibited a weak positive correlation with lifetime mortality risk ($r = 0.248$, $p < 0.001$). Eastern Europe and High-income North America had the highest lifetime risk of developing pancreatitis, while Eastern Europe had the highest mortality risk. The male-to-female lifetime risk ratios were 1.04 (95% CI: 1.03–1.04) for incidence and 1.24 (95% CI: 1.20–1.28) for mortality. The mortality risk after age 70 accounted for 56% of the overall lifetime risk. Between 1990 and 2021, Western Europe experienced the largest increase in incidence risk, while Eastern Europe had the largest increase in mortality risk.

Conclusions The lifetime risk of developing pancreatitis is approximately 1 in 34, with geographic variations and higher risks in males. Targeted prevention in high-risk areas and focused management among the elderly are essential to reducing the future burden of pancreatitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ouyang G, Pan G, Liu Q et al. The global, regional, and national burden of pancreatitis in 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *BMC Med* 2020; 18 (1): 388. doi:10.1186/s12916-020-01859-5

[2] Wang S, Zheng R, Li J et al. Global, regional, and national lifetime risks of developing and dying from gastrointestinal cancers in 185 countries: a population-based systematic analysis of GLOBOCAN. *Lancet Gastroenterol Hepatol* 2024; 9 (3): 229–237. doi:10.1016/S2468-1253(23)00366-7

[3] Feigin VL, Nguyen G et al. GBD 2016 Lifetime Risk of Stroke Collaborators. Global, Regional, and Country-Specific Lifetime Risks of Stroke, 1990 and 2016. *N Engl J Med*. 2018; 379 (25): 2429–2437. doi:10.1056/NEJMoa1804492

eP1148 Outcomes and Adverse Events of EUS-Guided Rendezvous Technique at Our Institution

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DOI 10.1055/s-0046-1822475

Aims The EUS-guided rendezvous technique (EUS-RV) is a useful salvage method for cases in which biliary cannulation during ERCP is difficult. However, the procedure has not been standardized, and technical approaches vary among institutions. Although adverse events such as bile leakage and bleeding have been reported, detailed analyses remain limited. At our institution, puncture of the intrahepatic bile duct (B2/B3) from the stomach is the first-line approach, whereas puncture of the common bile duct from the second portion of the duodenum (D2 position) is selected when intrahepatic bile duct dilation is insufficient. This study evaluated the outcomes and adverse events associated with EUS-RV performed at our institution.

Methods A total of 106 EUS-RV procedures were performed at our institution between November 2018 and October 2025. The puncture route, technical success rate, time to biliary cannulation, and adverse events were retrospectively analyzed. Technical success was defined as successful bile duct cannulation. Cannulation time was defined as the interval from ERCP failure to successful cannulation with EUS-RV. Adverse events were defined as those directly attributed to the EUS-RV procedure.

Results The median age was 77 years, and 54 patients were male. Primary diseases included common bile duct stones (n = 44), intrahepatic stones (n = 3), pancreatic cancer (n = 29), distal cholangiocarcinoma (n = 10), hilar cholangiocarcinoma (n = 6), ampullary cancer (n = 3), and others (n = 11). Puncture routes were B2/B3 in 60 cases, the D2 position in 44 cases, and the D1 position (push position at the duodenal bulb) in 2 cases. The technical success rate was 82.1 % (n = 87/106). Causes of technical failure included insufficient bile duct dilation (n = 7), inability of the guidewire to pass through the papilla or biliary stricture (n = 11), and failure of the duodenoscope to reach the papilla after guidewire placement (n = 1). The mean cannulation time was 29 minutes. EUS-RV related adverse events occurred in 5 cases (4.7 %), consisting of bile leakage (n = 2) and intraductal bleeding (n = 3). Bile leakage occurred in one case punctured from the D1 position and in another case punctured from the duodenal bulb with stretch position. Bleeding events were attributed to B3 puncture. All adverse events improved with conservative management, and no additional interventions were required.

Conclusions Adverse events related to EUS-RV occurred in 4.7 %. Puncture from the duodenal bulb may increase the risk of bile leakage and should be avoided when possible. Technical refinements and representative adverse event cases from our experience will be presented with video.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1149 Microbial and Metabolic Signatures in Locally Advanced Pancreatic Ductal Adenocarcinoma: Insights from V1–V9 Sequencing and Metabolomics

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DOI 10.1055/s-0046-1822476

Aims Pancreatic Ductal Adenocarcinoma (PDAC) remains one of the most lethal malignancies, projected to become the second leading cause of cancer death by 2040. The poor and heterogeneous prognosis, particularly in the Locally Advanced PDAC (LAD-PDAC) subgroup, highlights the urgent need for robust pre-treatment predictive biomarkers. Recent evidence implicates the intratumoral microbiota and metabolic reprogramming in disease progression and therapeutic response. This study aimed to characterize and integrate the microbial and metabolic signatures in pre-treatment tumor biopsies of LAD-PDAC patients, leveraging high-resolution sequencing to improve taxonomic clarity.

Methods A prospective cohort of LAD-PDAC patients (n = 65) undergoing Endoscopic Ultrasound-Guided Fine Needle Biopsy (EUS-FNB) was enrolled. The microbial community structure was characterized using 16S rRNA gene sequencing of the extended V1–V9 regions to achieve higher species-level resolution compared to standard protocols. Untargeted metabolomics analysis was performed to identify the functional chemical landscape. Alpha and Beta diversity metrics were correlated with clinical and morphological variables, including surgical status, tumor size reduction following neoadjuvant therapy, and basal glucose levels.

Results High-resolution sequencing successfully identified 267 genera and 767 species, enriched for taxa typically associated with the skin, oral cavity, and gut (e.g., *C. acnes*, *K. pneumoniae*, *S. aureus*, *H. pylori*, *E. faecalis*). The metabolomic profiling revealed 413 known metabolites, dominated by lipids and lipid-like molecules (~22.6 %) and organic acids and derivatives (~23.6 %). Crucially, the Beta-diversity of the microbial community emerged as a significant pre-treatment determinant: the microbial composition was significantly distinct in patients who later underwent surgical resection compared to those who did not (p = 0.026). Furthermore, patients who showed a dimensional reduction in tumor size post-therapy presented a significantly different microbial profile compared to non-responders (p = 0.031). No single microbial taxa or metabolite was found to be significantly discriminant after correction for multiple comparisons.

Conclusions Our findings demonstrate that the overall structure and diversity of the intratumoral microbiota, rather than specific single markers, is a pre-existing biological feature significantly associated with critical clinical outcomes (resectability and response) in LAD-PDAC. The use of V1–V9 sequencing validated a highly complex microbial ecosystem. These results strongly advocate for the development of integrated multi-omics and Network Analysis models to uncover the functional interplay between microbes and metabolites, ultimately paving the way for personalized therapeutic stratification.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1150 Balancing Symptom Relief and Intervention Burden: A Case Series of Single-Session Endoscopic Ultrasound-Guided Double Bypass for Malignant Gastric Outlet and Biliary Obstruction

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DOI 10.1055/s-0046-1822477

Aims Pancreaticoduodenal malignancies commonly present with simultaneous biliary and duodenal obstruction, resulting in jaundice, nutritional decline, and marked deterioration in quality of life. Most affected patients are unsuitable for surgery. Conventional management often requires multiple staged interventions, including ERCP, duodenal stenting, percutaneous biliary drainage, and surgical gastrojejunostomy.

Endoscopic ultrasound (EUS)-guided gastrojejunostomy (GJ) and biliary drainage (BD) have emerged as effective palliative strategies. Performing both in a

single session offers an efficient method to relieve double obstruction while minimising procedural burden.

This study evaluates the technical success, clinical success, and safety of single-session EUS-guided double bypass for palliation of malignant biliary and duodenal obstruction. We hypothesised that this approach would achieve high technical and clinical success, improve symptoms rapidly, reduce the need for multiple procedures and prolonged hospitalisation, and maintain an acceptable safety profile.

Methods This single-centre, retrospective observational cohort study was conducted at University Hospital Southampton, United Kingdom, from September 2023 to September 2025. Primary outcomes were technical success (successful completion of both EUS-guided bypass procedures) and clinical success (reduction in bilirubin and improvement in obstructive symptoms). Secondary outcomes included procedural safety and early recovery metrics. Statistical analysis was performed using Stata.

Results Eighteen patients were screened, and sixteen met inclusion criteria. The cohort comprised 6 males and 10 females, with a median age of 63.6 years. Underlying malignancies included pancreatic adenocarcinoma and duodenal cancers: head of pancreas (40 %), duodenum (40 %), and ampulla (20 %).

All 16 patients underwent single-session EUS-GJ and EUS-BD. Biliary drainage techniques included EUS-GJ + choledochoduodenostomy (CDD; n = 4) and EUS-GJ + hepatogastrostomy (HGS; n = 12).

- **Technical success:** 16/16 (100 %)
- **Clinical success:** 16/16 (100 %)
- **Median time to oral intake:** 3 days
- **Median length of stay:** 3.6 days

Adverse events occurred in 2 patients (12.5 %): one bile-leak biliary peritonitis and one probable ischaemic injury following EUS-HGS. The 30-day mortality was 30 %, predominantly related to underlying disease progression rather than procedural complications.

Conclusions Single-session EUS-guided double bypass appears to be a safe, feasible, and highly effective palliative option for patients with malignant biliary and duodenal obstruction. The high technical and clinical success rates, early return to oral intake, and acceptable adverse-event profile suggest that this approach may reduce the need for multiple invasive procedures and streamline palliative care pathways.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1151 The possibility of obtaining good quality and quantity RNA from EUS-FNA samples of PanN-ENs: a prospective study

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DOI 10.1055/s-0046-1822478

Aims The biological progression of pancreatic neuroendocrine neoplasms (PanNENs) is significantly influenced by their grading. Endoscopic ultrasound (EUS) is the gold standard for PanNENs' grading evaluation but inconsistent EUS/surgery Ki67 agreement rates have been found. This inconsistency underscores the need for improved diagnostic techniques in EUS. The aim of the project is to evaluate the feasibility of extracting RNA in sufficient quantity and quality to perform genomic analyses from specimens obtained through EUS-fine needle aspiration (EUS-FNA) of PanNENs, comparing three methods of RNA preservation and extraction.

Methods This study prospectively evaluated patients undergoing EUS for suspected PanNENs. A uniform biopsy procedure using a 25-gauge Menghini needle with a slow-pull technique was applied. Sample adequacy was assessed on-site by a cytopathologist. For cases deemed adequate and suspicious of malignancy, an additional biopsy was performed, and RNA preservation and extraction were conducted using three distinct methods: Snap frozen plus Trizol (Method 1), Fresh tissue plus 1-Thioglycerol buffer solution (Method 2), and Snap frozen followed by 1-Thioglycerol buffer solution (Method 3). RNA integrity and concentration were measured using the 2100 Bioanalyzer

Results The study included 37 PanNEN patients, predominantly male (62.2 %), with a median age of 59 years. The median Ki67 proliferation index was 2 %, with most tumors graded as G2 (62.2 %). RNA extraction yielded a median global RNA concentration of 11,000 pg/ul, and the median RNA Integrity Number (RIN) was 3.7. Method 1 resulted in the highest median RNA concentration, while Method 3 produced the highest median RIN value. Significant differences were observed between the methods in terms of RNA concentration and RIN. Univariate linear regression analysis considering various patient and tumor characteristics found no significant associations with RNA quantity or quality.

Conclusions Successfully extracting high-quality RNA from EUS-FNA samples of PanNENs represents a significant advancement in the molecular profiling of these tumors. This development is crucial in the context of modern oncology, where molecular characterization increasingly informs treatment and prognostic evaluations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Stomach and Duodenum

14/05/2026, 13:00–13:30

ePoster Connect:

Station 3 (Level 0)

eP1152 Longitudinal assessment with endoscopic ultrasound (EUS) of small gastric asymptomatic subepithelial lesions (SELs) arising from the muscularis propria: an Italian multicenter study

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DOI 10.1055/s-0046-1822479

Aims Small (< 2 cm), asymptomatic gastric subepithelial lesions (SELs) arising from the muscularis propria are frequently managed conservatively through follow-up, since most represent gastrointestinal stromal tumors (GISTs) with a favorable prognosis or benign lesions. This study aimed to evaluate the role of endoscopic ultrasound (EUS) in the long-term surveillance of such lesions [1–5].

Methods We conducted a retrospective multicenter study including patients with incidentally detected, asymptomatic, gastric SELs ≤ 20 mm arising from the muscularis propria who underwent EUS-based surveillance. Clinical outcomes (iron deficiency anemia, epigastric pain, weight loss) and EUS changes (mucosal ulceration, enlargement ≥ 25 % of the initial main diameter as suggested by previously published studies, change in the EUS pattern of the lesions) were analyzed together with risk factors for size increase and diagnosis of GISTs.

Results A total of 150 patients (38.7 % male; median age 62 [IQR 55–68] years) were followed for a median of 49 (IQR 22–96) months. No patient developed lesion-related symptoms. Thirty-five lesions (23.3 %) demonstrated a ≥ 25 % increase in size, which was significantly associated with age (P = 0.02), a ≥ 5 % size increase at 1 year (P < 0.001) and histologically confirmed GIST (P = 0.001). Histological diagnosis was obtained in 42 cases, with 22 confirmed GISTs. On multivariate analysis predictors of GIST included location in the gastric fundus or cardia (OR 0.94 (0.86 – 0.98); P = 0.05), baseline diameter for each mm (OR 1.17 (1.03 – 1.38); P = 0.01), ≥ 5 % enlargement at 1 year (OR 4.7 (1.1 – 20.5); P = 0.04), and size increase during follow-up for each % (OR 1.02 (1.01 – 1.04); P = 0.02). A resulting composite model was developed to predict the risk of having a GIST according to SEL location (fundus = 0 points; body or antrum = 1 point),

basal SEL size (≥ 10 mm = 1 point), 5% increase at 1-year (2 points). The prevalence of GIST was 0%, 4.4%, 6.3%, 34.8%, 43.8% in case of scores = 0, 1, 2, 3, 4 respectively; patients with a composite score > 2 showed an Odds ratio 13.3 (95% confidence interval 4.39 – 39.9; P value < 0.001) for a diagnosis of GIST.

Conclusions Our multicenter study confirms that EUS-based surveillance is a safe and effective strategy for small, asymptomatic gastric SELs of the muscularis propria. Most lesions remain stable over time, but younger age, baseline size > 1 cm, location in the fundus and early growth identify patients at higher risk of clinically relevant progression or GIST diagnosis. In such cases, closer EUS follow-up and tissue acquisition should be prioritized, while resection may be considered. Emerging techniques such as contrast-enhanced EUS, elastography and the incorporation of artificial intelligence in EUS image interpretation may further refine the risk stratification, but histology remains essential to guide management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kim B, Kim GH, Park DY, Jeon TY, Lee BE, Song GA. Gastric subepithelial tumor: long-term natural history and risk factors for progression. *Surg Endosc* 2022; 36 (7): 5210–5219. doi:10.1007/s00464-021-08914-0
- [2] Kim MY, Jung HY, Choi KD, Song HJ, Lee JH, Kim DH, Choi KS, Lee GH, Kim JH. Natural history of asymptomatic small gastric subepithelial tumors. *J Clin Gastroenterol* 2011; 45 (4): 330–336. doi:10.1097/MCG.0b013e318206474e
- [3] D'Ambrosio L, Fumagalli E, De Pas TM, Nannini M, Bertuzzi A, Carpano S, Boglione A, Buonadonna A, Comandini D, Gasperoni S, Vincenzi B, Brunello A, Badalamenti G, Maccaroni E, Baldi GG, Merlini A, Mogavero A, Ligorio F, Pennacchioli E, Conforti F, Manessi G, Aliberti S, Tolomeo F, Fiore M, Sbaraglia M, Dei Tos AP, Stacchiotti S, Pantaleo MA, Gronchi A, Grignani G Italian Sarcoma Group. Guideline-Based Follow-Up Outcomes in Patients With Gastrointestinal Stromal Tumor With Low Risk of Recurrence: A Report From the Italian Sarcoma Group. *JAMA Netw Open* 2023; 6 (11): e2341522. doi:10.1001/jamanetworkopen.2023.41522 Erratum in: *JAMA Netw Open*. 2024 Jan 2;7(1):e2354891. doi: 10.1001/jamanetworkopen.2023.54891 PMID: 37930700 PMID: PMC10628737
- [4] Bai S, Sun Y, Xu H. Impact of Gastrointestinal Bleeding on Prognosis and Associated Risk Factors in Gastrointestinal Stromal Tumors: A Systematic Review and Meta-Analysis. *Am Surg*. 2025; 91 (3): 434–443. doi:10.1177/00031348241307402 Epub 2024 Dec 14 PMID: 39673549
- [5] Deprez PH, Moons LMG, O'Toole D, Gincul R, Seicean A, Pimentel-Nunes P, Fernández-Esparrach G, Polkowski M, Vieth M, Borbath I, Moreels TG, Nieveen van Dijkum E, Blay JY, van Hooft JE. Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (4): 412–429. doi:10.1055/a-1751-5742. Epub 2022 Feb 18 PMID: 35180797

eP1153 Life-Saving Endoscopic Management of Stapfer Type II Perforations Using Fully Covered Metal Stents

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DOI 10.1055/s-0046-1822480

Aims Stapfer type II perforations, defined by periampullary injury with retroperitoneal leakage, represent the most frequent form of ERCP-related perforation. Despite their clinical relevance, optimal management remains debated. The aim of this study was to evaluate the clinical success of endoscopic treatment of Stapfer type II perforations, including cannulation success, early perforation recognition rate, and the need for surgery or percutaneous drainage.

Methods This retrospective study included patients diagnosed with Stapfer type II perforation between 2019 and 2025 at a high-volume tertiary referral center. Type II perforation was defined as retroperitoneal free air detected intra-procedurally or confirmed post-procedurally on contrast-enhanced CT. When perforation was recognized during ERCP, FcSEMS was placed in the same session. Patients diagnosed after ERCP underwent repeat ERCP within 24 hours, and FcSEMS was deployed if technically feasible. Endoscopic clinical success was defined as the avoidance of surgical exploration. In two patients with failed

cannulation, percutaneous transhepatic biliary drainage (PTBD) was performed, followed by rendezvous-assisted FcSEMS placement.

Results Between 2019 and 2025, a total of 14,576 ERCPs and 8,094 sphincterotomies were performed. Sphincterotomy-related Stapfer type II perforation developed in 24 patients (0.29%). The median age was 61.5 years (range 23–90), and 16 patients (66.6%) were female. The most frequent indication for ERCP was common bile duct stones in 16 patients (66.6%). Perforation was recognized during the index procedure in 20 patients (83.3%), while 4 patients (16.7%) were diagnosed post-procedurally by CT. Standard sphincterotomy was the cannulation technique attempted in 13 patients (54.2%). Cannulation was successful in 22 patients (91.7%). In two patients with unsuccessful cannulation, PTBD followed by rendezvous-assisted stent placement was performed. Due to post-procedural recognition of perforation ($n = 4$) or failed initial cannulation requiring PTBD ($n = 2$), a total of 6 patients (25%) underwent a repeat ERCP within 24 hours. FcSEMS was successfully placed in 23 patients (95.8%). One patient (4.2%) with primary sclerosing cholangitis-related dominant stricture was treated with nasobiliary drainage because stent placement was not technically possible. Retroperitoneal fluid collection developed in 8 patients (33.3%), 6 of whom were in the group requiring a second-session procedure. None of the patients required percutaneous drainage or surgical intervention. No mortality occurred in the entire cohort. All patients demonstrated rapid clinical improvement following endoscopic therapy, and no stent-related adverse events such as migration or occlusion were recorded during follow-up.

Conclusions FcSEMS placement is a highly effective treatment modality for Stapfer type II ERCP perforations. In all technically suitable patients, FcSEMS should be deployed immediately once perforation is recognized. In cases of failed cannulation, PTBD-assisted rendezvous enables successful stent placement and prevents the need for surgery. When perforation is diagnosed post-procedurally, early repeat ERCP and prompt FcSEMS deployment within 24 hours are critical to prevent clinical deterioration. Early recognition and timely treatment appear to reduce the likelihood of developing retroperitoneal fluid collections, which were predominantly observed in patients requiring delayed intervention. Our findings support the early, systematic use of FcSEMS for Stapfer type II perforations and highlight the importance of immediate detection, successful cannulation, and rapid biliary decompression to optimize outcomes and avoid invasive procedures.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1154 From accuracy to adoption: closing the real-time gap in gastric AI for MAPS III

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DOI 10.1055/s-0046-1822481

Aims MAPS III recommends using AI where available to enhance exam quality, but surveillance decisions remain based on Kimura–Takemoto, EGGIM, OLGA/OLGIM, and histology/risk factors—not on AI outputs. Many gastric AI systems show strong performance, yet most are offline and rarely report patient-level outcomes aligned with MAPS [1–4].

Methods Systematic search of PubMed/Embase (through Oct-2025) for adult EGD-AI studies targeting: (i) CAG detection/classification, (ii) IM detection or EGGIM scoring, (iii) OLGA/OLGIM prediction, versus histology or expert endoscopy. Because patient-level 2×2 data were uncommon, we performed a narrative synthesis, extracting per-patient accuracy metrics when available and mapping outputs to MAPS tasks.

Results We screened 214 records, assessed 32 full texts, and included 20 studies. Evidence clustered into three MAPS-relevant areas:

1. CAG (per-patient): accuracy $\approx 91\%$, sensitivity $\approx 88\%$, specificity $\approx 94\%$ vs histology.

2. IM/EGGIM (risk stratification): per-patient accuracy 88 % (95 %CI ~80–96) with sensitivity 100 % for EGGIM ≥ 5 (no high-risk cases missed) and specificity ~85 %; per-image accuracy ~87 % on large NBI datasets.
3. Atrophy/histologic risk: AI correlated with Kimura–Takemoto and OLGA/OLGIM (AUC ~0.67–0.75), supporting proof-of-concept more than deployable staging.

Most studies were offline, and <15 % reported MAPS-ready, patient-level outputs (confusion matrices or explicit CAG/EGGIM/OLGA reporting); real-time validation and routine VCE/standardized scoring were inconsistent.

Conclusions Gastric AI already reaches MAPS-relevant accuracy, but it must support—not replace—Kimura–Takemoto, EGGIM, and OLGA/OLGIM. Adoption hinges on multicentre real-time trials proving: (i) non-inferiority in missing high-risk disease (EGGIM ≥ 5 / advanced OLGA–OLGIM), (ii) better consistency of MAPS scoring, and (iii) standardized patient-level reporting aligned with MAPS III.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dinis-Ribeiro M, Libânio D, Uchima H, Spaander MCW, Bornschein J, Matysiak-Budnik T et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): ESGE/EHMSG/ESP Guideline update 2025. *Endoscopy*. 2025; 57 (5): 504–554
- [2] Almeida E, Lopes Martins M, Marques D, Delas R, Almeida T, Chaves J et al. Artificial intelligence for endoscopic grading of gastric intestinal metaplasia: advancing risk stratification for gastric cancer. *Endoscopy*. 2025; 57 (11): 1254–1260
- [3] Kodaka Y, Futagami S, Watanabe Y, Shichijo S, Uedo N, Aono H et al. Determination of gastric atrophy with artificial intelligence compared to the assessments of the modified Kyoto and OLGA classifications. *JGH Open* 2022; 6 (10): 704–710
- [4] Zhao Q, Jia Q, Chi T. Deep learning as a novel method for endoscopic diagnosis of chronic atrophic gastritis: a prospective nested case–control study. *BMC Gastroenterology* 2022; 22: 352

eP1155 Study of the CagPAI gene for gastric virulence factor of *Helicobacter pylori*

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DOI 10.1055/s-0046-1822482

Aims The *Helicobacter pylori* (*H. pylori*) is considered as the major cause of gastric cancer. This can be explained by the differences in the genotype of the CagA toxicity and the genes of the CagPAI assembly.

Methods A case control study was conducted among Mongolian adult patients. Gastric endoscopy, gastric histology, *H. pylori* isolation, and its gene sequence were performed in gastric cancer and non-gastric cancer cases. The diagnosis of gastric cancer was determined by the Lawrence classification. After culturing *H. pylori* infection DNA was extracted. Based on whole genome database the CagPAI complex genes were extracted and statistically processed [1–8].

Results A total of 54 patients were included in the study, with a male-to-female ratio of 1:1. Among the participants, 27.8 % (n = 15) were diagnosed with gastric cancer and 72.2 % (n = 39) had non-cancer cases. According to the updated Sydney classification, 66.7 % (n = 26) of non-cancer cases were low-risk and 33.3 % (n = 13) were high-risk for gastric cancer. Cancer prevalence differed by sex: 13.3 % of women (n = 4) and 45.8 % of men (n = 11) had cancer, indicating a significantly higher risk in men with *H. pylori* infection (p = 0.009).

Analysis of the *H. pylori* CagPAI gene revealed that 64.8 % (n = 35) of cases had complete gene sequences, 20.4 % (n = 11) were incomplete, and 14.8 % (n = 8) were negative. Full CagPAI expression was observed in 46.2 % of low-risk, 61.5 % of high-risk non-cancer groups, and 100 % of cancer cases, demonstrating a significant association with gastric pathology (p = 0.005). Full gene expression correlated with tumor presence and increased Sydney scores, reflecting great-

er histopathological changes in the gastric antrum (monocyte score p < 0.0001, neutrophil score p < 0.001).

Full CagPAI gene expression was associated with a 1.75-fold increased risk of gastric cancer (OR = 1.75, 95 % CI 1.3–2.3). Individuals over 40 years old with *H. pylori* infection had a 10.8-fold higher risk (OR = 10.8, 95 % CI 1.3–90.5), and men with *H. pylori* infection had a 5.5-fold higher risk compared to women (OR = 5.5, 95 % CI 1.5–20.7).

Conclusions

1. Among *H. pylori*-positive patients, 66.7 % (n = 26) of non-cancer cases were low-risk and 33.3 % (n = 13) were high-risk according to the updated Sydney classification.
2. Full CagPAI gene expression was observed in 46.2 % (n = 12) of low-risk, 61.5 % (n = 8) of high-risk, and 100 % of cancer cases, indicating a strong association with gastric cancer development (p = 0.005).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Cover TL, Lacy DB, Ohi MD. The *Helicobacter pylori* Cag type IV secretion system. *Trends in microbiology* 2020; 28 (8): 682–695
- [2] Matsuhisa T, Yamaoka Y, Uchida T et al. Gastric mucosa in Mongolian and Japanese patients with gastric cancer and *Helicobacter pylori* infection. *World Journal of Gastroenterology: WJG* 2015; 21 (27): 8408
- [3] Backert S, Tegtmeyer N, Fischer W. Composition, structure and function of the *Helicobacter pylori* cag pathogenicity island encoded type IV secretion system. *Future microbiology* 2015; 10 (6): 955–965
- [4] Hu B, El Hajj N, Sittler S, Lammert N, Barnes R, Meloni-Ehrig A. Gastric cancer: Classification, histology and application of molecular pathology. *Journal of gastrointestinal oncology* 2012; 3 (3): 251
- [5] Hatakeyama M. Structure and function of *Helicobacter pylori* CagA, the first-identified bacterial protein involved in human cancer. *Proceedings of the Japan Academy, Series B*. 2017; 93 (4): 196–219
- [6] Fock KM, Ang TL. Epidemiology of *Helicobacter pylori* infection and gastric cancer in Asia. *Journal of gastroenterology and hepatology* 2010; 25 (3): 479–486
- [7] Gantuya B, Oyuntsetseg K, Tserentogtokh T. *Helicobacter pylori* study review among Mongolian population Mongolian journal of Gastroenterology and Hepatology. 2019; 83–85
- [8] Sung H, Ferlay J, Siegel RL et al. Global Cancer Statistics 2021: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *LA Cancer*. 2022;

eP1156 Impact of the “TOGAS” Study on Gastroscopy Key Performance Indicators in a Tertiary Referral Centre: An Interim Comparative Analysis

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DOI 10.1055/s-0046-1822483

Aims Introduction TOGAS (Towards Gastric Cancer Screening Implementation in the EU) is a large EU-funded study providing preliminary data to inform implementation of gastric cancer screening. “Pilot 2” focuses on participants aged 50–74 years-old undergoing FIT-positive/surveillance colonoscopy. Patients are offered additional gastroscopy at time of scheduled colonoscopy to determine prevalence of *Helicobacter pylori* infection, precancerous lesions and gastric cancer.

Aim To determine whether preliminary evidence supports an improvement in gastroscopy key performance indicators (KPIs) following the introduction of the TOGAS pilot study in Ireland, similar to the established KPI enhancements seen in colonoscopy after the initiation of the Irish BowelScreen programme [1, 2].

Methods Reports from 100 gastroscopies performed before the start of the TOGAS study were reviewed. Data were collected on photographic documentation, use of anti-bubble solution, biopsies taken, and whether precancerous lesions such as intestinal metaplasia (IM) or atrophy were noted. These findings

were then analysed and compared with reports from 91 gastroscopies conducted during the TOGAS study. P values were determined using Fisher's exact test.

Results In the pre-TOGAS cohort, the average number of photographs taken was 12, compared with the minimum of 15 obtained in the TOGAS cohort. Complete photographic documentation of the antrum, body, and incisura was achieved in all TOGAS gastroscopies, but in only 22 (22 %) of pre-TOGAS procedures ($P < 0.0001$). Photographic evidence of examination under NBI was completed in every TOGAS gastroscopy, in comparison to less than half of the pre-TOGAS cohort. Use of anti-bubble solution was not documented in any pre-TOGAS gastroscopy. Full Sydney protocol biopsies were performed in all TOGAS procedures, compared with just two in the pre-TOGAS group ($P < 0.0001$). Comments on the presence or absence of intestinal metaplasia or gastric atrophy were included in 28.26 % of TOGAS reports, but only 4 % of pre-TOGAS reports ($P < 0.0001$).

Conclusions Adherence to the MAPS 2 (management of epithelial precancerous conditions and lesions in the stomach) and Sydney protocol was much more prevalent in the TOGAS cohort in comparison to the pre-TOGAS group. This may suggest that participation in the TOGAS study results in improved quality of upper GI endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Banks M, Graham D, Jansen M, Gotoda T, Coda S, di Pietro M et al. British Society of Gastroenterology guidelines on the diagnosis and management of patients at risk of gastric adenocarcinoma. *Gut*. 2019; 68 (9): 1545–75
- [2] Dinis-Ribeiro M, Libânio D, Uchima H, Spaander MCW, Bornschein J, Matysiak-Budnik T et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy*. 2025; 57 (5): 504–54

eP1157 Factors associated with the diagnostic yield of EUS-FNA/B in gastric subepithelial lesions: a two-center experience

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DOI 10.1055/s-0046-1822484

Aims EUS-FNA/B represents a key diagnostic modality for the evaluation of gastric subepithelial lesions, which are often incidentally identified and comprise a heterogeneous group of pathologies. However, the diagnostic performance of EUS-FNA/B is affected by lesion-specific features, procedural factors, and operator expertise. This study aimed to identify the factors associated with the diagnostic yield of EUS-FNA/B in two tertiary centers in Greece.

Methods Data from consecutive patients with gastric subepithelial lesions who underwent EUS-FNA/B between 2017 and 2025 were retrospectively collected. Variables collected included patient demographics, needle type and diameter, number of needle passes, lesion size, and final cytological diagnosis. Associations between lesion size, needle characteristics, number of passes, and diagnostic cytology were assessed.

Results A total of 118 EUS-FNA/B were performed in 118 consecutive patients, 56 (47 %) males and 63 (53 %) females, with a median age of 67.5 years (range: 29–90). Cytology was diagnostic in 100 cases (85 %) and non-diagnostic in 18

cases (15 %). Of the diagnostic samples, 88 (88 %) were reported as neoplastic while 11 (11 %) were non-neoplastic. In the neoplastic category, the predominant diagnosis was of gastrointestinal stromal tumor (53.4 %), followed by leiomyoma (39.7 %). In the non-neoplastic category, the most common diagnosis was pancreatic rest (18 %). Lesion size > 19 mm (OR = 0.29, 95 % CI: 0.12–0.72, $p = 0.007$), ≥ 2 needle passes (OR = 5.99, 95 % CI: 2.20–16.3, $p < 0.001$) and use of EUS-FNB needle (OR = 4.21, 95 % CI: 1.57–11.3, $p = 0.004$) were associated with a higher diagnostic yield.

Conclusions The results of our study suggest that performing two or more needle passes, targeting lesions > 19 mm, and the use of EUS-FNB needles were independently associated with a significantly higher diagnostic yield in the evaluation of gastric subepithelial lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Colon and Rectum

14/05/2026, 13:00–13:30

ePoster Connect:
Station 4 (Level 0)

eP1158 Capsule Endoscopy for Treat-to-Target Monitoring in Crohn's Disease: A Systematic Review and Meta-Analysis

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Aims To evaluate the role of small bowel and pan-enteric capsule endoscopy in treat-to-target monitoring of Crohn's disease.

Methods We conducted a systematic review and meta-analysis of studies assessing capsule endoscopy for mucosal healing in Crohn's disease from database inception to November 2025. We searched PubMed, Embase, Google Scholar, and the Cochrane Library to identify studies performing a baseline capsule examination followed by repeat capsule after medical therapy. Two reviewers independently screened titles, abstracts, and full texts. Reference lists were also examined to identify additional eligible studies. Pooled effect estimates and risk of bias assessments were computed using STATA 19.

Results The search yielded 829 records, of which nine studies met the inclusion criteria, enrolling a total of 348 patients. Among these, 91 % (95 % CI, 74 % 100 %) showed positive findings on baseline capsule endoscopy. The weighted mean age was 30.5 years (95 % CI, 28.8–32.2 years), and 44 % (95 % CI, 37 % 51 %) were male. Small-bowel visualization was complete in 91 % (95 % CI, 73 % 100 %) of cases, with no reported capsule retention. Capsule endoscopy detected active inflammation at baseline in 89 % of patients. A modification of medical therapy occurred in 97 % of patients (95 % CI, 88 % 100 %). After a weighted mean of 33.5 weeks, the pooled rate of mucosal healing was 26 % (95 % CI, 0.16–0.37; $I^2 = 77.40$ %; $p < 0.001$). No statistically significant small-study effects were identified by Egger's test ($p \geq 0.89$). 40 % of patients demonstrated reduced inflammation scores (95 % CI, 0.33–0.48; $p < 0.001$; $I^2 = 24.35$ %; $p = 0.23$). Meanwhile, the proportion of patients without mucosal healing or mucosal improvement was 33 % (95 % CI, 0.23–0.45; $p < 0.001$; $I^2 = 76.8$ %).

Conclusions In the cohort of patients with small bowel Crohn's disease, capsule endoscopy was a safe and accurate tool for disease monitoring. These findings support incorporating Capsule Endoscopy into treat-to-target strategies to guide therapeutic decision-making in Crohn's disease with small bowel involvement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1159 Artificial Intelligence and Endoanal Ultrasound: Multicenter Validation of Automated Detection and Differentiation of Benign Lesions

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Aims Benign anal canal conditions are common, clinically impactful, and frequently associated with proctological symptoms and functional impairment, creating a substantial burden for patients. Precise diagnostic assessment is essential to guide appropriate therapeutic planning and ensure optimal outcomes. Endoanal ultrasonography (EAUS) remains the reference modality for evaluating the sphincteric complex, yet its operator dependency, steep learning curve, and variability in image interpretation continue to limit consistency and reduce inter-observer agreement. Artificial intelligence (AI) offers a compelling opportunity to address these constraints by enhancing image interpretation, reducing reliance on individual expertise, and strengthening diagnostic standardization. This study aims to validate an AI model capable of automatically detecting and characterizing benign anal lesions in EAUS exams, reinforcing the need for more consistent, scalable, and clinically dependable evaluation in anal disorders.

Methods A bicentric retrospective study evaluated 13 787 EUAS radial-probe exams between April 2022 and January 2024. A total of 13787 frames were classified into fissures (632), external lacerations (1989), and internal lacerations (1687), intersphincteric fistula (5163), transsphincteric fistula (3581) and internal atrophy (735), after expert review. The dataset was divided into 90% for training and 10% for testing. Performance metrics included sensitivity, specificity, and accuracy.

Results For external lacerations, the CNN achieved 94.1% sensitivity, 99.6% specificity and 98.9% accuracy. For internal lacerations, achieved 95.0% sensitivity, 98.4% specificity and 98.4% accuracy. In the case of anal fissures, achieved 98.4% sensitivity, 98.6% specificity and 98.7% accuracy. Regarding inter and trans-sphincteric fistulas, sensitivity was 92.5% and 96.9%, specificity was 99.5% and 97.8%, and accuracy was 97.0% and 97.4%, respectively. For internal atrophy, sensitivity was 97.5%, specificity was 99.9% and accuracy was 99.9%.

Conclusions Our findings demonstrate that AI can reliably support the detection and characterization of benign lesions on EAUS and highlight its capacity to improve diagnostic consistency in this setting. In addition to enhancing accuracy and reducing operator dependency, AI may drive meaningful standardization and function as a valuable educational tool for clinicians in training. By guiding interpretation and emphasizing key anatomical structures, it has the potential to shorten the demanding learning curve associated with EAUS. Although these results are encouraging, they represent an early milestone in a wider developmental pathway. Future work will focus on integrating three dimensional network reconstruction to deliver richer anatomical insight and further elevate diagnostic precision.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1160 Prucalopride is Associated with Higher Completion Rate and Shorter Transit Times in Colon Capsule Endoscopy: Results from a Large Danish Cohort

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DOI 10.1055/s-0046-1822487

Aims Colon capsule endoscopy (CCE) is a minimally invasive alternative to colonoscopy for colorectal cancer screening and diagnostic evaluation of the colon. A major limitation of CCE is incomplete examination, with reported complete CCE rates typically ranging from 60 to 80%, depending on bowel preparation regimen and patient-related factors. In an interim analysis of the CareForColon2015 trial, oral administration of 2 mg prucalopride (a selective 5-HT₄ receptor agonist) appeared to increase the complete CCE rate and reduce both total (mouth to anus) and colonic (caecum to anus) transit times [1]. This study aimed to validate these findings in the full cohort, assess self-reported side effects, and identify predictors of fast colonic capsule transit.

Methods We conducted a non-randomised comparison of participants enrolled in the CareForColon2015 trial, which was conducted in Denmark from August 2020 to December 2022 [2]. The first 680 participants underwent a standard 2-day polyethylene glycol-based (Movicol and Moviprep, Norgine Danmark A/S, Herlev, Denmark) bowel preparation. The subsequent 1350 participants additionally received 2 mg prucalopride 45 to 60 minutes prior to capsule ingestion. The main exclusion criteria were conditions related to CCE contraindications, e.g. history of abdominal surgery, cardiac pacemaker, and renal insufficiency. The primary outcome was complete CCE rate defined as adequate bowel cleansing in all colorectal segments, no more than short technical interruptions, and visualization of both the caecum and anal cushions. Secondary outcomes included complete transit, conclusive CCE rate, self-reported side effects, polyp detection rate, total and colonic transit times, and overall bowel cleansing quality. Data were obtained from the capsule reports generated by the capsule readers or from participant questionnaires. Outcomes were compared between those who received prucalopride to those who did not using X² tests, Fisher's exact tests, Student's t-tests, or Mann-Whitney U tests depending on data type and normality.

Results Out of 2,031 participants, 2,024 were eligible for inclusion and complete data was available for 1,915 (94.3%). Prucalopride administration was associated with a higher complete CCE rate (63.2% versus 69.1%, $p = .008$). Median total transit time was decreased from 304 minutes (IQR 211 to 400) in the control group to 182 minutes (IQR 108 to 274, $p < .001$), representing a 40.1% reduction. Median colonic transit time was reduced by 27.5%, going from 153 minutes (IQR 97 to 248) in controls to 111 minutes (IQR 44 to 184, $p < .001$). Adequate overall bowel cleansing increased from 72.9% to 78.2% ($p < .001$). Prucalopride was associated with higher detection of polyps > 9 mm ($p = .037$) but not detection of any polyps of any size ($p = .070$). Participants receiving prucalopride more frequently reported diarrhoea, headache, and fatigue. All self-reported side effects were of mild to moderate clinical significance despite potentially being relevant for patients and their acceptability of undergoing CCE. Predictors of fast colonic transit times included male sex ($p < .001$) for transits < 20 minutes, and male sex ($p < .001$), older age ($p = .015$), and higher BMI ($p = .016$) for transits < 40 minutes.

Conclusions Oral administration of 2 mg prucalopride 45 to 60 minutes prior to CCE was associated with higher complete CCE rate and shorter total and colonic transit times. Prucalopride may be a simple and effective addition for CCE completeness with little self-reported side effects. The main limitation is the non-randomised study design while the primary strength is the large sample size. Randomised trials investigating optimal patient-specific dosing strategies and tolerability are warranted [3].

Conflicts of Interest Benedicte Schelde-Olesen has received honoraria from Jinshan Ltd. Anastasios Koulaouzidis is consultant for Jinshan Science & Technology Group, Ltd. He has received lecture and/or advisory honoraria from Covidien/Medtronic, Jinshan, and travel support from Jinshan, Aquilant, Covidien/Medtronic.

References

[1] Baatrup G, Bjørsum-Meyer T, Kaalby L, Schelde-Olesen B, Kobaek-Larsen M, Koulaouzidis A et al. Choice of colon capsule or colonoscopy versus default colonoscopy in FIT positive patients in the Danish screening programme: a parallel group randomised controlled trial. *Gut*. 2025;

- [2] Deding U, Kaalby L, Baatrup G, Kobaek-Larsen M, Thygesen MK, Epstein O et al. The Effect of Prucalopride on the Completion Rate and Polyp Detection Rate of Colon Capsule Endoscopies. *Clin Epidemiol.* 2022; 14: 437–44
- [3] Baatrup G, Bjorsum-Meyer T, Kaalby L, Schelde-Olesen B, Kobaek-Larsen M, Koulaouzidis A et al. Choice of colon capsule or colonoscopy versus default colonoscopy in FIT positive patients in the Danish screening programme: a parallel group randomised controlled trial. *Gut.* 2025;

eP1161 Endoscopic features of colon cancer at early restaging colonoscopy predicts response to neoadjuvant immunotherapy in colon cancer

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Aims Reliable predictors of clinical complete response (CR) are lacking for colon cancer (CC) patients treated with immunotherapy. Optical biomarkers have been used in other contexts for staging and response assessment, presenting a promising strategy for this purpose. This study aims to externally validate an optical evaluation framework for predicting CR.

Methods We conducted a retrospective, multi-reader, multi-case study involving 28 international endoscopists and 75 cases of stage I-III CC, treated with a single dose of pembrolizumab. Endoscopists assessed response using a published optical framework and provided confidence ratings for each case. Evaluations were based on still images from re-staging colonoscopies, with accuracy compared to biopsy and surgical pathologic specimens.

Results The optical evaluation performed with comparable accuracy to routine biopsy (72.7% vs. 74% OR = 0.94, $p = 0.80$) with moderate inter-observer agreement ($\kappa = 0.522$). Reader confidence significantly correlated with accuracy. High confidence (HC) evaluations demonstrated a marked increase in diagnostic accuracy and AUROC compared to low-confidence (LC) evaluations (0.799 vs 0.582, $p < 0.0001$). The addition of biopsy data doubled the odds of accurate LC-optical predictions (OR 2.01, $p < 0.0001$), but significantly decreased accuracy in HC cases (OR 0.53, $p < 0.0001$).

Conclusions Confidence-weighted optical assessment accurately predicts CR in CC. HC-optical evaluations matched biopsy accuracy and were not improved by addition of biopsy data, supporting a selective biopsy approach. LC-optical predictions of CR improved with biopsy confirmation, highlighting its role in uncertain cases. This framework provides an accurate, reliable and efficient strategy for disease restaging.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1162 Correlation between gastrointestinal PET-FDG uptake and subsequent endoscopic findings: a single centre retrospective study

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DOI 10.1055/s-0046-1822489

Aims The primary aim of our study is to determine the correlation between the incidental PET-FDG uptake in the gastrointestinal tract (GIT) and the subsequent endoscopic findings. Secondary outcomes are to analyze the differences among the types of 18-FDG uptake patterns and to evaluate the role of the maximum standardized uptake value (SUVmax) in differentiating among the different kind of findings [1–3].

Methods We conducted a single center retrospective study in a cohort of patients who underwent an endoscopic examination after a PET-scan showed

abnormal uptake at some level in the GIT. All the patients included had a non GIT malignancy, or the FDG accumulation was in a different site than the pre-existing GIT-malignancy. All the endoscopic procedures were performed at Istituto Regina Elena in Rome, while some of the radiological exams were performed in other centers and then reviewed by our expert radiologists. The analysis of the differences of SUVmax values among the different groups was performed using the Kruskal-Wallis test with Dunn's post-hoc pairwise comparisons adjusted by the Bonferroni method, due to non-normal data distribution. Continuous variables were summarized as medians with interquartile ranges (IQR). Statistical significance was set at $p < 0.05$.

Results We analyzed the data from 267 patients who underwent an endoscopic procedure between April 2018 and November 2024. 57.7% were females, with a median age of 66 years (range 32–89). 68.5% of patients underwent lower-GI endoscopy, 19.9% gastroscopy, and 11.6% underwent both examinations. 113 patients had a positive endoscopic finding (42.3%), in particular: 34 malignant lesions; 55 pre-malignant lesions (either colonic adenomas > 10 mm in diameter, with low grade or high grade dysplasia, or gastric intestinal metaplasia) and 26 inflammatory conditions of various kind. In 237 patients we could analyze the pattern of uptake in the radiological exam being a focal pattern in 166, diffuse in 36 and focal on diffuse in 35 cases. The diffuse pattern was associated with the higher grade of false positives (33 out of 36, 91.7%), while a focal captation was more frequently correlated with a significant endoscopic finding (86/166, 51.8% in the focal pattern and 13/35, 37.1% in the focal on diffuse pattern). In 242 out of 267 patients (90.6%) the SUVmax value was reported on the radiological exam. SUVmax median value significantly differed among malignant (15.7), premalignant (10.7), inflammatory lesions (8.16) and false positives (8.05) (Kruskal–Wallis $H = 36.97$, $p < 0.001$). Post-hoc Dunn analysis showed that malignant lesions had significantly higher SUVmax compared with inflammatory lesions ($p < 0.001$) and PET false positives ($p < 0.001$), while the difference with premalignant lesions did not reach statistical significance ($p = 0.196$). Premalignant lesions showed higher SUVmax values compared with PET false positives ($p < 0.001$), but not with inflammatory lesions ($p = 0.109$). No difference emerged between inflammatory lesions and PET false positives.

Conclusions In our study 42.3% of the patients had a positive endoscopic finding (either neoplastic, premalignant or inflammatory) which corresponded to the segment of the abnormal FDG-PET uptake in the majority of the cases, with the focal uptake pattern being the most specific one in identifying clinically relevant conditions compared to the diffuse pattern. The median SUVmax value in the group with malignant lesions was higher if compared to the inflammatory lesions or the false-positive PET-scan group, and the difference was statistically significant suggesting a role of this parameter in the decision of performing the endoscopic exam after incidental PET captation in the GIT. There are no guidelines on the subject yet and the decision whether to proceed with further investigations should be made on a case-by-case basis, also taking in consideration the patient's prognosis and comorbidities.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Unexpected FDG-PET uptake in the gastrointestinal tract: endoscopic and histopathological correlations, *World Journal of Gastroenterology* 2014
- [2] Endoscopic evaluation of PTE/CT abnormalities in the gastrointestinal tract: yield and approach, *Digestive diseases and sciences* 2024
- [3] Significance of incidental 18F-FDG accumulations in the gastrointestinal tract in PET/CT: correlation with endoscopic and histopathologic results, *The Journal of nuclear medicine* Nov2004

eP1163 Endoscopic submucosal dissection for colorectal neoplasia at anastomotic sites

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DOI 10.1055/s-0046-1822490

Aims Recurrent colorectal neoplasia at anastomotic sites after colorectal surgery poses a significant risk for subsequent cancer and is challenging to treat endoscopically due to severe fibrosis. Evidence on the feasibility of endoscopic submucosal dissection (ESD) in this setting remains limited. This study aimed to assess clinical and procedural outcomes of ESD for colorectal anastomotic-site lesions [1–3].

Methods A retrospective analysis was conducted on 17 patients who underwent ESD for anastomotic-site lesions at two high-volume western referral centers between January 2018 and June 2025. Tumor characteristics (location, morphology, size, histology, invasion depth) and procedural outcomes (technical success, en bloc and R0 resection rates, procedure time, and adverse events) were evaluated.

Results Mean patient age was 62 years (range 41–84); six patients had hereditary syndromes (Lynch n = 3; FAP n = 3). Lesions occurred at ileocolic (n = 1), colocolic (n = 3), colorectal (n = 8), coloanal (n = 1) anastomoses, and in the ileal pouch (n = 4). Median tumor size was 38 mm. Morphology included three protruded lesions, nine granular, and five non-granular LSTs. Technical success was 82% (14/17): two procedures were aborted due to severe fibrosis (both in the ileal pouch), and one lesion in the rectal cul-de-sac was inaccessible. Histology showed adenomas (LGD n = 4; HGD n = 7) and invasive cancer (n = 3). Median procedure time was 75 minutes. En bloc and R0 resection rates were 85.7% and 71.4%, respectively. One perforation occurred during one of the aborted procedure.

Conclusions ESD for colorectal anastomotic-site lesions is feasible, achieving high en bloc resection rates with acceptable safety despite technical difficulty from dense fibrosis. Ileal pouch lesions represent the most challenging subgroup. ESD may serve as an effective organ-preserving alternative to repeat surgery in selected patients.

Conflicts of Interest G. Grande is consultant for Olympus, ERBE, Boston Scientific

References

- [1] Grande G, Casciola R, Barbaro F et al. Endoscopic Submucosal Dissection as a Rescue Therapy for Ineffective Endoscopic Mucosal Resection in Ileal Pouch, Nongranular, Laterally Spreading Tumor. *ACG Case Rep J*. 2025; 12 (4): e01651. Published 2025 Apr 4. doi:10.14309/crj.0000000000001651
- [2] Maehata T, Kato M, Ochiai Y et al. Feasibility of endoscopic submucosal dissection for colorectal neoplasia at anastomotic sites: a retrospective study. *Surg Endosc* 2020; 34 (12): 5495–5500. doi:10.1007/s00464-019-07346-0
- [3] Krutsri C, Toyonaga T, Ishida T et al. Feasibility of endoscopic submucosal dissection of lesions at anastomosis site post-colorectal surgery: a case series. *Endosc Int Open* 2019; 7 (8): E949–E954. doi:10.1055/a-0903-2403

ePoster Connect: Endoscopy service

14/05/2026, 15:05–15:25

ePoster Connect:
Station 1 (Level 0)

eP1164 Endoscopic Submucosal Dissection Versus Endoscopic Laryngopharyngeal Surgery for Superficial Head and Neck Tumors

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Aims Endoscopic laryngopharyngeal surgery (ELPS) and endoscopic submucosal dissection (ESD) are minimally invasive endoscopic techniques for the treatment of head and neck tumors. ELPS is performed by otolaryngologists under gastrointestinal endoscopic guidance, whereas ESD is conducted by gastroenterologists with laryngeal exposure provided by otolaryngologists. Both procedures are performed collaboratively by gastroenterologists and otolaryngologists under general anesthesia, enabling organ preservation and favorable therapeutic outcomes. This study aimed to compare the clinical outcomes of ESD and ELPS for superficial head and neck tumors.

Methods A total of 120 patients with 129 lesions who underwent endoscopic treatment for head and neck tumors between June 2014 and December 2024 were retrospectively analyzed. Parameters assessed included (1) patient demographics and lesion characteristics, (2) short-term therapeutic outcomes, (3) procedural accidents, and (4) recurrence rates.

Results (1) Among the 120 patients, 110 were male and 10 female, with a median age of 69 years (range, 45–82). Lesions were located in the hypopharynx (n = 111), oropharynx (n = 9), and larynx (n = 9). Macroscopic types were 0-Is (n = 10), 0-IIa (n = 25), 0-IIb (n = 82), and 0-IIc (n = 12), with a median tumor size of 15 mm (range, 3–70). Pathological diagnoses included pTis (n = 47), pT1 (n = 59), pT2 (n = 18), pT3 (n = 3), and dysplasia (n = 2). (2) ESD was performed in 33 patients with 36 lesions, and ELPS in 88 patients with 93 lesions. The median resection speed, calculated as (long diameter × short diameter) / procedure time (mm²/min), was 13.9 (range, 2.2–32.7) in the ESD group and 11.3 (range, 1.1–73.9) in the ELPS group, with no significant difference (p = 0.38). The R0 resection rate was significantly higher in the ESD group (88.9%, 32/36) than in the ELPS group (48.4%, 45/93) (p < 0.0001). In the ESD group, horizontal margin indeterminate (HMX) status was observed in four lesions, due to tumor or dysplasia near the margin (n = 2), thermal denaturation (n = 1), and specimen incision (n = 1). In the ELPS group, HM1, HMX, VM1, and VMX statuses were noted in 15, 32, 2, and 6 lesions, respectively. Causes of HMX included tumor or dysplasia near the margin (n = 16), specimen crush or epithelial detachment (n = 8), thermal denaturation (n = 7), and specimen incision (n = 1). VMX was attributed to thermal denaturation (n = 5) and specimen crush (n = 1). (3) Procedural accidents occurred in seven patients (21.2%) in the ESD group, including aspiration pneumonia (n = 2), tongue injury (n = 2), laryngeal edema (n = 1), hypoglossal nerve palsy (n = 1), and vocal cord paralysis (n = 1). In the ELPS group, complications were observed in 16 patients (18.2%), including aspiration pneumonia (n = 6), laryngeal edema (n = 5), dysphagia (n = 2), free jejunal perforation (n = 1), tongue/oral floor swelling (n = 1), and prerenal failure (n = 1). There was no significant difference in the incidence of procedural accidents between the ESD and ELPS groups (p = 0.71). (4) In the ELPS group, local residual or recurrent lesions were observed in five cases (5.4%) and distant metastases in four cases (4.3%), whereas no such events occurred in the ESD group. There were no significant differences between the two groups in the

rates of local residual or recurrent lesions ($p = 0.16$) and distant metastases ($p = 0.21$).

Conclusions Although resection speed, incidence of procedural accidents, and frequency of residual or recurrent lesions were comparable between ESD and ELPS, the significantly higher R0 resection rate observed in the ESD group suggests that ESD may offer superior curative potential in the management of superficial head and neck tumors.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1165 Virtual reality in teaching non-technical skills (NTS) for ERCP – Real life experience from a JAG accredited ERCP training centre in the United Kingdom

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DOI 10.1055/s-0046-1822492

Aims Virtual reality (VR) technology is increasingly used in ERCP training to enable early acquisition of skills in a safe environment. While its role in developing technical skills in ERCP is recognised, evidence for its impact on generic non-technical skills (NTS)—including communication, teamwork, leadership, situational awareness, and emotional regulation—is limited. We evaluated the use of fully immersive VR to teach generic NTS during the Joint Advisory Group (JAG) approved Basic Skills ERCP course at University Hospital of North Tees [1–4].

Methods Three ERCP-based VR scenarios (complex stone disease, post-sphincterotomy bleeding, and oversedation during ERCP) were developed with support from a VR development team. Participants (consultants, trainees, and ERCP nurses) viewed the scenarios using immersive headsets (Red Box) and took part in facilitated group debriefs. A post-session electronic questionnaire assessed realism, usefulness for NTS, decision-making, emotional control, and overall value.

Results Seventeen delegates completed the questionnaire (7 doctors [4 consultants, 3 registrars] and 10 nurses). Thirty-five percent had prior exposure to more than 200 ERCP procedures. Perceptions of VR were highly positive: 76.5% strongly agreed and 23.5% agreed that sessions were realistic. VR improved understanding of NTS in ERCP (88.2% strongly agree, 11.2% agree), decision-making (58.8% strongly agree, 41.2% agree), confidence and emotional control in challenging cases (70.6% strongly agree, 29.4% agree) and the ability to manage unexpected limitations (70.6% strongly agree, 29.4% agree). Debrief discussions were rated useful by all participants (88.2% strongly agree, agree 11.2%). Overall session rating was excellent in 76.5% and very good in 23.5%. All participants recommended ongoing use of VR as an adjunct to ERCP training.

Conclusions Fully immersive VR is a promising tool for teaching non-technical skills in ERCP, providing a realistic platform for developing situational awareness, communication, and confidence within a controlled environment. Integrating VR into a standardised ERCP curriculum may accelerate the acquisition of both technical and non-technical skills. Further multi-centre studies are needed to determine its broader educational impact.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Bhushan S, Anandasabapathy S, Shukla R. Use of augmented reality and virtual reality technologies in endoscopic training. *Clinical Gastroenterology and Hepatology* 2018; 16 (11): 1688–91
- [2] Haycock A, Woolf K, Thomas-Gibson S. PTU-008 Enhancing professional behaviour in gastrointestinal endoscopy: development of a behavioural marker tool for assessment of endoscopic non-technical skills.

[3] Hitchins CR, Metzner M, Edworthy J, Ward C. Non-technical skills and gastrointestinal endoscopy: a review of the literature. *Frontline gastroenterology* 2018; 9 (2): 129–34

[4] Mahmood T, Scaffidi MA, Khan R, Grover SC. Virtual reality simulation in endoscopy training: Current evidence and future directions. *World journal of gastroenterology* 2018; 24 (48): 5439

eP1166 Amber-red color imaging for enhanced anatomical structures recognition in third-space endoscopy

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DOI 10.1055/s-0046-1822493

Aims Amber-red color imaging (ACI) is a novel image-enhanced endoscopic modality designed to improve visualization of blood-rich and submucosal structures. This study aimed to evaluate whether ACI improves in a clinical setting the clarity of identification of submucosal vessels, submucosal and muscle layers compared with white light imaging (WLI) in a standardized, video-based setting [1].

Methods In this prospective video-based study, third-space endoscopy clips, including endoscopic submucosal dissections (ESD) and peroral endoscopic myotomies (POEM), were analyzed. Each clip included matched WLI and ACI segments in randomized order. Six expert and six non-expert endoscopists independently rated vessel, submucosal and muscle layer clarity on a 10-point Likert scale.

Results Clips from 35 ESD and 20 POEM were analyzed. For submucosal vessels mean scores improved from 7.33 ± 0.89 to 8.55 ± 0.85 for non-experts and from 7.96 ± 0.86 to 9.63 ± 0.51 for experts (both $p < 0.001$); non-experts with ACI outperformed experts with WLI ($p < 0.01$). For submucosal layer non-experts improved from 6.37 ± 1.51 to 8.14 ± 1.29 , and experts from 7.82 ± 0.87 to 9.80 ± 0.40 (both $p < 0.001$), with non-experts achieving expert WLI performance ($p = 0.2$). For muscle layer non-experts improved from 5.31 ± 1.16 to 7.12 ± 1.17 , and experts from 7.75 ± 0.73 to 9.51 ± 0.57 (both $p < 0.001$).

Conclusions ACI enhances recognition of submucosal vessels, submucosal and muscle layers in ESD and POEM, benefiting both experts and non-experts, and may serve as a valuable adjunct in third-space endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Funasaka K, Miyahara R, Horiguchi N, Yamada H, Koyama K, Komura G, Hagihara S, Sugiyama H, Ariga M, Nagasaka M, Ohno E, Kuzuya T, Hirooka Y. Amber-red color imaging makes the dissection line more evident during gastric endoscopic submucosal dissection. *Endosc Int Open* 2025; 13:a26947445. doi:10.1055/a-2694-7445.

eP1167 Optimizing Gastrointestinal Defects Management: Outcomes of a Modified Endoscopic Vacuum Therapy System – A Single-Centre Experience

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Aims Transmural gastrointestinal (GI) defects—including perforations, anastomotic leaks, and fistulae—carry significant morbidity and mortality. Salvage operations – esophagectomy, duodenal diversion, or major colorectal resection are associated with prolonged recovery and high complication rates. Modified Endoscopic vacuum therapy (mEVT) has emerged as an organ-preserving alternative that promotes granulation, drainage, and controlled defect collapse. In our centre, a modified EVT platform (mEVT) was developed to enhance adaptability, allow custom sponge/ioban configurations, and improve negative-pressure delivery in anatomically challenging locations. This study evaluates the clinical performance, safety, and organ-preserving impact of mEVT across a wide spectrum of GI defects.

Methods A retrospective analysis of a prospectively maintained database was performed for all patients treated with mEVT. The mEVT device was assembled using a fenestrated NGT wrapped with gauze and antimicrobial incise drape or sponge, secured with three-point suturing for stability and positioning. Multiple 18G perforations enhanced uniform suction. The device was placed endoscopically and connected to continuous wall suction, with incise-drape sealing and a 20F catheter used to maintain stable negative pressure. All patients underwent EGD and contrast-enhanced CT to delineate leak size, location, associated cavities, and debris burden. Data retrieved included demographics, timing of presentation, comorbidities, etiology, leak chronicity, EVT placement technique (intraluminal, intracavitary, or combined), number of sponge exchanges, adjunctive endoscopic therapy, vacuum pressure settings, and clinical outcomes. Primary outcome was clinical success, defined as complete leak resolution. Secondary outcomes included organ preservation, requirement for rescue surgery, EVT-related complications, and adjunctive therapy utilization (► Table 1).

► Table 1

Types	Etiology
Post-surgical N = 6	Whipple's leak, LAR leak, ileorectal leak, duodenal ulcer repair, post-percutaneous drainage
Endoscopic / Iatrogenic N = 5	Post-EFTR (D3), post-POEM Boerhaave-type leak, , iatrogenic transmural tear
Spontaneous / Traumatic / Idiopathic N = 7	Spontaneous Boerhaave, traumatic, foreign-body esophageal injury traumatic duodenal fistula, idiopathic TEF

Results Eighteen patients underwent mEVT (mean age 54.22 ± 20.47 years; males 94.44 %). Acute leaks accounted for 72.22 % (13/18) and chronic defects for 27.78 % (5/18). Comorbidities included DM (27.77 %), HTN (27.77 %), and IHD (22.22 %). Prior therapy had failed in five patients. Successful closure was achieved in 10/13 (76 %) acute leaks and 3/5 (60 %) chronic leaks. Organ-specific healing rates were esophageal 6/8 (75 %), duodenal 5/7 (71.4 %), and colonic 2/3 (66.7 %). Importantly, all successfully treated patients avoided major morbid surgery, preserving esophageal, duodenal, and colonic continuity. mEVT placement was intraluminal in 61.11 % (11/18), intracavitary in 16.67 % (3/18), and combined in 22.22 % (4/18). Adjunctive endoscopic therapy included necrosectomy (2/18), endoscopic suturing (1/18), OTSC (1/18), haemoclips (5/18), specialized TTSC (1/18), and bovine pericardial patch (2/18). Only one patient required rescue surgical intervention. One patient was lost to follow-up; three deaths occurred, all unrelated to mEVT. Only 50 % required sponge exchanges (mean 6.22 ± 4.99). Median hospital stay was 21.5 days. Mean vacuum pressure was 145 mmHg ± 40. No major EVT-related complications were observed.

Conclusions mEVT is a safe, effective, and strongly organ-preserving treatment for GI transmural defects. In this cohort, it achieved meaningful closure

rates across esophageal, duodenal, and colonic injuries while preventing major salvage surgery in nearly all responders. The modified system's adaptability and adjunctive endoscopic options broaden its utility and justify further prospective evaluation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Esophagus

14/05/2026, 15:05–15:25

ePoster Connect:
Station 2 (Level 0)

eP1168 Do we need to endoscopically reassess patients with Eosinophilic Oesophagitis if they have no symptoms? A prospective real-world cohort study

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DOI 10.1055/s-0046-1822495

Aims Symptoms correlate only modestly with endoscopic and histological activity in Eosinophilic Oesophagitis (EoE). Real-world data show that symptoms detect histological remission with only ~60 % accuracy (AUC 0.60–0.61) [1]. Persistent histological activity is potentially associated with progression to fibrostenotic disease, highlighting the importance of detecting subclinical inflammation. UK, US, and European guidelines therefore recommend reassessment after induction or treatment change to detect unrecognised persistent inflammation [2–4]. Whether all symptom-free patients require routine gastroscopy in real-world practice remains uncertain.

This study aims to determine whether clinical remission predicts histological remission in treated EoE, and whether a targeted rather than universal reassessment strategy may be appropriate.

Methods We conducted a prospective single-centre cohort study from September 2023 to November 2025. Adults with confirmed EoE underwent reassessment after ≥ 8 weeks of stable therapy (food elimination diet, proton pump inhibitor, budesonide orodispersible tablets (BOTS), or combinations). All patients completed the Dysphagia Symptom Questionnaire (DSQ) and underwent same-day capsule sponge cytology (Endosign) and gastroscopy with biopsies, as part of another study. Clinical remission was defined as DSQ = 0. Histological remission was defined as highest peak eosinophil count < 15 eos/hpf on capsule sponge or histology. Fisher's exact test, Mann–Whitney U testing, sensitivity, specificity, predictive values and Cohen's kappa were calculated.

Results A total of 66 patients underwent paired symptom and tissue assessment. Median age was 50 years (IQR 36.5–57.0); 64 % were male and 91 % were White or White British. Of the 66 patients, 29 had DSQ = 0 and 37 had DSQ ≥ 1. Histological remission occurred in 55/66 (83.3 %).

Among DSQ = 0 patients, 24/29 (82.8 %) were in histological remission and 5/29 (17.2 %) had active eosinophilia (median 20 eos/hpf, IQR 19–30). In the DSQ = 0 group, the median total EREFS score was 2 in histological remission, and 4 in those with active disease. Of the 5 DSQ = 0 patients with active eosinophilia at follow-up, 2 reported variable compliance with Jorveza, 2 had marked symptomatic improvement despite persistent inflammation, and 1 had insufficient dietary elimination.

Among DSQ ≥ 1 patients, 31/37 (83.8 %) were in histological remission and 6/37 (16.2 %) were histologically active (median 30 eos/hpf, IQR 27–37.5). In the DSQ ≥ 1 group, the median total EREFS score was 2 in both remission and active disease. Within the DSQ ≥ 1 group, DSQ scores were significantly higher in histologically active patients compared with those in histological remission (median 34.5 [IQR 18–42] vs 9 [IQR 3–14]; Mann–Whitney U p = 0.016).

Median treatment duration was 16.3 weeks (IQR 13.0–19.6) for DSQ = 0 patients and 14.9 weeks (IQR 10.4–21.9) for DSQ ≥ 1 patients.

Clinical remission did not correlate with histological remission (Fisher's exact $p = 0.76$; $\kappa = -0.04$). Using DSQ ≥ 1 to detect histologic activity gave a sensitivity of 55%, specificity 44%, PPV 16%, and NPV 83%.

Conclusions Despite clinical remission, 17.2% of asymptomatic patients had persistent eosinophilic inflammation. As these are a minority of DSQ = 0 patients demonstrated active disease, these findings could support a targeted reassessment strategy, reserving gastroscopy for individuals with higher-risk features i.e. Higher EREFS at index endoscopy. The results also highlight the potential role of less invasive monitoring tools, such as capsule sponge cytology, and the need for biomarkers beyond eosinophil counts alone.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Papadopoulos A, Amil-Dias J, Auth MK et al. Joint ESPGHAN/NASPGHAN guidelines on childhood eosinophilic gastrointestinal disorders beyond eosinophilic esophagitis. *J Pediatr Gastroenterol Nutr* 2024; 78: 122–152
- [2] Dellon ES, Liacouras CA, Molina-Infante J et al. Updated International Consensus Diagnostic Criteria for Eosinophilic Esophagitis (AGREE Conference). *Gastroenterology*. 2018; 155: 1022–1033
- [3] Dhar A, Sweis R, Attwood S et al. British Society of Gastroenterology (BSG) guidelines for the diagnosis and management of eosinophilic esophagitis. *Gut*. 2022; 71: 1459–1489
- [4] Safroneeva E, Straumann A, Coslovsky M et al. Symptoms have modest diagnostic accuracy in detecting endoscopic and histologic remission in adults with eosinophilic esophagitis. *Gastroenterology*. 2016; 150: 581–590

eP1169 Submucosal Injection-Guided Septotomy (SING) for the treatment of Zenker's diverticulum: a multicenter study of over 100 procedures

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DOI 10.1055/s-0046-1822496

Aims Flexible endoscopic septotomy (FES) is the gold standard for the endoscopic treatment of Zenker's diverticulum (ZD), although limitations of the technique remain. We report the first experience with a novel FES-based approach, termed Submucosal Injection-Guided septotomy (SING) technique [1].

Methods In this retrospective analysis of prospectively collected data, all consecutive patients with ZD referred to three Italian centers between October 2019 and August 2024 were treated by the SING technique and included. SING procedure includes a classic septotomy, a mucosal incision with a Hook-Knife along the midline of the septum, and a cricopharyngeal myotomy extending along the entire length of the diverticulum and at least 10mm into the esophageal muscular layer. During septotomy, a submucosal injection is performed on both the esophageal and diverticular sides, enhancing visualization of the

muscular layer and guiding a complete myotomy. This represents the innovative aspect of the technique and an improvement over the traditional septotomy. The primary outcome was clinical success (CS), defined as a Kothari-Haber Scoring system score (KHSS) < 2 at 3 months. Secondary outcomes included technical success (TS), procedural time, and adverse events (AEs). Time to recurrence was estimated using the Kaplan–Meier method.

Results A total of 102 patients underwent the SING procedure (median age 74 years [IQR 68–81]; 69.7% male). Median diverticulum depth was 30 mm (IQR 25–40), and median baseline KHS score was 4 (IQR 3–6). CS was achieved in 98% (100/102) of patients, and, after a median follow-up of 370 days (IQR, 297–747), the recurrence of symptoms was 7%. The probability of remaining recurrence-free was 93.5% at 6 months, 92.0% at 12 months, and 92.0% at 24 months. TS was obtained in all cases, with a median procedural time of 30 minutes (IQR, 25–45 minutes). AEs occurred in 3 patients (2.9%) and were all managed endoscopically. Sixty-three patients (61.8%) underwent the conventional SING technique (C-SING), while 39 patients (38.2%) were treated with the diverticuloscope-assisted variant (D-SING). AEs occurred more frequently in the D-SING group (7.7% vs 0%, $p = 0.04$), including the only case of perforation, which was attributed to mechanical trauma from the distal end of the diverticuloscope. Recurrence was more frequent in the D-SING group compared to the C-SING group, although this difference did not reach statistical significance (12.8% vs 3.3%, $p = 0.06$). Seventy-eight patients (76.5%) had large diverticula (> 25 mm), while 24 patients (23.5%) had small diverticula (< 25 mm). was similarly high (L-SING 97.4% vs S-SING 100%, $p = 0.43$). No significant differences in AEs (3.8% vs 0%, $p = 0.62$) and recurrence rates (7.9% vs 4.2%, $p = 0.53$) were observed. TS was 100% in both groups ($p = 1.00$).

Conclusions SING appears to be a safe and effective technique for the endoscopic treatment of ZD, potentially offering technical advantages and improved outcomes over conventional FES.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dell'Anna G, Fasulo E, Fanizza J, Barà R, Vespa E, Barchi A, Cecinato P, Fuccio L, Annese V, Malesci A, Azzolini F, Danese S, Mandarino FV. The Endoscopic Management of Zenker's Diverticulum: A Comprehensive Review. *Diagnostics (Basel)*. 2024; 14 (19): 2155. doi:10.3390/diagnostics14192155 PMID: 39410559 PMID: PMC11475965

eP1170 Impact of Endoscopy Timing, Predictors of mortality and rebleeding in Variceal bleeding

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DOI 10.1055/s-0046-1822497

Aims Acute variceal bleeding (AVB) is the complication of portal hypertension associated with the highest mortality. Standard endoscopic treatment consists of esophageal band ligation (EBL) for esophageal varices (EV) or GOV1 varices, and cyanoacrylate (CYA) injection for gastric varices (GOV1–2 or IGV1–2). Early rebleeding carries significant morbidity, mortality, and prolonged hospitalization. Baveno guidelines recommend early consideration of transjugular intrahepatic portosystemic shunt (TIPS) placement in patients at high risk of rebleeding, such as those with active bleeding, hepatic venous pressure gradient (HVPG) > 20 mmHg, or Child-Pugh score ≥ 8. Because HVPG is not universally available, identification of less invasive predictors of early rebleeding is required.

Methods Patients presenting with AVB between January 2021 and March 2024 were included. Demographic data, clinical parameters, type of varices, timing

of endoscopy (early intervention < 12 h; delayed intervention > 12 h), rebleeding within 5 days, 30-day mortality, and overall mortality were recorded. Patients follow-up was until the end of the study or until death.

Results A total of 91 patients were included, 86 males and 5 females, with a mean age of 59.5 ± 12.1 years. Cirrhosis accounted for 90.1 % of portal hypertension, while 9.9 % had prehepatic etiologies (portal sinusoidal vascular disease or portal vein thrombosis). AVB was caused by EV in 81 cases (89 %) and by GV in 10 cases (11 %). EBL was performed in 82 patients, and CYA injection in 9. Mean systolic arterial pressure was 123.9 ± 21.1 mmHg, mean hemoglobin 8.8 ± 2.4 g/dL, mean INR 1.66 ± 0.54 , and mean platelet count $134.18 \pm 92.5 \times 10^9/L$. Early endoscopy was performed in 77 patients (84.6 %), while 14 (15.4 %) underwent endoscopy > 12 hours. Rebleeding occurred in 15 cases (16.4 %). Thirty-day mortality was 16.4 %, while overall mortality reached 31.8 %, mainly related to multiple organ dysfunction syndrome.

Rebleeding ($p < 0.01$) was associated with CYA injection and with FFP transfusion ($p < 0.05$) with statistical significance. For 30-day mortality, CYA injection, infection, low albumin, and coagulopathy were identified as significant predictors ($p < 0.001$). Although patients undergoing delayed endoscopy showed higher mortality rates (30.7 % versus 14.5 %), the difference did not reach statistical significance. No difference was seen in rebleeding rates based on endoscopy timing.

Conclusions Rebleeding rates are higher in patients with gastric varices treated with CYA injection and in those who received FFP transfusion. Thirty-day mortality is increased in patients with gastric varices, infection, low albumin levels, or elevated INR.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1171V Pre-sealing in different settings requires different modes

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DOI 10.1055/s-0046-1822498

Abstract Text

Intraprocedural bleeding in third-space endoscopy remains a major technical challenge, and no universal pre-sealing strategy has been established.

We present the first comparison of two electrosurgical settings for vessel pre-sealing: Forced Coagulation (FC) (Effect 0.3) in CO₂ and Swift Coagulation (Effect 3.0) in saline immersion.

In the high-impedance CO₂ environment, Forced Coagulation (Effect 0.3) successfully minimized spark formation, ensuring a safe pre-sealing effect. Conversely, in the low-impedance saline medium, Swift Coagulation achieved progressive tissue heating and successful coagulation.

Crucially, FC failed in saline due to the drop of impedance. These findings demonstrate that a similar pre-sealing outcome can be achieved with different modes across different settings, emphasizing the necessity of matching the electrosurgical setting to the procedural environment

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/c84fee2d-c5f0-4b65-9df1-502b6af1c95a/Uploads/19978_presealing.mov

Conflicts of Interest AC is a consultant for ERBE. RM is a consultant for ERBE, Fujifilm, 3DMatrix and Boston Scientific. CH is a consultant for Alpha-Sigma,

Fujifilm, Medtronic, Norgine, Olympus and Pentax. AR is a consultant for Medtronic, ERBE, Fujifilm and Olympus. Others authors have nothing to declare

ePoster Connect: Hepatopancreaticobiliary

14/05/2026, 15:05–15:25

ePoster Connect:
Station 3 (Level 0)

eP1172 Role of Endoscopy in the Management of Complicated Forms of Hepatic Hydatid Cyst

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DOI 10.1055/s-0046-1822499

Aims Rupture of a hepatic hydatid cyst (HHC) into the biliary tract is the most frequent and serious complication, leading to significant morbidity. Traditionally, management relied on surgery, but the advent of endoscopic retrograde cholangiopancreatography (ERCP) has considerably modified practices over the past decades. The objective of our study was to evaluate the contribution of ERCP in the management of complicated forms of HHC, particularly those fistulized into the biliary tract [1–3].

Methods We conducted a retrospective descriptive study within the Department of Hepato-Gastroenterology over the period from January 2021 to August 2025. Data were collected from ERCP records and concerned patients with complicated hepatic hydatid cysts.

Results A total of 85 cases of fistulized HHC were included. The mean age of patients was 38 years, with a male-to-female ratio of 1.8. Reported medical histories included prior surgery for HHC (28 %), cholecystectomy (13 %), and known uncomplicated HHC (9 %). Clinically, obstructive jaundice was the predominant symptom (81 %), followed by hepatic colic (41 %); fever > 38.2 °C was present in 59 %.

Radiological investigations (ultrasound, CT, MRI) showed dilatation of the common bile duct (CBD) in 71 % of cases and of the intrahepatic bile ducts in 48 %. Hydatid material within the CBD was found in 69 % of patients.

The main indications for ERCP were: acute cholangitis (63 %), postoperative or post-drainage biliary fistula (33 %), and acute biliary pancreatitis (4 %). Endoscopic sphincterotomy was performed in all patients (100 %).

Post-ERCP evolution showed resolution of jaundice within 5–15 days on average, and closure of biliary fistulas within 10–16 days. Complications were rare: two cases of post-ERCP pancreatitis (2.3 %) and one case of procedure-related bleeding (5.2 %). The relative risk of bleeding after sphincterotomy was significantly lower in patients without a history of HHC surgery (RR = 0.439; $p = 0.01$).

Conclusions ERCP is an effective and safe therapeutic modality in the management of complicated hepatic hydatid cysts. It ensures rapid resolution of jaundice and closure of fistulas, with a satisfactory safety profile (bleeding RR: 0.43). These results highlight the central role of ERCP in the therapeutic arsenal for complicated HHC, as a complement or an alternative to surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Treatment of hepatic hydatid disease: Role of Surgery, ERCP, and Percutaneous Techniques. PubMed. 2020;
- [2] Ozaslan E, Bayraktar Y. Endoscopic therapy in the management of hepatobiliary hydatid disease. J Clin Gastroenterol 2002; 35: 160–174
- [3] Dolay K, Akbulut S. Role of endoscopic retrograde cholangiopancreatography in the management of hepatic hydatid disease. World J Gastroenterol 2014; 20 (41): 15253–15261

eP1173 Microbiological Profile and Antimicrobial Resistance Patterns in Walled-Off Pancreatic Necrosis: A Single-Centre Retrospective Study

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DOI 10.1055/s-0046-1822500

Aims According to the Revised Atlanta Classification, walled-off pancreatic necrosis (WOPN) is a late complication of acute pancreatitis, diagnosed >4 weeks after disease onset. Up to 40% of WOPN cases develop secondary infections, which significantly worsen clinical outcomes and increase mortality up to five-fold compared with sterile necrosis. While endoscopic drainage is the preferred treatment, data on the microbiological characteristics of infected WOPN remain limited [1].

This study aims to characterise the microbial pathogens and their antibiotic resistance patterns in patients undergoing endoscopic stent placement for suspected infected WOPN at a single tertiary care centre the aim of this study is to describe the microbiological profile in infected WOPN. Secondary objectives were to assess antimicrobial resistance patterns, evaluate the effectiveness of empiric antibiotic therapy, and document therapy modifications.

Methods Between October 2021 and October 2025, we performed 3337 endoscopic procedures, including 1705 EUS examinations. During this period, a total of 75 WOPN cases were identified, comprising 40 LAMS insertions, 11 conventional plastic stent insertions, and 24 cases of spontaneous regression. This retrospective analysis included 51 patients with WOPN who underwent EUS placement of either a plastic or a metal stent. Samples from the WOPN cavity and blood cultures were obtained and sent for microbiological evaluation. We recorded the isolated organisms, resistance profiles, and corresponding antimicrobial therapies

Results Among 51 patients, 37 had infected WOPN (72.5%; median age 57 [42-69], 32.4% female) and 14 had sterile WOPN (27.5%; median age 64 [54-73], 57.1% female). Polymicrobial infection was present in 35/37 infected cases (94.6%), while the remaining two patients had monomicrobial infection. The most frequently isolated organisms included *Enterococcus* spp. (56.75%), *Klebsiella* spp. (45.9%), and *Pseudomonas* spp. (43.2%). Fungal organisms, predominantly *Candida* spp., were identified in 19 patients (51.3%). Empiric imipenem was administered to 19 patients (51.3%), with therapy modification required in 16 (84.2%), including 13 modifications due to confirmed imipenem resistance (68%). Overall, imipenem resistance was detected in 24 out of the 37 infected cases (64.8%), and antibiotic modification was required in 19 patients (51.3%).

Conclusions This study highlights the high rates of bacterial and fungal infections in WOPN, as well as the high prevalence of imipenem resistance, underscoring the need to recognise pathogen profiles to improve treatment protocols and strengthen antimicrobial stewardship in managing necrotising pancreatitis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Banks PA, Bollen TL, Dervenis C et al. Classification of acute pancreatitis--2012: revision of the Atlanta classification and definitions by international consensus. *Gut*. 2013; 62 (1): 102-111

eP1174 European practice and outcome of Endoscopy for Chronic Pancreatitis (ESCPA): A Prospective, International Modified Snapshot Study

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DOI 10.1055/s-0046-1822501

Aims The optimal treatment of pancreatic duct strictures and stones due to chronic pancreatitis remains challenging considering the heterogeneity in etiology, morphology and patient burden. Endoscopic therapy offers a minimally invasive option. However, endoscopic therapy, especially since the introduction of pancreatoscopy, varies between centers and countries due to availability and preference. Current guidelines offer limited guidance for treatment decisions. This study aims to provide an overview of practice variation across Europe and its influence on treatment outcomes, focusing on quality of life.

Methods This multicenter prospective snapshot study was conducted in 14 hospitals from 8 European countries. Between the 1st of June 2021 and the 9th of August 2023, patients undergoing endoscopic therapy for chronic pancreatitis were included. Patients were followed for at least 2 years. Primary outcomes were type of therapy performed and clinical success, defined as partial or complete pain relief following endoscopic therapy after 2 years. Secondary outcomes were total number of interventions, quality of life and post-interventional events. The Pancreatitis Quality of Life Instrument (PANQOLI), Izbicki and 12-Item Short-Form (SF-12) were performed at baseline and after 1, 3, 6, 12, 18 and 24 months post-intervention.

Results 96 patients were included (mean age 54 years (14.7), 66 (68.8%) men), median symptom duration of 7 months (3.0-23.0), 33 (34.4%) patients had current opioid use, of which 14 (42.4%) longer than 6 months and the most common etiology toxic/metabolic (N = 49, 51.6%). The mean Izbicki score was 52.7 (SD 24.6) following 81 responses. The primary indication for intervention was pain (N = 70, 56.5%). Overall, 102 treatments were performed, 6 patients receiving multiple modalities. Of these, 55 (53.9%) were only classic Endoscopic Retrograde Cholangiopancreatography (ERCPs), 23 (22.5%) extracorporeal shockwave lithotripsy (ESWL) +/- ERCP, 20 (19.6%) ERCPs assisted with pancreatoscopic lithotripsy and 4 (3.9%) Endoscopic ultrasound-guided access (i.e. rendezvous). A median of 3 (IQR 2.0-5.0) endoscopic interventions were performed in the two year follow-up. Clinical success following only endoscopic therapy was achieved in 56 (58.3%) patients. After 2 years, the median Izbicki score was 18.1 (IQR 1.2-33.9) in the overall population, following 36 responses.

Nineteen patients used opioids (19.8%). Four patients died, one caused by endoscopic complications, one due to an infected pseudocyst and two following other/unknown causes. Additional pancreatic surgery was performed in 21 (21.9%) patients and planned in two (2.1%). Explorative univariate logistic regressions showed no correlation of treatment related factors and patient related factors on clinical success. Additional quality of life outcomes are currently being analyzed and results are expected beginning of 2026.

Conclusions This snapshot study shows substantial treatment variation across Europe, with currently a limited role for pancreatoscopic lithotripsy. This treatment variation in combination with a clinical success rate in about 6 out of 10 cases, underlines the need for standardization of endoscopic management of chronic pancreatitis. Although several studies have shown superior outcomes of surgery, minimally invasive endotherapy should not be dismissed. Future studies should focus on optimal patient selection, further standardizing endotherapy based on morphologic traits and creating unity in European treatment standards.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1175 Trends and outcomes of EUS-guided hepaticogastrostomy (EUS-HGS) in a retrospective multicenter Italian study

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DOI 10.1055/s-0046-1822502

Aims EUS-guided hepaticogastrostomy (EUS-HGS) is among the preferred rescue techniques for biliary drainage when ERCP fails or when the papilla is inaccessible due to altered anatomy or neoplastic invasion. Although the majority of published experience originates from Eastern centers, and despite its demonstrated technical feasibility and clinical effectiveness, safety concerns have limited widespread adoption of EUS-HGS in Western practice, even among expert institutions. Recently, however, growing experience with EUS-guided interventions and accumulating evidence supporting the superiority of this technically demanding approach in select clinical scenarios have highlighted the need for robust data from Western centers.

Methods We conducted a retrospective study of all consecutive patients who underwent EUS-HGS at six Italian institutions from 2017 to October 2025. Technical outcomes were technical success rate and procedure time. Clinical outcomes included the rates of clinical success—defined as a $\geq 50\%$ bilirubin reduction within two weeks for malignant disease or resolution of the underlying condition for benign indications—and adverse events, which were defined and graded according to the ASGE lexicon.

Results A total of 183 patients underwent attempted EUS-HGS: 142 for malignant and 41 for benign conditions. Most procedures ($n = 98$, 53.6%) were performed from January 2024 onward. In 116 patients, the papilla was inaccessible due to duodenal or pyloric strictures ($n = 61$) or altered anatomy ($n = 55$). Adequate transmural stent placement was achieved in 174 cases (95.1%), with a mean procedure time of 50.2 ± 26.3 minutes. Following bile duct puncture, a cystotome was the preferred device for tract creation. Dedicated stents were used in 110 cases. Among the 174 technically successful procedures, clinical success was achieved in 146 patients (83.9%). Twenty-three patients (12.5%) experienced adverse events, ranging from moderate ($n = 16$)

to severe ($n = 7$) according to the modified ASGE lexicon. Cholangitis was the most common complication. One patient required surgery for biliary peritonitis, and two procedure-related deaths occurred due to post-procedural cholangitis leading to septic shock.

Conclusions EUS-HGS is increasingly adopted in tertiary centers and demonstrates high technical and clinical success rates, particularly considering that these procedures are performed in patients with limited—and often clinically ineffective—alternative options. Nevertheless, the incidence and severity of adverse events underscore the need for careful pre-procedural patient counseling and emphasize that EUS-HGS should be performed exclusively by experienced endoscopists in centers equipped to manage complications within a multidisciplinary framework.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Stomach and Duodenum

14/05/2026, 15:05–15:25

ePoster Connect:
Station 4 (Level 0)

eP1176 Breaking the size barrier: Endoscopic Submucosal Dissection of a massive flat Gastric Neuroendocrine Tumour

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DOI 10.1055/s-0046-1822503

Abstract Text

Type I gastric neuroendocrine tumors (gNETs) arise in chronic atrophic gastritis under hypergastrinemic stimulation, are typically indolent, with negligible metastatic potential. They present as multiple, small, mucosal (rarely submucosal) yellowish lesions with ectatic vessels. As most are small, superficial and without distant spread, the mainstay of treatment is endoscopic resection, while ENETS guidelines recommend considering surgery for lesions > 2 cm or high grade.

We report an exceptionally rare case of a type I gNET with an extremely unusual morphology—flat and involving almost the entire gastric body—successfully treated by endoscopic submucosal dissection (ESD).

A 56-year-old woman with autoimmune atrophic gastritis underwent gastroscopy. High-definition white-light and virtual chromoendoscopy revealed a subtle, completely flat (Paris 0-IIb) lesion with preserved glandular pattern but prominent, irregular “corkscrew-like” vessels, extending continuously from the proximal to the distal gastric body (≈ 100 mm).

Targeted biopsies showed low-grade gNET (Ki-67 1%). Somatostatin receptor PET/CT with ⁶⁸Ga-DOTA-peptides and contrast-enhanced CT excluded metastases. Endoscopic ultrasound (EUS) demonstrated mucosal thickening without submucosal or muscularis involvement.

Given the lesion’s remarkable size, the case was discussed at our multidisciplinary neuroendocrine tumor board. The absence of deeper invasion or metastasis supported an endoscopic approach, and ESD was performed. The lesion margins were carefully marked and en-bloc resection was achieved, yielding a 140×35 mm specimen. Histopathologic examination confirmed a well-differentiated, G1 multifocal NET with negative lateral and vertical margins and no vascular invasion. Remarkably, serial sectioning revealed more than 40 micro-foci of neuroendocrine proliferation ranging from 0.5 to 5 mm.

Postoperative recovery was uneventful. Follow-up endoscopies at two and six months showed a retracted scar with no recurrence or symptoms.

To our knowledge, this is the first reported case of a giant, completely flat type I gNET successfully removed by ESD. In gNETs, lesion size correlates with lymph-

node metastatic risk, typically guiding, for lesion larger than 2 cm, surgical management. However, in this case, careful correlation of morphology, cross-sectional imaging, and EUS findings supported localization limited to the mucosal layer, justifying an endoscopic approach. Definitive histology confirmed confinement to the mucosa and absence of lymphovascular invasion. This case highlights the importance of individualized, multidisciplinary evaluation in gNETs and demonstrates that, even for unusual very large lesions, advanced endoscopic resection can achieve curative results and avoid unnecessary surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1177 Is EUS with FNB an adequate method for the preoperative prognostic stratification of GIST?

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DOI 10.1055/s-0046-1822504

Aims The Miettinen-Lasota scoring system is the cornerstone for prognostic stratification of gastrointestinal stromal tumors (GISTs), based on mitotic count and tumor size. Guidelines lack indications about the optimal sample that should be used for mitotic count assessment, only specifying that at least 50 high-power fields (HPF) must be evaluated. It is generally believed that, due to tumor heterogeneity and the limited sample size obtained, endoscopic ultrasound-guided tissue acquisition (EUS-TA) is unreliable, particularly when using traditional cytology needles. However, only few data are available regarding the use of histology (FNB) needles in this context. Nevertheless, the ability to correctly stratify patients preoperatively is a critical factor in GIST management. The primary aim of this multicenter retrospective study was to evaluate the concordance between EUS-FNB and surgical specimens in assessing the GIST prognostic score. Secondary endpoints were the adequacy of FNB samples for immunohistochemistry (IHC) and mutational analysis [1–4].

Methods We included all histologically confirmed GISTs from a prospective registry (NCT02851511). Concordance for mitotic count and tumor size measurements was evaluated using Bland-Altman plots, calculating bias (mean difference between FNB and surgical specimens) and limits of agreement (LoA). Agreement in prognostic score classification was calculated as a percentage.

Results Among a cohort of 68 GISTs, we included 32 cases in which complete histopathological data from both EUS-FNB and surgical specimens were available. The diagnostic concordance between EUS-FNB and surgical pathology was 100%. IHC was successfully performed in all FNB samples (100%). The mitotic count showed a bias of -1.19 mitoses, with LoA ranging from +3.02 to -5.4. For tumor size, the bias was -0.96 mm, with LoA ranging from +21.28 to -23.2 mm. Miettinen-Lasota score concordance between EUS with FNB and surgery showed 72% agreement (23/32): in 5 cases, EUS underestimated the score, while in 4 cases, it overestimated it. Mutational analysis was performed in 62.5% of the cases.

Conclusions EUS with new FNB needles appears to be reasonably accurate for preoperative GIST evaluation and is certainly a useful tool for diagnosis and mutational analysis. However, its concordance with surgical findings is still suboptimal in terms of prognostic evaluation. On one hand, performing multiple needle passes, together with fanning technique, could improve the representativeness of tumor heterogeneity and increase the amount of material

provided to the pathologist. On the other hand, greater attention should be addressed to tumor size measurement in EUS, as this can sometimes lead to score variations. The study's limitations include its retrospective nature and the heterogeneity of mitotic count assessment. Prospective studies with dedicated protocols are warranted, along with an evaluation of the adequacy of the collected material for mitotic count on 50 HPF, as suggested by the guidelines.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Trindade A.J. et al. Fine-needle biopsy is superior to fine-needle aspiration of suspected gastrointestinal stromal tumors: a large multicenter study. 2019; *Endoscopy international open* 7 (7): E931–E936
- [2] Kobara H. et al. Analysis of the amount of tissue sample necessary for mitotic count and Ki-67 index in gastrointestinal stromal tumor sampling. 2015; *Oncology reports* 33 (1): 215–222
- [3] Kamata K. et al. Utility of a 20G needle with a core trap in EUS-guided fine-needle biopsy for gastric submucosal tumors: A multicentric prospective trial. 2021; *Endoscopic ultrasound* 10 (2): 134–140
- [4] Casali P.G. et al. Gastrointestinal stromal tumours: ESMO–EURACAN–GENTURIS Clinical Practice Guidelines for diagnosis, treatment and followup *Annals of Oncology*. Volume 33 (Issue 1): 20–33

eP1178 Performance of elementary endoscopic lesions for predicting helicobacter pylori infection

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DOI 10.1055/s-0046-1822505

Aims The Kyoto classification was introduced to standardize the endoscopic description of chronic gastritis associated with *Helicobacter pylori* (H. pylori). The diagnostic value of elementary endoscopic lesions has not been evaluated in our setting, where the prevalence of infection is high.

The aim of our study was to assess the diagnostic performance of each elementary endoscopic lesion for predicting H. pylori status.

Methods This was a single-center, cross-sectional study conducted over a six-month period. Included patients were H. pylori–treatment naïve and had not received recent antibiotics or proton pump inhibitors. Endoscopic evaluation focused on eight elementary lesions. H. pylori status was determined by histological examination. Diagnostic performance for each lesion was assessed by sensitivity (Se), specificity (Sp), positive predictive value (PPV), and negative predictive value (NPV).

Results Among the 300 included patients, 228 (76.0%) were H. pylori positive (mean age 40.2 ± 13.3 years; 54.4% women). The most frequent lesions were diffuse redness (94.3%), nodularity (50.4%), and atrophy (46.9%). Diagnostic performance was as follows:

- Diffuse redness: Se = 94.3%, Sp = 8.3%, PPV = 76.5%, NPV = 31.6%
- Nodularity: Se = 50.4%, Sp = 86.1%, PPV = 92.0%, NPV = 35.4%
- Atrophy: Se = 46.9%, Sp = 43.1%, PPV = 72.3%, NPV = 20.4%
- Fold hypertrophy: Se = 24.6%, Sp = 83.3%, PPV = 82.4%, NPV = 25.9%
- Adherent mucus: Se = 30.3%, Sp = 75.0%, PPV = 79.3%, NPV = 25.4%
- Spotty erythema: Se = 9.2%, Sp = 94.4%, PPV = 84.0%, NPV = 24.7%
- RAC absence/presence: Se = 32.5%, Sp = 29.2%, PPV = 59.2%, NPV = 12.0%
- Fundic gland polyp: Se = 3.1%, Sp = 94.4%, PPV = 63.6%, NPV = 23.5%

Conclusions Nodularity is the most specific lesion and the strongest predictor of H. pylori infection (PPV = 92.0%). Conversely, the absence of diffuse redness—owing to its high sensitivity (Se = 94.3%)—is a good indicator for ruling out infection. Fundic gland polyp is highly specific for excluding H. pylori infection (Sp = 94.4%), but its very low prevalence (3.1%) limits its practical value.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1179 Accuracy Of Lesion Size Estimation In Gastric Endoscopic Submucosal Dissection: A Comparison Between Community And Expert Endoscopists

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DOI 10.1055/s-0046-1822506

Aims Accurate pre-procedural lesion size estimation is crucial in endoscopic submucosal dissection (ESD) to guide treatment decisions. This study aimed to compare the accuracy of lesion size estimation by community endoscopists and hospital-based expert endoscopists against the actual lesion size measured from resected ESD specimens.

Methods A total of 250 paired pre-procedural lesion size estimates were analyzed from community endoscopists and from hospital based expert endoscopists. These estimates were compared with the actual lesion size using Bland-Altman analysis, Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), and Lin's Concordance Correlation Coefficient (CCC). Regression analysis was performed to assess proportional bias and trends over time, while ANOVA tests were used to determine whether lesion classification (Paris classification) or anatomical location influenced estimation errors.

Results Hospital-based endoscopists demonstrated superior accuracy compared to community endoscopists, with a lower bias of 5.22 mm, narrower limits of agreement, and a higher concordance correlation coefficient (CCC) of 0.785. Lesions larger than 11.5 mm were associated with increased estimation errors, particularly in community endoscopist estimates, which exhibited significant proportional bias ($p < 0.001$). Among hospital-based endoscopists, neither Paris Classification nor anatomical location showed a significant association with estimation errors. However, for community endoscopists, lesions located in the greater curvature were significantly overestimated ($p = 0.019$), with an average overestimation of 8.50 mm. No significant improvement in estimation accuracy over time was observed, suggesting that error rates have remained stable despite potential advancements in training or experience.

Conclusions These findings highlight the need for standardized measurement techniques and underscore the potential benefits of enhanced training programs and adjunctive imaging technologies to improve pre-procedural lesion size assessment in endoscopic practice

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Colon and Rectum

15/05/2026, 09:35–09:55

ePoster Connect:
Station 1 (Level 0)

eP1180 Biologic Behaviour of Carcinoma Differs Across the Colorectum: Real-World Validation in an All-Comers Observational Cohort from a Tertiary Care Center

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DOI 10.1055/s-0046-1822507

Aims Prior reports [1] suggest that distal colorectal lesions harbour carcinomas at higher rates than proximal (right-sided) lesions. Newer data [2], after adjusting for lesion size and morphology, posit that lesion location is not a significant predictor of carcinoma. As such, there is conflicting evidence on the role of

lesion location in the risk of carcinoma and thus the choice of endoscopic resection technique. Thus, we sought to characterize real-world cancer behaviour by colorectal sub-site. We leveraged detailed endoscopic and histopathologic correlation to assess whether a universal ESD strategy is superior to a selective resection algorithm (SRA). To determine how the frequency, depth, and curability of carcinoma differ across anatomical regions of the colorectum (rectum, distal colon, proximal colon), and to examine associations with lesion morphology, optical classification, and histologic risk features.

Methods From July 2019-2025, all 6,449 colorectal lesions assessed endoscopically at St. Michael's Hospital, Toronto, Canada were screened. After excluding polyps less than 10mm ($n = 4,871$), 1,578 lesions with endoscopic features warranting resection were evaluated. Choice of endoscopic resection technique was determined using our previously presented SRA [3]. Thirty-two high-risk lesions were referred directly for surgery, leaving 1,546 endoscopic resections attempted: EMR $n = 1,364$; ESD $n = 182$.

Results Carcinoma was identified in 110 (7.1 %) of specimens, with marked variation by anatomical sub-site: carcinoma was most frequent in the rectum (33/195, 16.9%), followed by the distal colon (32/291, 11.0%) and proximal colon (45/1,060, 4.3%). By Vienna classification, low-grade dysplasia (LGD) was the predominant histologic grade (48.8 %), followed by high-grade dysplasia (33.3 %), intra-mucosal carcinoma (1.2 %), and submucosal carcinoma (5.9 %). On histopathological review, lesions with carcinoma were more commonly removed with ESD than EMR (15.4 % vs 4.6 %, $p < 0.0001$). Among the carcinomas, well-differentiated histology predominated (61.8 %), though poor differentiation was more frequent in ESD vs EMR specimens (11.4 % vs 1.3 %, $p = 0.002$). LVI was observed in 36.4 % of all carcinomas and was more common in ESD vs EMR (51.4 % vs 29.3 %, $p = 0.025$). Among the carcinomas, positive deep (6.6 % vs 0.2 %, $p < 0.0001$) and lateral (4.9 % vs 0.2 %, $p < 0.0001$) margins were higher in ESD vs EMR. Curative resection for carcinoma was markedly higher with ESD vs EMR (74.3 % vs 9.3 %, $p < 0.0001$). Notably, 26.5 % of EMR lesions with submucosal invasive carcinomas fulfilled curative histologic criteria and would have been cured endoscopically had they been resected by ESD. Multivariable logistic regression confirmed anatomical location as a key determinant of carcinoma risk. Compared with the proximal colon, lesions in the rectum (OR 2.48, 95 % CI 1.24–4.97, $p = 0.01$) and distal colon (OR 2.56, 95 % CI 1.50–4.38, $p = 0.0006$) were significantly more likely to harbor carcinoma. Non-granular pseudo-depressed LSTs showed the strongest association with invasion (OR 4.94, 95 % CI 1.72–14.16, $p = 0.003$), whereas granular homogeneous LSTs were least likely to harbor carcinoma (OR 0.18, 95 % CI 0.07–0.49, $p = 0.0009$). When compared to lesions measuring 30–50 mm, those larger than 50 mm had significantly higher odds of harboring carcinoma (OR 0.50, 95 % CI 0.29–0.85; $p = 0.01$), indicating roughly a two-fold increase in carcinoma risk. Furthermore, optical prediction (JNET) of carcinoma performed significantly worse in the rectum: the odds of correctly identifying carcinoma endoscopically were 6-fold lower in rectal vs colonic lesions (OR 0.159, 95 % CI 0.084–0.304; $p < 0.0001$), consistent with lower discriminative performance in the rectum (AUC 0.67, [95 % CI 0.59–0.75] vs 0.71, [95 % CI 0.61–0.81] in the colon), supporting a higher prevalence of covert invasion in rectal lesions despite careful optical assessment by JNET (AUC 0.88, 95 % CI 0.86–0.90) of all colorectal lesions.

Conclusions Rectal lesions, while more frequently found to harbor carcinoma, exhibited a covert pattern of invasion that was less reliably detected endoscopically. This underscores the need for heightened suspicion and an aggressive approach to *en-bloc* resection in this location. Recognizing these segmental differences is essential for refining a selective resection algorithm that balances curative potential, procedural complexity, and patient safety.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; CWT – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

References

- [1] Van der Voort V, Schaefer M, Wallenhorst T, Lepilliez V, Degand T, Le Baleur Y, Leclercq P, Berger A, Chabrun E, Briau B, Barret M, Rahmi G, Legros R, Rivory J, Leblanc S, Vanbiervliet G, Alfaroni L, Magne J, Zeevaert JB, Albouys J, Perrod G, Yzet C, Lepetit H, Belle A, Chaussade S, Rostain F, Dahan M, Lupu A, Chevaux JB, Pioche M, Jacques J FECCo Group collaborators. Rectal versus colonic submucosal cancer rates and procedural outcomes in large non-pedunculated polyps: French ESD registry data. *Gut*. 2025; gutjnl-2024-332970
- [2] Gauci JL, Whitfield A, Medas R, Kerrison C, Mandarino FV, Gibson D, O'Sullivan T, Cronin O, Gupta S, Lam B, Perananthan V, Hourigan L, Zanati S, Singh R, Raftopoulos S, Moss A, Brown G, Klein A, Desomer L, Tate DJ, Williams SJ, Lee EY, Burgess N, Bourke MJ. Prevalence of Endoscopically Curable Low-Risk Cancer Among Large (≥ 20 mm) Nonpedunculated Polyps in the Right Colon. *Clin Gastroenterol Hepatol* 2025; 23 (4): 555–563.e1
- [3] Gupta S, He T, Khalaf K et al. A selective resection algorithm for large non-pedunculated colorectal polyps (LNPCPs) optimizes outcomes of endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD). *Gastrointestinal Endoscopy* 2025; 101: S316–S317. doi:10.1016/j.gie.2025.03.563

eP1181V Comparison of the tissue effects of Spray coagulation and Argon plasma on an ex vivo porcine rectal model

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DOI 10.1055/s-0046-1822508

Problem to solve Spray Coagulation (SprayCoag) is a noncontact thermoablative mode producing superficial tissue effects and operating on the same principles as Argon plasma coagulation (APC). Although SprayCoag has long been used for hemostasis in Surgery and dissection in ESD or POEM, its use in first-space endoscopy remains limited. A recent case series suggested that SprayCoag applied with a conventional polypectomy snare tip across different gastrointestinal locations may be a safe, economical, and less polluting alternative to APC (1). However, a major gap that should be filled is the lack of documented SprayCoag settings for first-space endoscopy [1].

Innovation We propose SprayCoag as an alternative to APC for ablating rectal angiodysplasias in chronic radiation proctitis (CrP). Accordingly, we conducted a single-blind randomized controlled trial using an ex-vivo porcine rectal model to identify the SprayCoag settings that most closely replicate APC-induced tissue effects. **Intervention:** Two electrosurgical units (ESU), the VIO-300D (Erbe Elektromedizin GmbH, Tübingen, Germany) and the ESG-300 (Olympus, Tokyo, Japan) were used for both APC and SprayCoag. APC was set according to recommended settings for CrP and SprayCoag was tested at 3 settings (effect/power): VIO-300D-Erbe: 2/50, 1/60 and 1/50; ESG-300-Olympus: 1/40, 2/30 and 2/40. All electrofulgurations were performed by the same endoscopist and tissue effects were blindly assessed by the same anatomopathologist. **Main outcome measure:** The tissue effects of SprayCoag.

Results Four rectums were included. For each rectum and generator, 3 APC and 3 SprayCoag electrofulgurations per setting were performed (N = 96).

VIO-300D-Erbe: APC produced mean thermal injury of 2.4mm (2.0-2.7) in diameter and 1.3mm (0.2-1.8) in depth, Volume: 2.0mm³ (0.3-2.8). These values were similar to SprayCoag-1/50: 2.6mm (2.2-2.8) in diameter and 1.4mm (0.7-2.0) in depth, Volume: 2.3mm³ (1.2-3.5), $p=0.272$ (95%CI -3.3-1.1), $p=0.251$ (95%CI -0.2-0.9), $p=0.525$ (95%CI -1.6-3.2), respectively. SprayCoag-2/50 and 1/60 caused significantly higher damage.

ESG-300-Olympus: APC produced injury of 2.3mm (1.8-2.6) in diameter and 1.2mm (0.3-1.7) in depth, Volume: 1.8mm³ (0.3-2.9) similar to SprayCoag-2/30: 2.5mm (1.9-2.8) in diameter and 1.2mm (0.9-1.8) in depth, Volume: 1.9mm³ (0.8-3.3), $p=0.217$ (95%CI -0.3-1.2), $p=0.386$ (95%CI -0.3-0.7), $p=0.417$ (95%CI -0.8-1.9), respectively. SprayCoag-1/40 showed a trend toward greater volume damage: 2.2mm³ (0.6-4.1), $p=0.271$ (95%CI -0.6-2.1) and a more erratic effect, 3/12 (25%) yielding no measurable injury. SprayCoag-2/40 produced significantly greater thermal damage in diameter and volume: 2.8mm (2.5-3.2), $p=0.021$ (95%CI 0.1-1.6) and 3.3mm³ (2.0-4.7), $p=0.017$ (95%CI 0.3-3.1), respectively. No electrofulguration reached the muscle layer.

Conclusions SprayCoag 1/50 with the VIO-300D and SprayCoag 2/30 with the ESG-300 produce tissue injury comparable to APC and may therefore be suitable alternatives for the treatment of chronic radiation proctitis.

Video http://data.process.y-congress.com/ScientificProcess/Data/1106/660/1670/ce246253-d4c5-4019-bfb6-eb0cd8f2237f/Uploads/19990_SprayCoag_resection.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Alburquerque M, Vargas A., Ledezma C et al. Use of spray coagulation in first-space endoscopy: a case series. *iGIE* 2024; 2: 182–5

eP1182 Comparative Efficacy and Technical Performance of Submucosal Injection Solutions for Colorectal Endoscopic Mucosal Resection: A Network Meta-analysis of Randomized Trials

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DOI 10.1055/s-0046-1822509

Aims Submucosal injection solutions are essential for safe and effective colorectal endoscopic mucosal resection (EMR), yet comparative evidence across available agents is limited. Viscous and hypertonic solutions have been proposed to improve technical performance and resection quality. This study evaluates the comparative efficacy of submucosal injectates using a network meta-analysis (NMA) of complete resection and a structured synthesis of secondary technical and safety outcomes.

Methods Nine randomized trials were included in the study. Three colorectal EMR trials with extractable complete resection (R0/CRR) data contributed to the connected NMA network of normal saline (NS), hyaluronic acid (HA), 50% dextrose (DEX), and indigo carmine-mixed saline (IC) (total 564 lesions). A fixed-effect contrast-based NMA was used to generate risk ratios (RRs). Secondary outcomes, including submucosal elevation durability, injection volume, procedure time, and adverse events, were synthesized from all relevant colorectal trials.

Results Primary NMA: Compared with NS, HA significantly improved complete resection (RR 1.21; 95% CI 1.02–1.45), DEX showed comparable efficacy (RR 1.26; 95% CI 0.97–1.65), and IC showed no advantage over NS (RR 0.96; 95% CI 0.89–1.05). Treatment ranking favored HA $\approx$ DEX $>$ NS $>$ IC.

Secondary Outcomes: Direct comparative evidence demonstrated that both hydroxyethyl starch (HES) and 50% dextrose substantially prolonged submucosal elevation and reduced reinjection volume versus NS. HES also modestly shortened procedure time and reduced EMR-related bleeding in large laterally spreading tumors. HA-based solutions exhibited a bleeding risk comparable to NS, whereas indigo-carmin saline and 0.13% HA did not significantly influence bleeding or procedural safety. In a separate comparison unconnected to the saline-based network, Eleview required significantly less injectable volume and improved Sydney Resection Quotient compared with hetastarch, without clear adverse event differences. Across all colorectal trials, perforation was rare, and no injectate demonstrated a consistent safety liability.

Conclusions In this colorectal EMR NMA, hyaluronic acid was the only agent that showed a statistically significant improvement in complete/curative resection compared to normal saline. Dextrose 50% showed a similar effect but with less precision. Secondary comparative analyses indicate that HES, dextrose, and Eleview each enhance technical performance by improving cushion durability or lowering injection volume, whereas bleeding and perforation rates remain low across agents. These results show that viscous and hypertonic solutions, especially HA and DEX, are good injectants for clinical use. HES and Eleview also have some technical advantages in certain situations. Additional well-designed randomized controlled trials are required to standardize efficacy and safety assessments across all injectable categories.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1183 Significant proportion of young patients under the age of 50 years found to have premalignant and advanced colorectal polyps – Critical Juncture

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DOI 10.1055/s-0046-1822510

Aims To evaluate the adenoma detection rate (ADR) in patients under 50 years of age undergoing colonoscopy and to characterize the features of adenomas/polyps in this population.

Methods A retrospective analysis was conducted of colonoscopy procedures performed between 2022-2023 in patients under 50 years of age at a district general hospital in the UK. Data collected included patient demographics, procedure indications, colonoscopy findings, and histopathological results. Adenoma and polyp characteristics including location, histological type, and grade of dysplasia were recorded and analyzed (► **Table 1**).

► **Table 1** Adenoma Characteristics (n = 35)

Characteristics	n	%
Location *		
Caecum + ascending colon	13	37.1
Transverse colon	13	37.1
Descending + sigmoid colon	16	45.7
Rectum	9	25.7
Size		
< 5mm	16	45.7
6-9mm	10	28.6
≥ 10mm	11	31.4
Size range (mm)	2-30	-
Histological subtype		
Tubular	29	85.7
Tubular villous	5	14.3
Dysplasia grade		
Low-grade dysplasia	31	88.6
High-grade dysplasia	3	8.6
Adenocarcinoma	1	2.9
Advanced adenomas†	9	25.7

Results A total of 3800 colonoscopies were carried out during this time. 234 colonoscopies performed in patients under 50 years of age. Patients with inflammatory bowel disease and polyposis syndrome were excluded.

Overall adenoma detection rate was 14.96% (35/234). The mean age of patients with adenomas was 38.12 years (range 33-49) with a 22:13 M:F of 1.7:1. One patient was found to have an adenocarcinoma.

Common indications for colonoscopy included: rectal bleeding (15/35, 42.9%), altered bowel habits (13/35, 37.1%), abdominal pain (9/35, 25.7%), and anaemia (7/35, 20%).

Overall serrated polyp detection rate was 4.27% (10/234).

ADR plus (defined as the proportion of patients with at least one adenoma or serrated polyp) was 18.4% (43/234).

Advanced adenomas were found in 25.7% (9/35).

Conclusions This study demonstrates a significant ADR of 15% in patients under 50 years of age undergoing colonoscopy. Adenomas were relatively evenly distributed throughout the colon, with slight left-sided predominance (45.7%). The presence of high-grade dysplasia in 8.6% of cases and one adenocarcinoma highlights the clinical significance of evaluating significant symptoms in younger patients. These findings support the value of colonoscopy in symptomatic patients under 50 and contribute to evidence informing screening strategies for younger populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Endoscopy service

15/05/2026, 09:35–09:55

ePoster Connect:
Station 2 (Level 0)

eP1184 Development Of A Vision-based Large Language Model For An Automated Ambient Endoscopic Report Scribe: A Scalable Approach With Clinical Potential

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DOI 10.1055/s-0046-1822511

Aims Endoscopic reporting has traditionally required physicians to manually document findings, procedural maneuvers, and recommendations—a time-consuming task that contributes to physician burnout. Recent advances in ambient clinical documentation have reduced this burden, enabling greater focus on high-value, skill-based activities. Emerging large language models (LLMs) with vision-language capabilities offer the potential to further streamline workflows and enhance diagnostic accuracy through automated image interpretation. This study evaluated the performance of a state-of-the-art vision-language LLM for endoscopic image classification and report generation.

Methods We fine-tuned Google's MedGemma-4B LLM using the HyperKvasir dataset, comprising 9,808 labeled GI endoscopic images across 23 categories representing both anatomical landmarks and pathological findings from upper and lower GI examinations. Images were randomly divided into training/validation (80%; 7,686/854) and testing (20%; 2,122) sets. The model underwent supervised fine-tuning, and performance metrics were assessed before and after training.

Results Fine-tuning yielded large performance gains across the full test set (Figure 1). On all samples, overall accuracy increased from 0.13 at baseline to 0.86 after fine-tuning, with macro-averaged F1 rising from 0.07 to 0.54; discrimination approached ceiling performance with area under the receiver operating characteristic curve (AUROC) improving from 0.96 to 0.99. For labels with ≥ 100 training images, performance was uniformly strong, with both accuracy and macro-F1 near 0.97 and AUROC ≈ 0.996. In contrast, classes with < 100 training images showed greater variability (Figure 2). Visually dis-

tinctive but infrequent findings, such as impacted stool and ulcerative colitis with Mayo endoscopic score 3, remained accurately classified despite limited sample size.

Conclusions Supervised fine-tuning of LLM substantially enhanced endoscopic image classification, achieving near-ceiling discrimination for well-represented classes, with variable performance for underrepresented labels. These results support immediate utility for focused tasks such as Boston Bowel Preparation Scale grade assignment, anatomic landmark recognition, and polyp identification, with anticipated gains with additional training data. Future work should incorporate unstructured textual inputs and free-text label prediction to better mirror clinical documentation. The framework's scalability, adaptability to heterogeneous inputs, and flexibility in outputs position it for clinically relevant applications (e.g., automated endoscopy reporting) and for academic use in large-scale curation of image repositories. Extension to multimodal data streams may enable predictive analytics (e.g., pathology forecasting), offering a promising avenue for translational research.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1185 A human factors-based analysis of reported patient safety incidents involving significant harm in endoscopy care in England and Wales to inform the generation of team-based in-situ simulations

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DOI 10.1055/s-0046-1822512

Aims Gastrointestinal (GI) endoscopy is widely regarded as safe, yet patient safety incidents (PSIs) do occur, with scarce information on contributory factors (CF). [1] This study aims to systematically identify contributory factors (CFs) across the endoscopy pathway using narrative reports from the National Reporting and Learning System (NRLS) in England and Wales, mapped to the Systems Engineering Initiative for Patient Safety (SEIPS) 2.0 human factors framework. By capturing latent risks across its various domains, we seek a system-wide understanding of where, in the endoscopy journey, significant patient harm occurs and why. We also seek to translate these insights into team-based simulations, delivered in-situ, designed to reflect real-world risks.

Methods We retrospectively analysed relevant PSI narrative reports submitted to the NRLS between 2017 and 2022, focusing on significant incidents, resulting in moderate or severe harm or death. Incidents were characterised by procedure type, urgency, and stage of patient care. Using a mixed inductive and deductive approach we identified CFs, based on the SEIPS 2.0 domains using established content analysis principles. [2] High-yield in situ simulation scenarios were developed by translating key descriptors and CFs into realistic, contextually grounded scenarios. These scenarios reflected system vulnerabilities and provided a foundation for exploring team communication and adaptive decision-making in complex, real-world settings.

Results Analysis of 1,442 PSI reports revealed that incidents most commonly occurred during oesophago-gastro-duodenoscopies (31.2%), colonoscopies (29.4%), and Endoscopic Retrograde Cholangio-Pancreatography (16.4%). Elective procedures accounted for 44.8%, with emergencies comprising 17.0%. PSIs were most frequently reported peri-endoscopically (44.5%), followed by pre- (28.3%) and post-endoscopy (27.3%) phases.

Content analysis of 1,057 reports identified 1,484 CFs. The Person domain predominated (52.0%), with communication failures (50.6%) and gaps in knowledge, competence, or skills (33.7%) most commonly reported. Organisational factors (18.7%) reflected resource availability, staffing, and workflow challenges, while Task factors (17.5%) related to procedural complexity and patient-specific considerations. Tools and Technology (7.3%) and External factors (3.7%, mainly COVID-19-related) were less frequently reported CFs

These findings were translated to create team-based in-situ simulation scenarios addressing real-world vulnerabilities (such as management of complex patients with comorbidities and anticoagulation, navigating incomplete or conflicting documentation, responding to peri-procedural complications such as perforation, withdrawal of consent). Each scenario was explicitly mapped to CFs identified from the analysis and are currently being used as a basis to study endoscopy team communication and adaptive capacity in participating centres.

Conclusions This content analysis of at least moderate harm incident reports in GI endoscopy highlights that PSIs arise from complex interactions across the entire work system, with Person and Organization domains most frequently reported. Communication failures accounted for over half of person-related CFs, often occurring across teams, with patients, or via incomplete documentation. This highlights a mismatch between current endeavours to improve safety in endoscopy care—typically focused on improving individual technical performance—and where harm actually originates. Latent system vulnerabilities amplify seemingly minor errors into significant adverse events, including delayed diagnosis, missed pathology, or lost surveillance.

Addressing these risks requires a reconceptualization of safety that extends beyond the procedure room to encompass the entire multidisciplinary team. To address some of those challenges, we have developed and delivered multi-centre, in-situ team-based simulations based on those real-life risks. These simulations are now being used to study team communication and adaptive capacity, offering an evidence-informed, proactive approach to improving patient safety and fostering resilient endoscopy systems.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Krippendorff K. Content analysis: An introduction to its methodology. 2025 <https://methods.sagepub.com/book/mono/content-analysis-4e/toc>. doi:10.4135/9781071878781
- [2] Matharoo M, Haycock A, Sevdalis N, Thomas-Gibson S. A prospective study of patient safety incidents in gastrointestinal endoscopy. *Endosc Int Open* 2017; 5 (1): E83–E89. doi:10.1055/s-0042-117219

eP1186 Development of a Simulated Soft-Gel Upper Gastrointestinal Endoscopy Training Device and Matching Lesion Training Modules

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DOI 10.1055/s-0046-1822513

Aims To address the limitations of current gastrointestinal endoscopy training systems—such as abstract modeling, low anatomical fidelity, and lack of support from adjacent organs—this study aimed to develop a high-fidelity upper gastrointestinal endoscopy training platform based on real imaging data, along with replaceable lesion training modules.

Methods Three-dimensional reconstruction and optimized design were performed using patient CT images, preserving the upper gastrointestinal tract, adjacent organs, and bony structures. The outer shell and positioning framework were fabricated via 3D printing using TPU material, followed by rubber casting and overall assembly to form a complete human simulation model with a fixation system. According to training requirements, matching lesion modules for foreign body removal, polypectomy, and ESD were developed, enabling modular quick replacement and scenario expansion.

Results A simulated upper gastrointestinal endoscopy trainer was constructed that covers the pharynx, esophagus, stomach, duodenum, and pancreaticobiliary system, integrating adjacent structures such as the liver, spleen, pancreas, diaphragm, and spine, together with a stable fixation system. Multiple compatible lesion training modules were successfully developed to meet training needs ranging from basic to advanced procedures.

Conclusions This trainer achieves high-fidelity design based on realistic anatomical structures, significantly enhancing the spatial perception and tactile

feedback of endoscopic operations. It provides a reproducible and expandable solution for endoscopy education and skill training.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1187 Short-term PEG (stPEG) mortality risk stratification using machine learning

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DOI 10.1055/s-0046-1822514

Aims Patients receiving endoscopic percutaneous endoscopic gastrostomy (PEG) are usually at elevated risk of short-term mortality due to concurrent morbidity. Risk stratification algorithms to identify patients with no or elevated risk might assist appropriate patient selection. The aim of this study was to develop a machine learning-based risk stratification model for short-term (<30 days) mortality prediction.

Methods All PEG implantations between January 2017 and December 2023 were retrospectively included. Exclusion criteria comprised age below 18 years, multiple PEG procedures (≥ 2), follow-up shorter than 30 days and PEG indications due to dementia or palliative treatment. Spearman correlation with Bonferroni multiple comparison correction was used to identify feature variables. A time-based split (4:1) was applied to define the training (80%) and validation cohort (20%). After feature engineering, imputation of missing variables using K-nearest neighbour method and compensation of class imbalance with SMOTE, a logistic regression-based machine learning model was trained using the training cohort. Monte Carlo cross-validation-based (100-fold stratified random splitting with a 25% validation proportion) threshold selection was used to pre-define a rule out threshold achieving a sensitivity >80% while maximizing the true negative classifications within the training data. This rule-out threshold was then applied to the validation data. Performance metrics were calculated and an internal validation was conducted using bootstrap analysis ($n=2000$). To assess for differences between the training and validation cohort a Mann-Whitney U test was used for continuous non-parametric variables and a Fisher's exact test for categorical variables. Python alongside different packages (e.g. NumPy, pandas, SciPy, scikit-learn) with the support of Chat GPT-5 was used to develop the algorithm and to perform the statistical analysis.

Results A total of 689 PEG implantations met the inclusion criteria. Median age of patients was 68 (IQR 60-78) years, 39% were female. The most common PEG indication was a cancer ($n=314$), either due to dysphagia or prophylactic (oncological), followed by stroke/cerebral haemorrhage ($n=242$) and neurological disease ($n=133$). Approximately 7.7% of patients died within 30 days after PEG placement. Spearman correlation analysis demonstrated a significant correlation between 30-day mortality and C-reactive protein ($r=0.21$), Charlson Comorbidity Index ($r=0.163$), prothrombin time ($r=-0.16$), age ($r=0.12$), leucocyte count ($r=0.12$) and haemoglobin ($r=-0.12$). ASA score was also associated with short-term mortality (30-day mortality: ASA1 = 0%; ASA2 = 3.1%; ASA3 = 8.2%; ASA4 = 8.9%). To identify patients with no or elevated risk a machine learning based approach was developed. No differences between the training ($n=551$) and validation cohort ($n=138$) were found. A logistic regression-based machine learning model was trained utilizing the features identified and listed above. To reduce overfitting, as indicated by learning curves, leucocytes were excluded from the final model. Evaluation of the model demonstrated good discrimination with an area under the receiver operating characteristic curve of 0.81 (95%CI 0.70-0.92). SHAP analysis indicated that PEG indication had only minimal predictive value (mean absolute SHAP <0.01). Utilizing the pre-calculated rule-out threshold in the validation cohort, patients without

short-term mortality could be identified with a negative predictive value and sensitivity of 100% (true negative = 91; false negative = 0; true positive = 6; false positive = 41). Given the low prevalence of short-term mortality, a reliable rule-in threshold could not be defined. Thus, the rule out threshold was used to stratify into rule out (mortality = 0%) and elevated-risk groups (mortality = 14.6%).

Conclusions This logistic regression-based machine learning model enables stratification of patients receiving PEG implantations. Patients classified as rule out have no mortality risk. Future research should focus on external and possibly prospective validation and further refining the model for better stratification of high-risk patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Esophagus

15/05/2026, 09:35–09:55

ePoster Connect:
Station 3 (Level 0)

eP1188 Performances of Baveno VII and AASLD 2024 criteria for detecting gastroesophageal varices in untreated patients with HDV-related cirrhosis

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DOI 10.1055/s-0046-1822515

Aims In patients with cirrhosis, gastroesophageal varices (EV) due to clinically significant portal hypertension (CSPH) are associated with an increased risk of liver decompensation. Non-invasive tests (NITs) are increasingly used in clinical practice for assessing the risk for CSPH with EV, but chronic hepatitis Delta (CHD) specific studies are missing. We investigated the performances of NITs-based criteria to predict EV in CHD patients (► **Table 1**).

► **Table 1**

Criteria	Specificity	Positive Predictive Value	Sensitivity	Negative Predictive Value
LSM or PLT	24.0 %	31.6 %	95.7 %	93.8 %
SSM	47.3 %	37.0 %	89.5 %	92.9 %
LSM > 18.7 kPa	68.1 %	40.9 %	60.2 %	82.4 %

Methods Untreated patients with HDV-related compensated cirrhosis and available liver stiffness measurement (LSM) and esophagogastroduodenoscopy (EGD) enrolled in the multicenter SAVE-D and D-SHIELD studies were included. In a subgroup of patients, spleen stiffness measurement (SSM) was also available. EGD and transient elastography (TE) were performed prior to Buleviritide (BLV) start. Baveno VI/VII and AASLD criteria were applied to identify patients in which screening endoscopy could have been avoided (LSM < 20 kPa + platelets [PLT] count > 150 × 10⁹/L). Regarding SSM, the Baveno VII criteria of SSM ≤ 40 kPa was implemented to identify patients who could have been spared of screening endoscopy. NITs' performances were assessed calculating for each criteria Sensitivity (Sn), Specificity (Sp), Positive Predictive Value (PPV), Negative Predictive Value (NPV), and accuracy. The diagnostic performance of the continuous LSM variable was evaluated using Receiver Operating Characteristic (ROC) curve analysis [1, 2].

Results 347 patients were included in this analysis (median age 54, 56 % males): 93 (27 %) showed high risk varices (HRV). Avoiding screening endoscopy in patients with LSM < 20 and PLT > 150 × 10⁹/L resulted in 4 (9 %) missed high risk varices (HRV) (Sensitivity [Sn] 95.7 %, Negative Predictive Value [NPV] 93.8 %). In patients with available SSM, the rate of missed HRV dropped to 7 %, while Sn was reduced 89.5 % and NPV to 92.9 %. ROC analysis to identify patients harboring varices retrieved an optimal LSM cut-off of 18.7 kPa, with an AUROC of 0.620 (0.550–0.690), Sn of 60.2 % and a false positive rate (1 – Sp) of 0.319, corresponding to a Sp of approximately 68.1 %. The corresponding PPV was 40.8 %.

Conclusions In patients with untreated HDV-related cirrhosis, applying the Baveno VII criteria to identify patients who could avoid screening EGD reports a rate of missed HRV higher than the acceptable threshold. Avoiding screening endoscopy based on NITs in CHD patients could lead to misclassify patients who have HRV and are at higher risk of decompensating events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kaplan DE, Ripoll C, Thiele M et al. AASLD Practice Guidance on risk stratification and management of portal hypertension and varices in cirrhosis. *Hepatology* (Baltimore, Md). 2024; 79 (5):
- [2] de Franchis R, Bosch J, Garcia-Tsao G et al. Baveno VII – renewing consensus in portal hypertension: report of the Baveno VII Consensus Workshop: personalized care in portal hypertension. *J Hepatol*. 2021; 0 ():

eP1189 Acetic Acid-Enhanced Linked Color Imaging May Improve the Color-Based Visibility of Barrett's Neoplasia

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DOI 10.1055/s-0046-1822516

Aims Acetic acid chromoendoscopy and linked color imaging demonstrate significant clinical utility in enhancing the visibility of Barrett's neoplasia during endoscopy. However, there are limited data examining the incremental benefit of utilizing these imaging modalities in combination. The aim of this study is to assess the effect of acetic acid-enhanced linked color imaging (AA-LCI) on enhancing Barrett's neoplasia visibility, compared with acetic acid chromoendoscopy alone [1–5].

Methods We retrospectively examined paired endoscopic images of 17 lesions from 17 consecutive patients with Barrett's neoplasia who underwent endoscopic submucosal dissection between April 2023 and March 2025 at a single Canadian tertiary referral centre. Images of each lesion were captured under acetic acid chromoendoscopy and AA-LCI during index endoscopy. Within these images, neoplastic and non-neoplastic Barrett's mucosa were identified and demarcated by an expert endoscopist, and ten 50-by-50-pixel regions of interest were randomly selected from each of the demarcated mucosal zones using image analysis software (ImageJ, NIH, Bethesda, MD, USA). We then quantified the mean color contrast (ΔE^*) between the neoplastic and non-neoplastic regions of interest for each lesion, using the Commission Internationale de l'Eclairage (CIE) lab color system. We also performed exploratory analyses of the geometric and textural contrast between the lesion and adjacent non-neoplastic mucosa using the Sobel operator and grey-level co-occurrence matrix, respectively. Paired differences in color, geometric, and textural contrast between acetic acid chromoendoscopy and AA-LCI were analysed using a Wilcoxon signed-rank test.

Results Overall, 680 regions of interest were analysed across 17 neoplastic lesions with paired acetic acid chromoendoscopy and AA-LCI images (340 neoplastic and 340 adjacent non-neoplastic). Quantitative image analysis demonstrated that AA-LCI produced a moderate increase in the lesion-to-background color contrast when compared to acetic acid chromoendoscopy alone (median paired difference 2.8 ΔE^* ; $Z = 2.34$, $p = 0.017$, $r = 0.57$). Differences in geometric contrast did not favor either modality (median paired difference – 0.68 units; $Z = 0.78$, $p = 0.459$, $r = 0.19$), and textural contrast similarly showed no significant advantage for AA-LCI (median paired difference – 1.33 units; $Z = 0.59$, $p = 0.579$, $r = 0.14$).

Conclusions In this single-centre review of Barrett's neoplasia treated with ESD, AA-LCI was associated with a moderate increase in color contrast between neoplastic lesions and adjacent non-neoplastic Barrett's mucosa when compared to acetic acid chromoendoscopy alone. We did not observe significant differences in geometric or textural metrics between modalities, suggesting that the potential benefit of AA-LCI in this context may be driven principally by color contrast rather than by changes in edge or texture features. These findings support AA-LCI as a useful adjunct for enhancing color-based delineation of Barrett's neoplasia. However, this study was limited by its small sample size and the absence of endoscopist visibility scores, diagnostic performance measures, or clinical outcome data. Larger studies are needed to further evaluate whether AA-LCI meaningfully improves the optical detection of Barrett's neoplasia.

Conflicts of Interest Dr. Robert Bechara is a consultant for Olympus and Vantage Endoscopy.

References

- [1] Ramzan M., Raza M., Khan Z.F., Khan M.A., Bačanin-Džakula N., Damaševičius R., Jeon S., Nam Y. 2025; A review on computer-aided diagnostic system to classify the disorders of the gastrointestinal tract. *European journal of medical research* 30 (1): 674. doi:10.1186/s40001-025-02718-w
- [2] Ramzan F, Tariq A, Rehman A, Iqbal Z, Mehmood A, Saba T et al. Texture-based polyp detection in colonoscopy. *Int J Comput Assist Radiol Surg* 2025; 20 (3): 467–78

- [3] Mokrzycki W.S., Tatol M. 2011; Color difference ΔE : a survey. *Machine graphics & vision.* 383–411
- [4] Coletta M., Sami S.S., Nachiappan A., Fraquelli M., Casazza G., Ragunath K. 2016; Acetic acid chromoendoscopy for the diagnosis of early neoplasia and specialized intestinal metaplasia in Barrett's esophagus: a meta-analysis. *Gastrointestinal endoscopy* 83 (1): 57–67.e1. doi:10.1016/j.gie.2015.07.023
- [5] External Voting Panel Areia M., Esposito G., Leclercq P., Romańczyk M., Zessner-Spitzenberg J., Delgado Guillena P.G., Monged A., Honrubia López R., Uchima H., Ruiz Ballesteros E.J., Panarese A., Reis de Oliveira L.A., Afify S., Bisschops R., Ferlitsch M. 2025; Performance measures for upper gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative – Update 2025. *Endoscopy* 57 (11): 1268–1297. doi:10.1055/a-2674-4912

eP1190 Predictive factors for pressure ulcer resolution after esophageal variceal ligation in cirrhotic patients

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DOI 10.1055/s-0046-1822517

Aims Hemorrhage from sloughing of the esophageal slough, which has a severe prognosis, is a rare complication of esophageal variceal ligation (EVL) in cirrhotic patients. The aim of this study was to identify risk factors for hemorrhage associated with this complication at the time of EVL.

Methods This retrospective study included patients with cirrhotic portal hypertension who underwent esophageal ligation between April 2021 and October 2025. A retrospective analysis of these patients was performed, followed by a case-control study comparing patients who experienced a first bleeding episode due to sloughing of the esophageal ulcer during their first esophageal ligation (EVL) session (13 cases) with 120 cirrhotic patients (controls) treated during the same period during their first EVL. Univariate and multivariate analyses were conducted to determine predictive factors for bleeding from sloughing of the esophageal ulcer after EVL. The procedure was performed under propofol-induced general anesthesia. Eleven patients experienced a bleeding episode following EVL. Post-EVL sloughing of the esophageal ulcer was confirmed in all cases endoscopically by the presence of active bleeding at one or more sites of post-EVL esophageal ulceration.

Results Bedsore sloughing occurred in 13 patients with a mean age of 54 years [34; 75], with a M/F sex ratio of 1.5.

All of the patients were admitted through the emergency department for gastrointestinal bleeding.

Cirrhosis was non-B/non-C in 8 patients (61.5%), of viral origin (Hepatitis B) in 3 patients (23%), of alcoholic origin in 1 patient (7.6%), and of dysmetabolic origin in 1 patient (7.6%).

Seven patients (53.8%) had child-onset C, 4 patients (30.7%) had child-onset B, and 2 patients (15.3%) had child-onset A.

Hemorrhage from sloughing of eschar occurred within an average of 6 days, inducing hemodynamic instability in 2 patients (15.3%) requiring transfusion. This complication induced severe bleeding in all patients and was significantly associated in the case-control study with the presence of gastroesophageal reflux ($p < 0.001$), a history of gastrointestinal bleeding ($p = 0.02$), a low prothrombin level ($p = 0.01$), a high Child-Pugh score ($p = 0.02$), and elevated C-reactive protein. protein ($p = 0.04$) and units of fresh plasma transfused ($p = 0.03$). Two patients (15.3%) died following this complication. In multivariate analysis, a history of gastrointestinal bleeding (OR: 1.2), the presence of gastroesophageal reflux (OR: 4.5), an APRI score greater than 3.3 (OR: 1.54), and a prothrombin level less than 46% (OR: 0.54) were independent predictors of post-LVO eschar sloughing bleeding.

Conclusions In conclusion, hemorrhage from sloughing of post-LVO eschar in cirrhotic patients is a severe complication with independent risk factors including a history of gastrointestinal bleeding, gastroesophageal reflux, a high APRI score and a low prothrombin level.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1191 Long-term outcomes of endoscopic treatment for zenker's diverticulum in patients with prior failure treatments: a retrospective analysis in a high-volume western center

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DOI 10.1055/s-0046-1822518

Aims Endoscopic treatment is an established treatment of Zenker's diverticulum. However, evidence on endoscopic retreatment of ZD after prior treatment failure is limited. We aimed to compare long-term outcomes of endoscopic treatment of ZD in patients with and without previous endoscopic or surgical treatments.

Methods This is a retrospective analysis of a prospectively maintained cohort of patients who underwent endoscopic treatment for ZD at a single high-volume center between March 2019 and March 2025. Patients who had completed at least 6 months of follow-up were included. Baseline data included demographics, symptom duration, and septum size. Procedural data included type of treatment (flexible endoscopic septotomy (FES) vs peroral endoscopic septotomy (POES), sedation, procedural time, adverse events and length of hospitalization. The primary outcome was clinical failure (defined as Kothari-Haber Dysphagia Score ≥ 2) during overall follow-up. The effect of previous treatment on clinical failure was estimated using inverse-probability-of-treatment weighting (IPTW) with a Cox model, accounting for relevant influencing factors. A sensitivity analysis used 1:1 propensity-score matching (PSM) followed by Cox regression was performed.

Results 250 patients underwent endoscopic treatment for ZD during the study period. 224 patients (median age 74 years; 70.5% male; median ASA score 2; median septum 20 mm; median symptom duration 12 months) with at least 6 months of follow-up were included in the analysis. 50 patients (22.3%) had undergone previous treatment. No difference between the two groups in terms of baseline characteristics and procedural data (median procedural time 20 min; adverse events 3.1%) were reported. Over a median follow-up of 36 months, clinical failure was comparable in the two groups (10.4% naïve vs 14.0% previous; $p = 0.53$). A conventional multivariable Cox model stratified by technique (FES vs POES) found prior failure treatment did not significantly predict clinical failure (HR 1.06; 95%CI 0.46–2.42; $p = 0.887$). In the IPTW-Cox analysis, previous treatment was not associated with clinical failure (HR 1.34; 95%CI 0.56–3.22; $p = 0.508$), with good post-weighting balance across covariates. The PSM-Cox sensitivity analysis yielded concordant results (HR 1.35; 95%CI 0.61–2.97; $p = 0.46$). Among previously treated patients, a subgroup analysis by prior modality (endoscopic vs surgical) showed no association with clinical failure (endoscopic: HR 0.78, 95% CI 0.28–2.23, $p = 0.65$; surgical: HR 1.63, 95% CI 0.63–4.22, $p = 0.31$).

Conclusions Endoscopic treatment for ZD after prior intervention failure remains feasible, safe, and effective, achieving clinical results comparable to treatment-naïve patients even in the long-term. These findings support offering endoscopic treatment as the first-line therapy for ZD irrespective of previous failure history.

Conflicts of Interest A. Capogreco is a consultant for ERBE and Boston Scientific. C. Hassan is a consultant for Fujifilm, Erbe, and Medtronic. R. Maselli is a

consultant for Fujifilm, Erbe, Boston Scientific, and 3DMatrix A. Repici is a consultant for Fujifilm, Erbe, Boston Scientific, 3DMatrix, and Medtronic All other authors have nothing to disclose

ePoster Connect: Hepatopancreaticobiliary

15/05/2026, 09:35–09:55

ePoster Connect:
Station 4 (Level 0)

eP1192 Hepatic Decompensation After ERCP in Cirrhotic Patients: A Retrospective Cohort Study from a Tertiary Eastern European Center

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DOI 10.1055/s-0046-1822519

Aims To evaluate the frequency, type, and predictors of hepatic decompensation following endoscopic retrograde cholangiopancreatography (ERCP) in patients with liver cirrhosis, and to assess the impact of baseline clinical and biochemical parameters on post-procedural outcomes.

Methods We retrospectively analyzed 67 cirrhotic patients who underwent ERCP between January 2021 and December 2023 at a tertiary referral center. Child–Pugh and MELD–Na scores were recorded pre- and post-procedure. Variables analyzed included demographics, etiology of cirrhosis, indication and type of ERCP intervention, and post-procedural complications such as ascites, hepatic encephalopathy (HE), variceal bleeding, jaundice, and hepatorenal syndrome (HRS). Statistical analysis included Wilcoxon, Chi-square, ANOVA, and univariate logistic regression tests.

Results The study cohort included 49 men (73 %) and 18 women (27 %), mean age 65 ± 10.9 years. The predominant etiology was alcoholic cirrhosis (61 %). ERCP indications were choledocholithiasis (60 %), malignant biliary stricture (28 %), benign biliary stricture (8 %), and pancreatic disease (4 %). Post-procedural deterioration in hepatic function was significant (Child–Pugh $p = 0.008$; MELD–Na $p = 0.006$). Hepatic decompensation occurred in 25 % of patients, most commonly ascites and HE. Logistic regression identified post-ERCP Child–Pugh (OR 2.35; $p < 0.001$) and MELD–Na (OR 1.19; $p = 0.001$) as independent predictors of complications.

Conclusions ERCP in cirrhotic patients carries a substantial risk of post-procedural hepatic decompensation, particularly in advanced disease stages. Careful patient selection, pre-procedural optimization, and close post-procedural monitoring are essential to mitigate risk and improve outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1193 Explaining outcome variability in endoscopic treatment of post-liver transplant biliary leaks

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Aims Endoscopic therapy is first-line for biliary leaks after liver transplantation (LT), yet contemporary series report success from ~55 % to >90 %. We assessed which technical/anatomical factors explain this variability.

Methods We searched PubMed/Embase (Jan 2015–Oct 2025) for peer-reviewed studies on endoscopic treatment of post-LT (or post-hepatic surgery

including LT) bile leaks with extractable patient-level outcomes or multivariable analyses. Three studies met criteria (Oh 2015; Sendino 2018; Obata 2025). Management was classified as bridging (stent or nasobiliary tube beyond the leak) vs non-bridging/pressure-reduction only. Additional 2025 LT series/review were screened qualitatively but not pooled (no per-technique denominators).

Results Across the three pooled studies, endoscopic closure was 190/244 (77.9 %). Bridging drainage was the strongest, most consistent predictor: in a two-centre LT series, success was 44/47 (93.6 %) with stent vs 19/33 (57.6 %) with sphincterotomy alone (OR 8.36; $p = 0.007$); a large postoperative cohort likewise found bridging stent independently associated with closure (OR 12.2; $p < 0.001$). Anatomical complexity reduced success: an LT cohort showed leak-only 17/22 (77.3 %) vs leak + anastomotic stricture 10/20 (50.0 %). Recent 2025 series confirmed high success (>85 %) for stent and ENBD when the leak could be crossed, supporting the bridging effect [1–10].

Conclusions Bridging the leak is the decisive driver of success in post-LT bile leaks: ~84 % when the drainage crosses the defect vs ~55 % when it does not. The variability seen between studies is largely explained by three elements—bridging, absence of an anastomotic stricture, and technical success at the index ERCP. Future reports should mandate “bridged vs not bridged” to make outcomes comparable and actionable.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Harputluoglu M et al. Endoscopic treatment of biliary complications after living-donor liver transplantation. *Acta Gastro-Enterol Belg* 2018; 81 (2): 283–287
- [2] Tringali A, Costa D, Ramai D. Endoscopic management of biliary leaks: where are we now? *World J Gastrointest Endosc*. 2025; 17: [Article 107587]
- [3] Bofill A, Cárdenas A. A practical approach to the endoscopic management of biliary strictures after liver transplantation. *Annals of Hepatology*. 2023/2024
- [4] Quintini D et al. Endoscopic (± combined) management of postoperative biliary leaks: a two-centre cohort including liver transplantation. *Surgical Endoscopy* 2024; 38: 7233–7242
- [5] Lee HW, Shah NH, Lee SK. An update on endoscopic management of post-liver transplant biliary complications. *Clinical Endoscopy* 2017; 50 (5): 451–463
- [6] Macías-Gómez C, Dumonceau J-M. Endoscopic management of biliary complications after liver transplantation: an evidence-based review. *World J Gastrointest Endosc* 2015; 7 (6): 606–616
- [7] Raza A et al. Efficacy of nasobiliary tubes and biliary stents in management of patients with bile leak after liver transplantation: a systematic review. *Clinical Endoscopy* 2019; 52 (2): 159–167
- [8] Raza A et al. Efficacy of nasobiliary tubes and biliary stents in management of patients with bile leak after liver transplantation: a systematic review. *Clinical Endoscopy* 2019; 52 (2): 159–167
- [9] Obata T et al. Endoscopic bridging stent placement improves outcomes of postoperative biliary leaks (including liver transplantation). *Journal of Clinical Medicine* 2025; 14: 3381
- [10] Oh D et al. Endoscopic management of bile leakage after liver transplantation. *Gut and Liver* 2015; 9 (4): 417–423

eP1194 Endoscopic ultrasound- guided gastroenterostomy performed with novel lumen- apposing metal stent with electrocautery-enabled delivery system- a single center study

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DOI 10.1055/s-0046-1822521

Aims Background: Endoscopic ultrasound- guided gastroenterostomy (EUS-GE) is a new treatment modality for gastric outlet obstruction, demonstrating advantages over enteral stenting and surgical bypass. The majority of reported

procedures have been performed with only one electrocautery-enhanced lumen-apposing stent (LAMS) and data about other LAMSs are scarce. There is paucity of data in the literature about long-term symptom relief and factors associated with outcomes and adverse events.

Aim: To evaluate the safety and efficacy of EUS-GE to treat gastric outlet obstruction (GOO) using a novel electrocautery-enabled LAMS (Niti-S Hot SPAX-US, Taewoong Medical, Goyang, South Korea). Primary endpoints were adverse events (AEs) and factors associated with their occurrence. Secondary endpoints were technical success (establishment of an anastomosis), clinical success (tolerating semisolid food at 48 hours), procedure time, hospital stay and long term follow up data on symptom relief.

Methods Methods: Retrospective single center study over a 2-year period. Demographic characteristics, procedure-related and follow-up data were collected.

Results Results: Forty patients were included. The most common indication was malignancy (87.5%), predominantly pancreatic cancer (55%), followed by gastric cancer (10%) and groove pancreatitis (7.5%). Technical success was achieved in 97.5%. Stent misdeployment (SM) occurred in 10% and was more frequent in younger ($p = 0.0067$) and female (75% vs. 25%) patients. SM occurred exclusively in malignant indications (11.4% vs. 0%). There was no correlation with the presence of ascites, site of obstruction, technique, shape of target loop, previous interventions or surgically altered anatomy. All the cases were salvaged endoscopically. SM did not prolong the hospital stay ($p = 0.481$) and was only associated with prolongation of the procedure time. Immediate AEs (< 24 hours) were reported in 2.5% and happened more frequently in younger age and peritoneal carcinomatosis ($p = 0.046$). The rate of short-term AEs (< 30 days) was 10% ($n = 4$) occurring more frequently in the presence of ascites ($p = 0.078$), in malignant etiology ($p = 0.048$) and peritoneal carcinomatosis ($p = 0.046$). Long-term AEs (> 30 days) were reported in 15.8% and were significantly associated with malignant etiology ($p = 0.021$). Most adverse events were managed conservatively or were not clinically significant, only two patients required surgery. The median procedure time was 35 minutes (IQR 30–40), and the median hospital stay was 3 days (IQR 2–3). The clinical success was 92.5%, indicating high rate of early functional recovery. Six-month follow-up data were available for 15 patients (37.5%). Among them, 86.7% demonstrated complete clinical resolution. Late functional outcomes assessed using the gastric outlet obstruction scoring system (GOOSS score) showed that 94.9% of patients achieved a GOOSS of 3 or 2, indicating the ability to tolerate a full or almost full diet at longest follow-up. These findings suggest sustained symptomatic improvement in most patients with available follow-up data. Two patients are alive at 12 months and both tolerate normal diet.

Conclusions Conclusions: We demonstrated that EUS-GE using a novel electrocautery-enabled LAMS is a safe and highly effective procedure. The majority of patients tolerate normal diet at long term follow-up. SM happened rarely, mostly in young female patients with malignant indications but did not affect the outcome and was related only with prolonged procedure time. Malignant etiology and presence of peritoneal carcinomatosis are strongest risk factors for adverse events.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1195 Lumen-apposing metal stent with or without coaxial double pigtail plastic stent for EUS-guided gallbladder drainage in case of acute cholecystitis or distal malignant biliary obstruction: a multicentre study (COALA study) on behalf of I-EUS group

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DOI 10.1055/s-0046-1822522

Aims EUS-guided gallbladder drainage (EUS-GBD) with lumen-apposing metal stent (LAMS) reported high technical/clinical success but not negligible adverse events (AEs) and stent dysfunction (SD). Based on evidence from pancreatic fluid collection drainage and EUS-choledochoduodenostomy, the placement of a coaxial double-pigtail plastic stent (DPPS) within the LAMS may reduce these events. This study aimed to assess whether inserting a DPPS coaxially through the LAMS during EUS-GBD decreases the risk of AEs and stent dysfunction.

Methods This is an interim analysis of an ongoing multicentre study conducted across eight centres, including consecutive adult patients (2018–2025) who underwent successful EUS-GBD with LAMS for acute cholecystitis or distal malignant biliary obstruction. Patients with perforated gallbladder or with contained perforation, coagulopathy, non-patent cystic duct (in case of DMBO) were excluded. As the target sample size has not yet been reached, analyses represent a direct comparison without propensity-score matching. Stent dysfunction was defined as a composite endpoint including recurrent jaundice, obstruction, migration, buried stent, cholangitis or new onset/recurrent AC during follow-up. The primary endpoint was the effectiveness of coaxial DPPS placement in reducing overall AEs and SD. Secondary endpoints included identifying risk factors associated with AEs and SD.

Results A total of 273 patients were included (141 M; mean age 80 ± 12 years); 216 underwent EUS-GBD for acute cholecystitis. Coaxial DPPS placement was performed in 41 patients, predominantly via a trans-gastric approach. Overall, AEs occurred in 9/41 (22%) patients in LAMS + DPPS group and 42/230 (18.3%) in LAMS alone group. Kaplan–Meier analyses revealed no significant differences between the LAMS + DPPS and LAMS-alone groups in AE-free survival (log-rank test, $p = 0.49$) or SD-free survival (log-rank test, $p = 0.10$) (Fig.1; Fig.2). Binary logistic regression identified previous percutaneous transhepatic biliary drainage (PTBD) (OR 3.197; 95%CI 1.00–2.32; $p = 0.048$) and the presence of perihepatic ascites (OR 0.210; 95%CI 0.00–1.00; $p = 0.050$) as predictors of AEs. The transgastric route showed a trend toward increased AEs (OR 0.515; 95%CI 0.03–1.36; $p = 0.061$).

Conclusions In this interim analysis, coaxial DPPS within LAMS did not reduce AEs or SD. Notably, prior PTBD, ascites and a transgastric approach were identified as potential risk factors for AEs. A larger cohort with propensity-score matching or a RCT is necessary to verify this hypothesis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Small intestine

15/05/2026, 11:35–11:55

ePoster Connect:
Station 1 (Level 0)**eP1196 Gastrointestinal Complications of Continuous Levodopa–Carbidopa Enteral Therapy: A Five-Year Multicenter Experience****Authors** Achemlal A^{1,2}, Coelho J², Popa I², Robleh H², Grabli D³, Meneret A³, Mantisi L³, Letrillart H³, Amiot X²**Institutes** 1 Mohammed V Military Training Hospital, Rabat, Morocco; 2 Tenon Hospital, Paris, France; 3 University Hospitals Pitié Salpêtrière, Paris, France**DOI** 10.1055/s-0046-1822523

Aims The primary objective of our study was to report our experience with the placement and management of complications in patients with advanced Parkinson's disease (PD) treated with continuous intestinal infusion of levodopa-carbidopa gel (LCIG) via gastrojejunostomy tube (PEG-J). This work was conducted through close collaboration between a neurology unit and a gastroenterology department. In addition, factors associated with system persistence, the occurrence of complications, and the need for device replacement were also analyzed.

Methods This was a retrospective observational study conducted in patients with long-standing, advanced PD who had a PEG-J tube placed for LCIG therapy between December 2019 and June 2025. The treatment decision, made by the neurology department based on clinical status, treatment history, and patient preferences, followed a thorough discussion of potential benefits and risks. After obtaining informed consent, PEG-J placement was performed endoscopically, and LCIG therapy was initiated and adjusted during a short hospitalization period. A scheduled annual tube replacement was implemented to prevent complications, while patients and their caregivers received training on preventive measures. Malfunctions or complications were managed on an emergency basis, with or without endoscopic intervention. Statistical analysis was performed using Jamovi software, version 2.3.

Results A total of 91 patients were included, accounting for 361 procedures performed over a five-year period. The male-to-female ratio was 2.37, and the mean age at the time of intervention was 68.5 ± 8.7 years. Most PEG-J tubes placed were 15 French in diameter (96.1%). The median propofol dose per procedure was 245 mg [186; 346].

Among the procedures performed:

- 57 (15.8%) corresponded to initial tube placements,
- 140 (38.8%) to scheduled annual replacements,
- 67 (18.6%) to complete endoscopic repairs under anesthesia,
- 92 (25.5%) to repairs performed without anesthesia,
- and 5 patients (1.4%) required complete tube removal due to lack of therapeutic efficacy.

One or more complications were reported in several patients, leading to partial or total device replacement (► **Table 1**). The median device survival at one year, prior to scheduled replacement, was estimated at 308 days (cf. Survival Curve Analysis).

► **Table 1**

Adverse Events / Complications		N (%)
Stoma-related	Wound infection	2 (0.9)
	External blockage	9 (4.2)
Gastrointestinal complications	Buried Bumper Syndrome (BBS)	6 (2.8)
	Bezoar	5 (2.3)
	Digestive ulceration	4 (1.9)
	Other gastric lesions	1 (0.5)
Device-related	J-tube migration	37 (17.2)
	Hardware displacement	11 (5.1)
	Dislocation	7 (3.3)
	Obstruction (loop, knot, etc.)	52 (24.2)
Severe complications	Peritonitis	2 (0.9)
	Aspiration pneumonia	1 (0.5)
Other	Accidental device removal	78 (36.3)

Conclusions Complications related to PEG-J tubes used for LCIG therapy in advanced Parkinson's disease are frequent but generally mild. Optimal management relies on close collaboration between neurologists, gastroenterologists, healthcare providers, and caregivers to ensure early detection and effective management of complications, thereby maintaining treatment continuity and improving clinical outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1197 The Evolution of Capsule Endoscopy Procedure Over Two Decades: A Single-Center Experience (2002–2025)**Authors** Leventaki F¹, Stasinou I¹, Kouimtsidis I¹, Chachopoulos C¹, Pujante A¹, Sorotou A¹, Theofanopoulou A¹, Kalantzis C¹, Tsiouris P¹, Apostolopoulos P¹**Institute** 1 NIMTS Medical Institution Military Shareholder Fund, Athina, Greece**DOI** 10.1055/s-0046-1822524

Aims Small-bowel capsule endoscopy (SBCE) has undergone substantial technological evolution over the past two decades, accompanied by changes in clinical indications and referral patterns. From 2002–2013, the PillCam SB1/SB2 platforms were used at our center, while from 2014–2025 the PillCam SB3 system—offering higher image resolution, adaptive frame rate, and prolonged battery life—was introduced. The aim of this study is to compare indications, completion rates, transit times, and diagnostic yield of SBCE across two consecutive 11-year periods (2002–2013 and 2014–2025).

Methods We performed a retrospective analysis of 1,484 consecutive SBCE examinations (1,048 in 2002–2013 and 436 in 2014–2025). Indications were classified according to ESGE/ASGE guidelines as “appropriate” (obscure GI bleeding, iron-deficiency anemia [IDA], Crohn's disease, inherited polyposis syndromes, imaging abnormalities, and celiac disease) or “low-yield” (abdominal pain, diarrhea, malabsorption). Indications outside ESGE/ASGE criteria were also recorded. Diagnostic yield was defined as the presence of clinically relevant findings at the time of examination. Statistical analysis was performed using t-test and chi-square testing [1].

Results Significantly more SBCEs were performed in the first period than in the second (1,048 vs. 436, $p < 0.001$). Patients examined in the later period

were significantly older (mean age 60 vs. 66 years, $p < 0.001$). IDA and obscure GI bleeding became more frequent indications in the second period (IDA: 39 % vs. 54 %; GI bleeding: 14 % vs. 25 %; both $p < 0.001$), whereas Crohn's disease was significantly less common (13 % vs. 5 %, $p < 0.001$). Examinations performed outside ESGE/ASGE guidelines decreased markedly from 2.76 % to 0.07 % ($p < 0.01$). Completion rate improved substantially from 76 % to 94 % ($p < 0.00001$), and small-bowel transit time increased from 281 to 321 minutes ($p = 0.0001$). Estimated diagnostic yield decreased significantly in the second period for GI bleeding (86 % to 61 %, $p < 0.001$), IDA (78 % to 53 %, $p < 0.001$), and Crohn's disease (75 % to 45 %, $p < 0.01$).

Conclusions Over the last two decades, stricter adherence to guideline-based indications, refined interpretation criteria, and technological enhancements of SBCE have resulted in fewer but more targeted examinations, improved completion rates, and more reliable evaluation. Despite technological advancements, diagnostic yield decreased, likely reflecting increasingly selective patient referral and more stringent diagnostic thresholds rather than diminished test performance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pennazio M, Rondonotti E, Despott EJ, Dray X, Keuchel M, Moreels T, Sanders DS, Spada C, Carretero C, Cortegoso Valdivia P, Elli L, Fuccio L, Gonzalez Suarez B, Koulaouzidis A, Kunovsky L, McNamara D, Neumann H, Perez-Cuadrado-Martinez E, Perez-Cuadrado-Robles E, Picciarelli S, Rosa B, Saurin JC, Sidhu R, Tachei I, Vlachou E, Triantafyllou K. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. 2023; 55 (1): 58–95. doi:10.1055/a-1973-3796 Epub 2022 Nov 24 PMID: 36423618

eP1198 EUS-guided Enteroenterostomy via a Small Bowel Ostomy for Recurrent Malignant Small Bowel Obstruction in a Highly Palliative Setting: a two-case feasibility report

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DOI 10.1055/s-0046-1822525

Abstract Text

Patients with peritoneal carcinomatosis frequently develop small bowel obstruction (SBO), resulting in significant morbidity due to severe nausea, vomiting, pain, leading to reduced quality of life. Surgical bypass or ostomy creation is the traditional approach; however, obstructions proximal to the ostomy or bypass can recur. Further treatment becomes difficult, especially in patients with low performance status not amenable to surgery. In this setting, endoscopic ultrasound-guided enteroenterostomy (EUS-EE) using a cautery-enhanced (CE) Lumen-apposing metal stent (LAMS) through a pre-existing small bowel ostomy could be a potential alternative, but data are scarce. We report two cases of patients with peritoneal carcinomatosis and recurrent malignant SBO proximal to a small bowel ostomy in whom EUS-EE was performed via the ostomy.

Case 1: a 60-year-old man with metastatic colon cancer and peritoneal carcinomatosis underwent jejunostomy for ileus two years prior. After a long stable phase under chemotherapy he presented with absent stoma output, vomiting, and melena without any oral intake. CT-scan revealed dilated small-bowel loops proximal to the ostomy, consistent with ileus. As surgery was not feasible, EUS-EE was performed by advancing a linear echoendoscope through the jejunostomy. A 15/10 mm CE-LAMS was deployed 15 cm proximal to the stoma. Subsequently stoma output improved and oral intake (soft solid) was tolerated. He was discharged after five days and died four weeks later due to disease progression.

Case 2: A 63-year-old man with metastatic pancreatic cancer and a prior ileostomy, presented with intermittent absent stoma output, abdominal pain

, and reduced oral intake. CT-scan confirmed ileus about 20 cm proximal to the stoma. An EUS-EE through the ostomy with deployment of a 20/10 mm CE-LAMS 10 cm proximal to the ostomy resulted in immediate bowel decompression. During the procedure, he aspirated gastric content, from which he fully recovered. He tolerated oral intake (full diet) for four weeks before the obstructive symptoms recurred. He declined further intervention and was discharged to hospice care.

Conclusion: These two cases suggest that EUS-guided enteroenterostomy via an existing small bowel ostomy is technically feasible, and may offer short-term palliation in carefully selected patients with recurrent malignant SBO who are not surgical candidates. Larger series are needed to better define safety, durability, and patient selection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1199V Combined endoscopic decompression using EUS-guided entero-colostomy (EUS-EC) through a colonic stent for a double lower intestinal malignant obstruction (LIMO)

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DOI 10.1055/s-0046-1822526

Abstract Text

EUS-EC is a palliative alternative for LIMO not amenable to enteral stenting. Synchronous rectosigmoid and jejunal LIMO precluding EUS-EC was overcome by same-session colonic stenting, facilitating rectal passage of the echoendoscope over a guidewire. A frail patient with mid-jejunal implant of CRC. A 7F irrigation catheter is left in the jejunum using a pediatric colonoscope perorally. A malignant sigmoid stricture precluding passage is bridged with a 22x90 uncovered stent, which is then 20-mm balloon dilated. The echoendoscope is passed over the wire through the stent into the descending colon supported by a transrectal overtube. After fluoroscopic confirmation of proximity, the jejunum is maximally distended. Jejuno-colostomy is uneventfully performed with a Hot 15x10 mm LAMS. The patient maintains oral tolerance 4 months later.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/1453920f-f068-42e9-b185-8bd407c0ba02/Uploads/19978_VIDEO_ECOIM%20ESGE.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1201 Transfusion strategy in acute non-variceal upper gastrointestinal bleeding among high-risk cardiac patients: a 3-year prospective monocentric study from Marrakech, Morocco

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DOI 10.1055/s-0046-1822528

Aims Patients with ischemic heart disease (IHD) are at increased risk of upper gastrointestinal bleeding (UGIB), mainly due to antiplatelet therapy. International guidelines recommend a restrictive transfusion strategy for most UGIB patients, but suggest considering a more liberal threshold in high-risk cardiac patients, who may require higher hemoglobin levels to maintain adequate myocardial oxygen supply.

Aim To compare restrictive versus liberal transfusion strategies in high-risk cardiac patients admitted for acute non-variceal UGIB in a Moroccan tertiary center.

Methods A prospective randomized monocentric study was conducted at CHU Mohammed VI, Marrakech, between January 2022 and January 2025. A total of 76 high-risk cardiac patients with acute non-variceal UGIB were included. High-risk cardiac status was defined briefly as: a history of myocardial infarction, coronary stents, coronary bypass surgery, ongoing/recent ischemia, reduced left ventricular ejection fraction ($<40\%$), significant arrhythmias, or dual anti-platelet therapy.

Patients were randomized into:

- Restrictive strategy: transfusion when $Hb \leq 8$ g/dL
- Liberal strategy: transfusion when $Hb \leq 10$ g/dL, in accordance with recommendations for cardiac high-risk patients

The primary endpoint was 30-day rebleeding. Secondary outcomes included mortality, cardiovascular events, and hospital stay duration.

Results Of the 76 included patients, 38 received restrictive transfusion and 38 received liberal transfusion. Baseline characteristics were comparable between groups.

30-day rebleeding:

- Restrictive: 18.4 %
- Liberal: 13.2 % ($p > 0.05$, not significant)

30-day all-cause mortality: no significant difference.

Hospital stay: slightly shorter in the liberal group (mean 6.8 vs 7.4 days).

Major cardiovascular events:

- Restrictive: 15.8 %
- Liberal: 7.9 % Liberal transfusion was associated with fewer heart-failure episodes and acute coronary syndromes.

Conclusions In this 3-year Moroccan monocentric cohort of high-risk cardiac patients with acute non-variceal UGIB, a liberal transfusion strategy ($Hb \leq 10$ g/dL) did not increase rebleeding or mortality. It was associated with:

- fewer major cardiovascular events,
- and a slightly shorter hospital stay.

These findings support the use of a more liberal transfusion threshold in high-risk cardiac patients, in line with international recommendations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1202 Low prediction rate of pre-procedure biopsy in upper GI lesions undergoing to endoscopic resection: time to change the algorithm? A retrospective study

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DOI 10.1055/s-0046-1822529

Aims Pre-resection biopsy is usually performed for gastric lesions and non-ampullary duodenal adenomas. However, the final histological diagnosis often diverges, revealing the presence of high-grade dysplasia or carcinoma not previously detected. We aimed to assess the agreement between biopsy and definitive histopathological diagnosis in this setting.

Methods We performed a retrospective analysis of gastric and non-ampullary duodenal lesions submitted to endoscopic resection. Patients' and lesions' characteristics were prospectively collected. A descriptive analysis was performed [1–3].

Results We collected 135 lesions (54 % F, mean age 75.6 years) treated by endoscopic resection and previous biopsy with forceps, performed between January 2021 and October 2025 at Forlì-Cesena Gastroenterology Unit. Gastric (71 %) and duodenal (29 %) lesions were included, with mean dimensions of 20 mm, respectively submitted to Endoscopic Submucosal Dissection (ESD) and Endoscopic Mucosal Resection (EMR) according to European Guidelines.

In 35 % of cases we observed disagreement between biopsies and definitive histology; in details, for gastric lesions understaging rate was 41 % and among them carcinoma was diagnosed in one third of cases not previously detected. Notably 5 % emerged as mixed type gastric cancer including signet ring cells, leading to a significant change in the oncological approach.

Conclusions In our experience and in accordance with previous literature, pre-resection sampling showed a low prediction rate of definitive histology despite its economic and ecological burden, as well potential delay in therapeutic decisions. In this setting, a future change in the diagnostic algorithm for upper GI lesions, especially gastric ones, should be considered. The adoption of artificial systems and chromoendoscopy could strengthen this approach.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Dinis-Ribeiro M, Libânio D, Uchima H, Spaander MCW, Bornschein J, Matysiak-Budnik T, Tziatzios G, Santos-Antunes J, Areia M, Chapelle N, Esposito G, Fernandez-Esparrach G, Kunovsky L, Garrido M, Tachei I, Link A, Marcos P, Marcos-Pinto R, Moreira L, Pereira AC, Pimentel-Nunes P, Romanczyk M, Fontes F, Hassan C, Bisschops R, Feakins R, Schulz C, Triantafyllou K, Carneiro F, Kuipers EJ. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy*. 2025; 57 (5): 504–554. doi:10.1055/a-2529-5025 Epub 2025 Mar 20 PMID: 40112834
- [2] Cantú-Germano E, Fernández-Esparrach G, De Tejada AH, Marín-Gabriel JC, Uchima H, Ramos-Zabala F, Albéniz E, Santiago J, Nogales O, De Santiago ER, Gornals JB, Peñas B, Rodríguez-Sánchez J, Rosón P, Goikoetxea U, Miranda P, Parejo S, De Frutos D, Rivero-Sánchez L, Pozo AD, Terán Á, Pérez D, de María P, Díaz-Tasende J, Ortiz O Resection Working Group of the Spanish Society of Digestive Endoscopy. Poor agreement between biopsies and endoscopic submucosal dissection specimens of Esophageal and Gastric Epithelial Lesions in a western setting. *Dig Liver Dis*. 2025; 57 (5): 556–564. doi:10.1016/j.dld.2025.02.025 Epub 2025 Mar 15 PMID: 40090819
- [3] Xu Q, Yang J, Shi Z, Fang D, Bao D, Wang L. Diagnostic performance of pre-procedure endoscopic biopsies in predicting the histology of gastric lesions undergoing ESD. *Front Oncol* 2025; 15:1569739. doi:10.3389/fonc.2025.1569739 PMID: 40575160 PMID: PMC12197940

eP1203 Dieulafoy's Lesion in Clinical Practice: A 30-Year Analysis of Diagnostic Accuracy and Overdiagnosis

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DOI 10.1055/s-0046-1822530

Aims Dieulafoy's lesion is an uncommon vascular anomaly characterized by a dilated submucosal artery that can cause severe upper gastrointestinal bleed-

ing in the absence of underlying mucosal disease. It accounts for approximately 1–2 % of all gastrointestinal hemorrhage. Endoscopic diagnosis relies on specific criteria: (1) active arterial spurting or micropulsatile bleeding from a small (<3 mm) mucosal defect or through normal mucosa; (2) a visible protruding vessel with or without active bleeding from a tiny mucosal defect; or (3) a densely adherent clot with a pinpoint attachment on otherwise normal mucosa. Despite these criteria, overdiagnosis remains under-reported, and the extent of misinterpretation in real-world endoscopy practice is unclear. We aimed to evaluate both diagnosis and overdiagnosis of Dieulafoy's lesions over a 30-year period in a tertiary hospital [1, 2].

Methods We reviewed all gastroscopy reports from our department between September 1993 and January 2024 in which the term “Dieulafoy” appeared. Demographic data (age, sex) were collected, and all reports underwent detailed reassessment. We evaluated stomach contents, completeness of mucosal inspection, and the presence of alternative bleeding sources such as ulcers, varices, erosions, or angiodysplasia. Each report was reassessed to determine whether the standard endoscopic diagnostic criteria for Dieulafoy's lesion were clearly documented. For confirmed cases, the endoscopic hemostatic modality used was recorded.

Results A total of 59 reports were retrieved, corresponding to 52 patients (mean age 70 years; 71 % male), all presenting with upper gastrointestinal bleeding. Lesions were most commonly described in the fundus (28.8 %), followed by the duodenal bulb (21 %), the lesser curvature (11 %) and the posterior wall of the gastric body (11 %). Overall, 42.3 % of lesions labeled as “Dieulafoy” did not fulfil the diagnostic criteria, indicating substantial overdiagnosis. Nearly half of the procedures (57.6 %) were performed in a stomach contaminated with blood or clots, limiting mucosal visualization. Apart from the lesions described as Dieulafoy, other mucosal abnormalities potentially responsible for bleeding were present in 34.6 % of cases. Several lesions initially labeled as Dieulafoy's were reinterpreted as ulcers (19 %). Hemostasis was achieved using adrenaline injection, ethanolamine injection (used until 2005), APC, thermal coagulation probes, hemoclips, or combination therapy (53 %). Successful hemostasis was reported in 96.6 % of confirmed Dieulafoy cases. Five patients underwent second-look endoscopy; outcome data for the remaining patients were not available.

Conclusions Dieulafoy's lesions remain a significant diagnostic challenge. Limited visualization and inconsistent application of standard diagnostic criteria contribute to substantial overdiagnosis. This 30-year review underscores the importance of rigorous documentation and strict adherence to the recognized endoscopic criteria to improve diagnostic accuracy and guide appropriate treatment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jeon HK, Kim GH. Endoscopic Management of Dieulafoy's Lesion. Clin Endosc 2015; 48 (2): 112–120. doi:10.5946/ce.2015.48.2.112
- [2] Aabdi B, Kharrasse G, Zazour A, Koulali H, Elmqaddem O, Zahi I. Clinical, endoscopic and therapeutic features of bleeding Dieulafoy's lesions: case series and literature review. BMJ Open Gastroenterology 2024; 11:e001299. doi:10.1136/bmjgast-2023-001299

ePoster Connect: Colon and Rectum

15/05/2026, 11:35–11:55

ePoster Connect:
Station 3 (Level 0)

eP1204 Impact of Position Change on Polyp Detection During a Second Look at the Right Colon: A Multicenter, Randomized Controlled Trial

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DOI 10.1055/s-0046-1822531

Aims Detection and removal of colorectal polyps are important for the prevention of colorectal cancer. Among various strategies to enhance the polyp detection, a second-look examination of the right colon can improve the adenoma detection rate (ADR) in the proximal colon. This study aimed to determine whether a second look with patient position change improves ADR compared with a second look without a position change [1, 2].

► **Table 1** Comparison between the first observations and the first + second observations in the control and position change group

	Second look with position change group (n = 327)			Second look without position change group (n = 332)		
	First exam	Frist and second exams	p-value	First exam	Frist and second exams	p-value
Overall ADR for right colon, %	67 (20.5)	99 (30.3)	0.005	63 (19.0)	88 (26.5)	0.026
Overall ASR for right colon, %	15 (4.6)	22 (6.7)	0.310	15 (4.5)	25 (7.5)	0.142
Overall PDR for right colon, %	101 (30.9)	159 (48.6)	<0.001	103 (31.0)	154 (46.5)	<0.001
MAP, n	0.3 ± 0.6	0.4 ± 0.8	0.012	0.3 ± 0.6	0.4 ± 0.7	0.030
MSP, n	0.0 ± 0.2	0.1 ± 0.3	0.101	0.1 ± 0.3	0.1 ± 0.4	0.165
MAPP, n	0.4 ± 0.8	0.8 ± 1.0	<0.001	0.4 ± 0.8	0.7 ± 1.0	<0.001

ADR, adenoma detection rate; ASR, SSL detection rate; PDR, polyp detection rate; SSL, sessile serrated lesion; MAP, mean number of adenomas per patient; MSP, mean number of SSLs per patient; MAPP, mean number of all polyps per patient.

Methods A total of 659 patients undergoing colonoscopy at six institutions were randomly assigned to one of two groups. In the second-look without position change group, the right colon was examined twice in the same position. In the second-look with position change group, the right colon was examined once, the patient's position was changed (from left lateral to supine or from supine to left lateral), and the segment was re-examined. Each observation lasted at least one minute. Colorectal lesions detected during the examinations were analyzed for each group.

Results The second-look with and without position change groups included 327 and 332 patients, respectively. Changing the patient's position during the second look did not result in a significantly higher ADR compared with no position change (30.3% vs. 26.5%; $p=0.324$) (► **Table 1**). However, in both groups, the second look identified additional missed lesions, increasing ADR by 9.8% ($p=0.005$) and 7.5% ($p=0.026$), respectively, and increasing the polyp detection rate by 17.7% and 15.5%, respectively ($p<0.001$). No increase in the detection of sessile serrated lesions was observed.

Conclusions A second-look examination of the right colon significantly increased ADR and polyp detection rates regardless of position change. Similar outcomes in both groups suggest that the effect of position change may be offset when a second look is routinely performed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kamal F, Khan MA, Lee-Smith W et al. *Endosc Int Open*. 2022; 10 (10): E1391–E1398
- [2] Nitalapati V, Desai M, Thoguluva-Chandrasekar VS, Olyae M, Rastogi A. *Endosc Int Open*. 2020; 8 (12): E1842–E1849

eP1205 Comparative Evaluation of Multimodal Large Language Models for Computer-Assisted Endoscopic Assessment in Ulcerative Colitis

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DOI 10.1055/s-0046-1822532

Aims To systematically compare the diagnostic accuracy of five contemporary multimodal large language models (MLLMs: Gemini-2.5-Pro, Grok-4, GPT-4o, GPT-5, and Qwen-VL-Max) in evaluating the Mayo Endoscopic Score (MES) for ulcerative colitis (UC), and to explore their consistency and performance across various intestinal segments and MES categories [1–12].

Methods A total of 402 authentic endoscopic images from patients with UC were collected, covering the entire colon location from the ileocecal region to the rectum. Three experienced inflammatory bowel disease (IBD) experts independently reviewed and unanimously graded these images and finally 283 images with consensus on regrades. These images were among the second stage of research and the grade as the reference standard. These images were randomly presented to MLLMs and two senior IBD physicians without specifying the intestinal segment, and then randomly presented to MLLMs with segmental information before grade. Model and physician performance were compared, and stratified analyses were conducted by intestinal segment and MES grade.

Results The diagnostic accuracies (Acc) of the two IBD physicians were 81.6% and 78.4%, respectively, with strong inter-observer agreement ($\kappa=0.692$). Among these MLLMs, GPT-5 achieved the highest overall performance (F1: GPT-5 0.720 > GPT-4o 0.602 > Gemini-2.5-Pro 0.480 > Grok-4 0.415 > Qwen-VL-Max 0.338), and its diagnostic accuracy was comparable to that of human physicians (GPT-5 Acc 71.7% vs. Senior Physician 2 Acc 78.4%, $P=0.068$). The other models exhibited significantly lower diagnostic performance compared with experienced IBD physicians (all $P<0.001$). When additional segmental information was provided, the sigmoid colon was the most accurately assessed region (mean F1 across models 0.682), whereas the rectum and ileocecal region remained the most challenging (0.447 and 0.493, respectively). The provision of segmental information significantly enhanced the performance of the lower-performing models. Moreover, both the models and human physicians

showed the lowest accuracy at MES = 1 (physicians mean Acc ≈ 60.3%, models mean Acc ≈ 39.4%), indicating that the mild-activity grade remains the most challenging to classify due to its inherent subjectivity.

Conclusions GPT-5 demonstrated diagnostic performance comparable to that of senior IBD physicians in MES grading, whereas other MLLMs require further optimization. In terms of intestinal segments, the rectum and ileocecal region, and in terms of disease severity, mild activity (MES = 1), represented common challenges for both physicians and models. Future efforts should focus on targeted training for these challenging segments and grades, and on integrating additional clinical multimodal data to advance the clinical implementation of intelligent endoscopic assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ogata N. et al. Artificial Intelligence-assisted Video Colonoscopy for Disease Monitoring of Ulcerative Colitis: A Prospective Study. *J Crohns Colitis*. 19: 2025;
- [2] Kuroki T. et al. A novel artificial intelligence-assisted "vascular healing" diagnosis for prediction of future clinical relapse in patients with ulcerative colitis: a prospective cohort study (with video). *Gastrointest Endosc* 100: 97–108 2024
- [3] Osada T. et al. Comparison of several activity indices for the evaluation of endoscopic activity in UC: inter- and intraobserver consistency. *Inflamm Bowel Dis* 16: 192–197 2010
- [4] Lai E.J., Calderwood A.H., Doros G., Fix O.K., Jacobson B.C. The Boston bowel preparation scale: a valid and reliable instrument for colonoscopy-oriented research. *Gastrointest Endosc* 69: 620–625 2009
- [5] Sciberras M. et al. Accuracy of Information given by ChatGPT for Patients with Inflammatory Bowel Disease in Relation to ECCO Guidelines. *J Crohns Colitis* 18: 1215–1221 2024
- [6] Levartovsky A., Ben-Horin S., Kopylov U., Klang E., Barash Y. Towards AI-Augmented Clinical Decision-Making: An Examination of ChatGPT's Utility in Acute Ulcerative Colitis Presentations. *Am J Gastroenterol* 118: 2283–2289 2023
- [7] Levartovsky A. et al. Enhancing diagnostics: ChatGPT-4 performance in ulcerative colitis endoscopic assessment. *Endosc Int Open* 13:a25420943 2025
- [8] Gemini T. et al. Gemini: A Family of Highly Capable Multimodal Models. arXiv e-prints, arXiv 2312: 11805 2023
- [9] OpenAI et al. GPT-4 Technical Report. 2023;
- [10] Fernandes S.R., Pinto J., Marques da Costa P., Correia L. Disagreement Among Gastroenterologists Using the Mayo and Rutgeerts Endoscopic Scores. *Inflamm Bowel Dis* 24: 254–260 2018
- [11] 2023 Chinese national clinical practice guideline on diagnosis and management of ulcerative colitis. *Chin Med J (Engl)* 137: 1642–1646 2024
- [12] Mohammed Vashist N. et al. Endoscopic scoring indices for evaluation of disease activity in ulcerative colitis. *Cochrane Database Syst Rev* 1:Cd011450 2018

eP1206 Development and Validation of a Machine Learning Model for Predicting Non-Curative Resection After Colorectal Endoscopic Submucosal Dissection of Large non-pedunculated colorectal polyps

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DOI 10.1055/s-0046-1822533

Aims Endoscopic submucosal dissection (ESD) is increasingly used to achieve 'en bloc' resection of large non-pedunculated colorectal polyps (LNPCs). However, accurate pre-procedural identification of patients at risk of local- or high-risk resections, which fall within the spectrum of non-curative ESD (NC-ESD), remains challenging. This study aimed to develop and validate machine-learning (ML) models to predict NC-ESD using pre-procedural variables.

Methods We retrospectively analyzed a prospective multicenter database including consecutive patients aged ≥ 65 years who underwent colorectal ESD for LNPCs in 10 Italian tertiary centers (2019–2023). Forty baseline clinical and endoscopic features were collected. The primary outcome was NC-ESD, defined according to ESGE criteria. A supervised ML pipeline with 5-fold stratified cross-validation was implemented using support vector machine (SVM), random forest (RF), extreme gradient boosting (XGBoost) and multi-layer perceptron (MLP) classifiers, optimized for F1-weighted score. Model explainability was assessed with Local Interpretable Model-Agnostic Explanations (LIME).

Results Overall, 1022 patients (median age 74 years) were included. NC-ESD occurred in 16.5%. T1 cancer was found in 13.4% cases, with a deep submucosal invasion in 91% cases. SVM achieved the highest accuracy (0.82) with an F1-score of 0.77, whereas RF yielded an accuracy of 0.81 with the highest F1-score (0.80). XGBoost and MLP showed good, comparable performance (accuracy 0.78–0.79; F1-score 0.77–0.78). LIME consistently identified JNET pattern, lesion size, location, antithrombotic therapy, age and ASA class as the most influential predictors of NC-ESD.

Conclusions In older patients undergoing colorectal ESD, ML models based on clinical and endoscopic variables provided accurate pre-procedural prediction of NC-ESD. These tools may support treatment planning while complementing, rather than replacing, expert endoscopic judgement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1207 Prospective clinical and economic analysis of a universal ESD resection strategy for non-pedunculated colonic polyps ≥ 20 mm

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DOI 10.1055/s-0046-1822534

Aims Large non-pedunculated colonic polyps (≥ 20 mm) can be resected either by piecemeal endoscopic mucosal resection (pEMR) or endoscopic submucosal dissection (ESD). Macroscopic assessment of flat polyps for invasive cancer often has limited sensitivity, especially in borderline lesions. A universal ESD strategy in the colon offers high en bloc, and R0 resection rates with low recurrence rates. In contrast to pEMR, curative ESD obviates the need for endoscopic surveillance for benign lesions and surgical completion therapy for low-risk malignant polyps. On the other hand, colorectal ESD is associated with higher complication rates and longer procedure times. This study aimed to perform a clinical and economic evaluation of a universal ESD strategy for non-pedunculated colonic polyps ≥ 20 mm at a tertiary referral center.

Methods In a universal ESD approach, all non-pedunculated colonic polyps ≥ 20 mm resected between March and October 2025 were treated by ESD. All procedure- and hospital-related costs (materials, staff, length of stay, com-

plications, surveillance colonoscopies, and additional treatments) were recorded and compared using propensity score matching with a historical pEMR cohort from previous years.

Results Forty patients with non-pedunculated colonic polyps ≥ 20 mm (range 22–112 mm) were treated within the universal ESD strategy. Lesions were located in the caecum (n = 6), ascending colon (n = 9), transverse colon (n = 9), descending colon (n = 2), and sigmoid colon (n = 14). En bloc and R0 resection rates were 100% and 97.5%, respectively. Histology revealed 10 LGD, 24 HGD, five early cancers with low-risk features, and one cancer with high-risk features (L1, positive vertical margin). The overall complication rate was 2.5% (n = 1; post-polypectomy syndrome). Mean procedure time was 113 minutes (range 43–430). In the initial cost analysis of the first 10 patients, immediate ESD costs were higher than those of pEMR (2,059.6 € vs. 1,469.2 €; $\Delta = +590.4$ €). However, mandatory surveillance colonoscopies in the pEMR group generated additional costs of 886.4 €, resulting in higher 24-month total costs for pEMR compared to ESD (2,355.6 € vs. 2,059.6 €; $\Delta = -296.0$ €). Analysis of the full cohort is still ongoing. Potential costs which would be generated by additional surgery were not part of this evaluation but should also be taken into consideration.

Conclusions This single-center analysis of a universal ESD strategy for non-pedunculated colonic polyps ≥ 20 mm demonstrates excellent clinical outcomes. The exploratory health-economic evaluation and the propensity score-based comparison with a historical pEMR cohort suggest that, due to required surveillance procedures, pEMR becomes more expensive than ESD over time. Final cost-effectiveness results, including avoided surgical treatment, are pending.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Endoscopy service

15/05/2026, 11:35–11:55

ePoster Connect:
Station 4 (Level 0)

eP1208 Assessing the Reliability of the S2T2 Tool for Scoring Technical Difficulty and Educational Value of Endoscopy for Suspected Upper GI Bleeding

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DOI 10.1055/s-0046-1822535

Aims Accurately assessing technical difficulty in acute upper gastrointestinal bleeding (AUGIB) endoscopy is essential for training, triage, and service planning. The S2T2 scoring tool integrates four domains: Setting, Site, Type, and Treatment, to generate a total score between 0 and 10, stratified into easy, moderate, and difficult cases. This study evaluated the inter- and intra-observer reliability of the S2T2 tool among endoscopy trainees and trainers, and explored its relationship with perceived educational value (EDV).

Methods Twenty-three raters (12 trainees, 11 trainers) scored 15 anonymised AUGIB cases (5 easy, 5 moderate, and 5 difficult) across two rounds two weeks apart. Case order was randomised and blinded between rounds. Each rater independently applied the S2T2 score to each case. Inter- and intra-observer reliability of total S2T2 scores was assessed using intraclass correlation coefficients (ICCs; two-way, agreement, single measures), stratified by case difficulty and by rater type. Domain-level ICCs were calculated for each S2T2 component. Intra-observer agreement between rounds was evaluated using a Bland–Altman plot and summarised using mean absolute score differences. The association between S2T2 scores and perceived EDV was analysed using Spearman's rank correlation.

Results Overall inter-observer reliability was excellent, with an ICC of 0.938 (95% CI: 0.888–0.974) in Round 1 and 0.919 (95% CI: 0.856–0.966) in Round 2. Stratified analyses showed strong agreement for difficult cases (ICC > 0.8) and easy cases (ICC ~0.72–0.86), while moderate cases showed greater variability, particularly among trainees (ICC 0.41 vs 0.25). Intra-observer reliability across rounds was also strong (ICC = 0.938, 95% CI: 0.924–0.950), with a mean absolute score difference of 0.51 (SD 0.99). The Bland–Altman plot demonstrated minimal bias and narrow limits of agreement. Domain-specific reliability was highest for Treatment (ICC = 0.985), followed by Setting (0.910), Type (0.890), and Site (0.657). EDV ratings demonstrated substantial inter-rater agreement (Fleiss' κ = 0.757), and S2T2 scores showed a strong positive correlation with EDV (Spearman's ρ = 0.81, p < 0.001).

Conclusions The S2T2 tool is a reliable and valid measure of technical difficulty in AUGIB endoscopy, demonstrating excellent inter- and intra-observer agreement, particularly in clearly easy or difficult cases. The strong correlation between S2T2 scores and perceived educational value supports its use for case selection in training, performance assessment and certification, and service benchmarking.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1209 Magnet Resonance Scanner Induced Displacement Force and Torque on Video Capsule Endoscopes

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DOI 10.1055/s-0046-1822536

Aims Non-invasive video capsule endoscopes (VCE) are widely used for gastrointestinal (GI) imaging. Usually, excretion of VCE occurs within 2 weeks. However, excretion is not always observed by the patient and rare cases of capsule retention for years have been reported. Magnet Resonance Imaging (MRI) with incorporated VCE is considered a contraindication due to possible adverse interaction with the ferromagnetic components of VCE. While single case reports with incidental MRI have documented no clinically evident harm due to VCE, systematic experimental data are lacking. This study aims to quantify magnetically induced displacement forces and torque on VCE within the electromagnetic environment of a 3 Tesla (T) MRI scanner according to internationally recognized ASTM standards.

Methods This experimental study used a 3T whole-body MRI scanner (Magnetom Vida, Siemens Healthcare, Erlangen, Germany). Eleven commercially available VCEs (PillCamSB3, PillCamColon2, OMOM HD, OMOM RC, OMOM CC, NaviCam, NaviCam Colon, CapsoCam Plus, MiroCam 1200, MiroCam 2000, MiroCam Navi) designed for imaging of the small bowel, upper GI tract, or colon were tested. For displacement force measurement, each capsule was suspended by a string near the MRI bore entrance at the position of maximum spatial magnetic field gradient (ASTM F2052-21). The deflection angle relative to the vertical axis was measured using a protractor setup. A deflection angle greater than 45° was defined as exceeding gravitational force, thus failing the MRI safety criterion. Torque was measured with the pulley method (ASTM F2213-17). Each capsule was mounted in a test apparatus allowing free rotation and connected to a calibrated force gauge. The maximum tensile force and lever arm radius were recorded to calculate torque. For VCE with excessive displacement, qualitative assessments and torque estimations based on displacement data were performed. Data were compared with MRI safety limits described in ISO/TS 10974:2018(E). Length of the paramagnetic interior parts of each VCE was calculated from the measured length and the ratio of internal ferromagnetic parts to the outer surface on X-ray images.

Results All VCE except NaviCam Colon demonstrated deflection angles greater than 45°, indicating displacement forces exceeding gravitational forces within the 3 T static magnetic field. The cutoff for MRI safety was therefore not met in 10 of 11 tested devices. Capsules containing small permanent magnets allowing gastric navigation by external magnets, exhibited significantly higher displacement forces compared to VCE without magnet (2338 mN vs. 168.1 mN; p < 0.0001). In contrast, mean gravity was 36.4 mN. Torque measurements were successfully performed for eight VCE models, ranging from undetectable to 54.0 mNm. All but one capsule (NaviCam Colon) exceeded the individual gravity-induced torque safety limit (mean 1.04 mNm). For the three magnet-containing capsules torque measurement was not possible due to strong displacement forces. Instead, estimated torque values based on displacement measures were calculated, ranging from 271.95 to 293.90 mNm. Mean X-ray assisted length estimation of internal paramagnetic parts was 21.3 mm (range 18.2 – 25.4 mm).

Conclusions This study provides the first systematic experimental evaluation of magnetic displacement force, and torque acting on VCE in a 3T MRI environment. Induced forces on all but one tested capsules exceed safety thresholds defined for passive medical implants, especially for VCE containing integrated permanent magnets. Estimated length of paramagnetic VCE parts was within or only slightly above the limit of 24 mm for dynamic thermal effects in a 3T MR environment. Furthermore, VCE include air and a protective plastic cover likely protecting from thermal damage. Hence no direct thermal measurements were performed. Although the measured and calculated forces remain below those reported to cause bowel perforation, the findings highlight a potential safety hazard in clinical practice. Interdisciplinary awareness of these risks is critical for clinicians and MRI staff. Future research should include in-vivo and clinical safety assessments, as well as manufacturer-specific labeling, consideration of MR compatibility by engineers, and improved workflow for device identification before MRI procedures.

Conflicts of Interest M. Keuchel: Medtronic – lecture fees, consultancy; Jinshan – lecture fees, study support; AnX robotics – study support; CapsoVision – consultancy. N. Kurniawan: Medtronic – lecture fees. P. Baltes: Medtronic – lecture fees

eP1210 To re-scope or not to re-scope? – The gastric ulcer dilemma

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 DOI 10.1055/s-0046-1822537

Aims The increasing demand on endoscopy units in Portugal requires optimization of the diagnostic yield of procedures. Routine endoscopic re-evaluation is based on limited evidence. Recent studies support an individualized approach, reserving repeat endoscopy for patients at higher risk. To assess the incidence of malignant gastric ulcer in a cohort of patients undergoing upper gastrointestinal endoscopy and to identify clinical, endoscopic, and histological predictors of malignancy that may guide the need for endoscopic re-evaluation [1–4].

Methods Retrospective observational study conducted in the Gastroenterology Department, including patients with gastric ulcer diagnosed on upper endoscopy between January and December 2024. Demographic, clinical, endoscopic, and histological data from index and follow-up endoscopies were collected. Descriptive and univariate analyses were performed using Microsoft Excel.

Results A total of 101 patients were included (mean age 69 years; 72% male); 59% of endoscopies were elective, and biopsy was performed in 75% of index procedures. Seven malignant ulcers (6.9%) were identified, 71% diagnosed at the index endoscopy. Among 53 ulcers reassessed endoscopically, most showed mucosal healing (79%). Endoscopically suspicious ulcers represented 27% of cases, of which 26% were malignant. Among ulcers deemed benign, only 1/74 (1.3%) was later found to be malignant (late malignancy rate 2.7%). The strong-

est predictors of malignancy were endoscopic suspicion—particularly excavated base and/or elevated borders (OR 17.2; 95 %CI 0.8–372)—and non-antral location, especially the incisura (OR 4.03; 95 %CI 0.75–16.6; $p = 0.12$), showing a trend toward increased risk. Ulcer size was also a strong and independent predictor: ulcers > 20 mm were significantly associated with malignancy (OR 12.5; 95 %CI 2.0–78.0; $p = 0.0026$). Comorbidities most strongly associated with malignancy included cardiovascular disease (OR 3.22), chronic kidney disease (OR 4.64), antiplatelet therapy (OR 6.26), and smoking (OR 6.03). *Helicobacter pylori* at index endoscopy showed a non-significant trend toward lower malignancy risk (OR 1.8; $p = 0.12$). A benign initial histology was a strong predictor of benign disease. The presence of multiple ulcers (≥ 2), including duodenal ulcer, was associated with a lower probability of malignancy (OR 0.10; 95 %CI 0.005–1.76; $p = 0.043$), supporting the observation that malignant ulcers tend to present as single lesions. All malignant cases occurred in patients aged > 50 years, but age ≥ 50 did not reach statistical significance (OR 1.86; 95 %CI 0.10–35.0; $p = 1.00$). Sex was not associated with malignancy (OR 0.85; 95 %CI 0.18–4.05). Presentation with overt bleeding at index endoscopy was not significantly associated with malignancy.

Conclusions In this cohort, 7 % of gastric ulcers were malignant, most diagnosed at the index endoscopy with adequate histological sampling. The diagnostic yield of routine re-evaluation after benign biopsies was low. The combination of benign histology and absence of suspicious endoscopic features was sufficient to exclude malignancy in most patients, supporting a risk-stratified approach. These findings align with current international guidelines (MAPS III, ESGE/AGA/ASGE) and support a strategy that may reduce costs, optimize resource allocation, and improve the sustainability of endoscopy services. Validation in larger, multicenter cohorts is warranted.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Giellisse EAR, Kuyvenhoven JP. Follow-up endoscopy for benign-appearing gastric ulcers has no additive value in detecting malignancy: It is time to individualise surveillance endoscopy. *Gastric Cancer* 2015; 18 (4): 803–809. doi:10.1007/s10120-014-0433-4
- [2] Raiya S, Hanson BJ, Shaikat A. Determining the endoscopic follow-up for gastric ulcers based upon endoscopic appearance and histology. *Gastroenterology*. 2022; 163 (4 Suppl): e33–e34

[3] ASGE Standards of Practice Committee Banerjee S, Cash BD, Dominitz JA, Baron TH, Anderson MA et al. The role of endoscopy in the management of patients with peptic ulcer disease. *Gastrointest Endosc* 2010; 71 (4): 663–668. doi:10.1016/j.gie.2009.11.026

[4] Dinis-Ribeiro M, Libânio D, Uchima H, Spaander MCW, Bornschein J, Matysiak-Budnik T et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy* 2025. doi:10.1055/a-2529-5025

eP1211 Multi-Center Evaluation of Novel Point-Of-Care Blood Detection Capsule: Advancing Clinical Decision-Making and Optimizing Resource Utilization

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DOI 10.1055/s-0046-1822538

Aims Esophagogastroduodenoscopy is the gold standard for evaluating suspected upper gastrointestinal bleeding but delays in access may complicate triage and resource management. PillSense, an FDA-approved ingestible capsule that detects presence of blood through optical absorption, provides a rapid and non-invasive diagnostic option with results available within ten minutes. This study assessed the real-world impact of this device on clinical decision-making and resource allocation while evaluating its safety profile.

Methods A multicenter retrospective analysis was performed across two academic medical centers, including only patients with documented PillSense result. Patients were excluded for gastrointestinal obstruction, motility disorders, dysphagia, pregnancy, or implanted electromedical devices. Outcomes were compared between patients with positive and negative capsule results, including Glasgow Blatchford Score (GBS), transfusion requirements, hemodynamic instability, length of stay, thirty-day readmission, and adverse events. The influence of capsule findings on clinical management was recorded (► Table 1).

► Table 1

	Patients (n = 75)			
Mean Age	60.2 years			
Gender (n, %)	Male (54, 72 %)			
Symptoms (n (%))				
Melena	51 (68 %)			
Hematochezia	17 (28 %)			
Hematemesis	15 (30 %)			
Coffee Ground Emesis	9 (12 %)			
Symptomatic Anemia	40 (53 %)			
Outcomes		Negative (n = 51)	Positive (n = 24)	P value
Length of stay (days)	Mean (se)	3.87 (0.82)	14.83 (5.58)	0.02 *
GBS score at presentation	Mean (se)	7.62 (0.86)	11.68 (1.29)	0.005 **
Units of Blood Transfused	Mean (se)	1.45 (0.50)	10.00 (6.12)	0.04 *
Hemodynamically Unstable	n (%)	7 (21 %)	8 (47 %)	0.03 *
Active bleeding on EGD	n (%)	4 (6 %)	18 (75 %)	0.01 *

Results Seventy-five patients met inclusion criteria, of whom 24 (32 %) had a positive capsule and 51 (68 %) had a negative result. Patients with a positive result demonstrated substantially higher GBS (11.68 vs 7.62), required significantly more blood transfusions during hospitalization (mean 10.00 units vs 1.45 units), and experienced markedly longer hospital stays (14.83 days vs 3.87 days). The capsule was deployed in Emergency Department for 39 patients (52 %) and in inpatient setting for 36 patients (48 %) of which 12 were in intensive care unit (16 %). Capsule findings influenced management in 70 % of cases, including avoidance of EGD in 25 %, prioritization of urgent EGD in 12 %, and improved resource allocation in 63 % (ED observation discharges $n = 18$, step-down bed assignment due to early detection of GI bleeding $n = 10$, colonoscopy instead of EGD when upper GI bleed was excluded $n = 9$); among patients who did not undergo EGD ($n = 12$), there were no 30-day readmissions or adverse events.

Conclusions This study demonstrates that the blood detection capsule is a safe and clinically valuable point-of-care tool for suspected upper gastrointestinal bleeding. Capsule results correlate meaningfully with bleeding severity, support more accurate triage, and reduce unnecessary procedures. Incorporation of this technology into routine practice may meaningfully decrease health care burden by improving diagnostic efficiency and supporting earlier and more appropriate allocation of endoscopic and inpatient resources.

Conflicts of Interest H. Hayat, D. Szvarca, T. Walradt, S. Soleymanjahi, H. A. Zeid – Nothing to disclose; Lee, L. – Research Grant Support: Fujifilm, Medtronic; Consulting/Advisory Roles: Boston Scientific, Fujifilm, Fractyl; Educational/Speaking/CME Roles: Boston Scientific, Fujifilm, Fractyl; Ryan, M. – Consulting: Enterasense, BariendoStorm, A. – Research Grant Support (Past & Ongoing): Apollo Endosurgery, Boston Scientific, Endogenex, EndoTAGSS, EnteraSense, OnePass Medical; Consulting/Advisory Roles: Apollo Endosurgery, Boston Scientific, Intuitive (Intuitive Surgical), Medtronic, Micro-Tech (Microtech), Olympus, GI Dynamics; Data & Safety Monitoring/Oversight Roles: ERBE USA, GI Dynamics; Educational/Speaking/CME Roles: Olympus, Boston Scientific

ePoster Connect: Esophagus

15/05/2026, 13:30–14:00

ePoster Connect:

Station 1 (Level 0)

eP1212 Current status of EoE diagnosis, management, and follow up: Aberdeen Royal Infirmary Experience, Scotland

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DOI 10.1055/s-0046-1822539

Aims Eosinophilic oesophagitis (EoE) is a chronic, immune-mediated disease characterised by eosinophilic inflammation of the oesophagus with peak eosinophilic count > 15 cells per high power field that may lead to remodelling and fibrotic changes and impaired oesophageal function. [1] We aim to characterize the current practices in the diagnosis, management, and follow-up of EoE at Aberdeen Royal Infirmary.

Methods We conducted a retrospective analysis of electronic data records from 2022 to 2024. This involved identifying EoE cases using histology confirmation, clinical presentation, and mode of treatment at Aberdeen Royal Infirmary, Scotland.

Results In our cohort, we found 162/690 patients had histology biopsies confirmed EoE. Most patient were Male (125/162). The median age group was 30-40 years old. We found that the most common mode of presentation was

dysphagia (63 %) followed by food bolus (16.3 %). The most recognised endoscopic finding was furrows (21.6 %).

37.24 % received both Proton pump inhibitors and Jorveza (oral Budesonide dispersible tablets). 45.2 % achieved histological remission. There were 20 patients who had strictures and 10 of these patients underwent endoscopic balloon dilation. Although 74 patients had clinical follow up, there was no standardisation of management across the board with fast majority of patients had no follow up (88). Therefore, we believe that this data should raise the awareness of the importance of establishing an EoE clinic for standard medical practice and better patient outcomes.

Conclusions This audit has highlighted the importance of establishing EoE clinic for standardisation of medical practice, prevent future complications and repeat hospitalisations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Avinashi V, Gupta M, Payne BA, Amhaz H, Temirova AT, Afif W, Ashok D, Barkey J, Burnett D, Bush JW, Cameron S, Carr S, El Demellawy D, Erdle S, Huynh HQ, Griffin J, Grover SC, Grzywacz K, Jeimy S, Ko HH, Lacuesta G, Marcon M, Mayrand S, Petropolis H, Rodrigues D, Sherlock M, Song C, Tardio N, Vander Leek TK, Vurzing M, Williams B, Xenodemetroupolous T, Ma C, Chan ES. Recommendations for the diagnosis and management of eosinophilic esophagitis in adults and children in Canada: a Delphi consensus project. *Journal of the Canadian Association of Gastroenterology*. 2025

eP1213V Salvage Cryoballoon Ablation After Non-Curative Endoscopic Submucosal Dissection: The First Report in T1bN0M0 Esophageal Adenocarcinoma

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DOI 10.1055/s-0046-1822540

Abstract Text

Esophageal adenocarcinoma (EAC) treatment is challenging in patients unfit for surgery. We report an 84-year-old male with Barrett's esophagus (BE) who underwent ESD for a 3-cm pT1bN0M0 EAC. Histology revealed deep submucosal invasion, perivascular infiltration, negative horizontal and positive vertical resection margins, rendering the resection non-curative. Given surgical ineligibility, the patient underwent cryoballoon ablation six months later for recurrent intramucosal carcinoma proximal to the ESD scar. At three months, surveillance endoscopy revealed residual BE with low-grade dysplasia. This case highlights the feasibility and safety of cryoballoon ablation as salvage therapy after non-curative ESD in inoperable EAC. This represents the first report of salvage CbFAS in T1bN0M0 EAC, underscoring the need for further studies to define its role in multimodal management of EAC.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/059fcb55-3e3b-4736-883c-fb3d5cb539fc/Uploads/19978_Cryoballoon_Esge%20Days.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1214 Use of EndoRotor as Salvage Therapy for Refractory Barrett's Neoplasia in a High-Risk Patient

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DOI 10.1055/s-0046-1822541

Aims Endoscopic eradication therapy (EET) is established as first-line management for dysplastic Barrett's esophagus (BE) and early oesophageal adenocarcinoma. Although most patients respond to a combination of endoscopic

mucosal resection (EMR) and radiofrequency ablation (RFA), a proportion develop residual or non-lifting lesions that remain difficult to treat. Such cases are particularly challenging when patients are unsuitable for esophagectomy or chemoradiotherapy. The EndoRotor non-thermal mechanical resection system has demonstrated feasibility in removing BE mucosa, including fibrotic or previously treated tissue [1], and early evidence supports its safety profile [2]. We present a case illustrating its role as salvage therapy after failure of standard modalities.

Methods A 76-year-old man with long-segment BE (C11M12) was diagnosed with moderately differentiated oesophageal adenocarcinoma, with no worrying features on PET-CT and EUS. He had a history of two renal transplants for glomerulonephritis and was maintained on lifelong immunosuppression, as well as significant cardiac risk factors, rendering him high risk for surgery or chemoradiotherapy. Therefore, an endoscopic approach was favoured following multidisciplinary discussion.

He developed multi-focal neoplasia and required six EMR sessions with an excellent macroscopic response, eventually achieving Prague COM0 status with only 2–3 residual Barrett's islands. A persistent lesion at the 5 o'clock position exhibited a Paris IIa morphology and was non-lifting, making it unsuitable for further EMR or ESD. Biopsies demonstrated high-grade dysplasia (HGD). Hybrid APC was performed (selected due to preference to perform a "deeper ablation", but dysplasia persisted, consistent with previously described RFA-refractory disease as described in the literature [3, 4]. Subsequent repeat CT-scans demonstrated stable imaging without progression, EndoRotor therapy was selected as salvage intervention.

Results Here we demonstrate EndoRotor resection as technically successful technique, enabling non-thermal mechanical removal of previously treatment-resistant Barrett's mucosa. Histopathology confirmed intramucosal carcinoma (IMCA). Follow-up endoscopy demonstrated further regression of the remaining Barrett's island with improved appearance and reduced surface irregularity. Small areas of residual mucosa remained, and a repeat EndoRotor session was planned. No immediate or delayed adverse events occurred, consistent with reported low complication rates [2]. Repeat radiological surveillance showed no local progression, nodal involvement, or distant metastasis.

Conclusions This case highlights the value of EndoRotor as a salvage modality for refractory Barrett's neoplasia when Endoscopic resection modalities (EMR or ESD) and Ablation techniques (RFA or APC) are insufficient, particularly in patients unable to undergo surgery or oncologic therapy. Its non-thermal mode of action appears advantageous in previously ablated or fibrotic tissue, allowing targeted resection while limiting thermal injury. Emerging evidence supports its feasibility, safety, and potential utility in complex or treatment-resistant Barrett's pathology [1–4]. EndoRotor may represent an important adjunct in the evolving management paradigm for advanced or refractory BE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Rohof WO et al. *Gastrointest Endosc.* 2018
- [2] Rashid S et al. *Am J Gastroenterol.* 2022
- [3] Alzoubaidi D et al. *Gastroenterol Rep (Oxf).* 2016
- [4] Yip VL, Lim KH. *World J Gastroenterol.* 2020

eP1215V Alligator-assisted esophageal ESD in a compact and extensive early Barrett's cancer lesion

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DOI 10.1055/s-0046-1822542

Problem to solve Endoscopic submucosal dissection (ESD) of large and compact esophageal lesions is technically demanding, especially in the later stages of the procedure. The partially dissected specimen often becomes floppy and

obscures the dissection field. This loss of visualization and traction limitation makes precise submucosal dissection challenging. Conventional traction methods, especially at this stage of the procedure, provide only limited axis movements and cannot be easily repositioned.

Innovation The novel EndoRobotics Alligator (ROBOPERA & TraCloser) device is designed for flexible multipoint traction. The device provides true four-axis independent movements (grip, wrist, arm, and rotational movements), enabling multidirectional traction. The operator can lift, rotate, pull, or push the lesion in multiple directions and reposition at any time, maintaining continuous exposure of the submucosal layer and preventing the partially dissected specimen from obstructing the field. This multidirectional control improves visualization, optimizes tissue tension, facilitates efficient and precise dissection, and allows safe en-bloc specimen retrieval using the same device.

We report the first case of an EndoRobotics Alligator-assisted esophageal ESD of an 11 cm early Barrett's adenocarcinoma extending over 70 % of the circumference, with a compact component of 3–4 cm. The use of this novel device was authorized by the Institutional Review Board.

Results After circumferential incision and completing dissection of 70 % of the lesion, visualization and access to the dissection plane worsened. The Alligator device was used at this later stage of the procedure to lift the compact specimen in order to re-visualize the dissection plane, maintain tension, and finalize the dissection. The lesion was successfully resected en bloc. R0 resection was histologically confirmed. No intra- or post-procedural adverse events occurred.

Conclusions Alligator-assisted robotic traction is a valuable tool during esophageal ESD, particularly in challenging cases involving large or compact lesions. By providing dynamic multidirectional traction, it complements conventional ESD techniques and enhances visualization, stability, and dissection efficiency. This case demonstrates that integrating robotic traction into ESD can support safer and more controlled tissue handling.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/57759795-8ecb-4183-ad42-2f6a849a7f73/Uploads/19990_127626_EndoRobo%20Alligator%20Assisted%20eso%20ESD.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1216 Clinical outcomes and ph-impedance results predicting recurrence rates of circumferential Barrett's Esophagus after successful Treatment with Radiofrequency Ablation

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DOI 10.1055/s-0046-1822543

Aims Radiofrequency ablation (RFA) is an effective treatment for circumferential Barrett's esophagus (BE). However, recurrence of BE after initially successful RFA is common, and outcomes following recurrence not well described. The aim of this study is to find clinical signs and ph-impedance results able to predict circumferential Barrett's esophagus recurrence following initially successful RFA

Methods In 15 patients undergoing a single session of circumferential Radiofrequency Ablation (BarrX 360 °) on proton pump inhibitor (PPI) therapy, clinical symptoms are investigated and 24h-pH-impedance measurements were performed after 3 months of treatment. On pH monitoring, total acid exposure time (AET) > 6 % was defined as pathological reflux [1–3]

Results Pathological reflux was identified in 6 patients (40 %), of whom only 2 patients referred reflux symptoms. Other 3 patients of 15 referred reflux symptoms, but their ph-impedance measurements didn't show pathological values of acid exposure.

Conclusions 30 % of asymptomatic patients treated for BE with circumferential Radiofrequency ablation exhibit pathological reflux on pH-monitoring despite PPI treatment. Conversely, clinical symptoms of reflux is not necessarily linked

to pathological acid exposure and therefore to an increased risk of post-ablation BE recurrence

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] He T, Sundararajan V, Clark NJ, Tsoi EH, Thompson AJ, Holt BA, Desmond PV, Taylor ACF. Long-term outcomes after endoscopic eradication therapy for dysplastic and T1a adenocarcinoma-related Barrett's esophagus: higher rate of late dysplastic recurrence with radiofrequency ablation monotherapy. *Gastrointest Endosc.* 2025; 102 (2): 184–193.e2. doi:10.1016/j.gie.2025.01.026 Epub 2025 Jan 25 PMID: 39870246
- [2] Sachdeva K, Chandi PS, Verma A, Dierkhising R, Codipilly DC, Leggett CL, Trindade AJ, Iyer PG. Recurrence rates of Barrett's esophagus and dysplasia in patients successfully treated with radiofrequency ablation vs. cryoballoon ablation: a comparative study. *Endoscopy.* 2025; 57 (9): 951–959. doi:10.1055/a-2598-6806 Epub 2025 Apr 30 PMID: 40306696
- [3] Van Munster SN, Nieuwenhuis E, Bisschops R, Willekens H, Weusten BLAM, Herrero LA, Bogte A, Alkhalaf A, Schenk EBE, Schoon EJ, Curvers W, Koch AD, de Jonge PJF, Tang TJ, Nagengast WB, Westerhof J, Houben MHMG, Seewald S, Eijkmans MJC, Bergman JJGHM, Pouw RE. Dysplastic Recurrence After Successful Treatment for Early Barrett's Neoplasia: Development and Validation of a Prediction Model. *Gastroenterology.* 2022; 163 (1): 285–294. doi:10.1053/j.gastro.2022.03.020 Epub 2022 Mar 16 PMID: 35306024

eP1217 Early experience with bipolar knife POEM: efficacy and safety

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DOI 10.1055/s-0046-1822544

Aims To assess the efficacy and safety of a bipolar knife in POEM.

Methods Single-center retrospective study including patients undergoing POEM between October 2023 and May 2025, using the Speedboat knife and the CROMA energy platform (Creo Medical, UK). Categorical variables were presented as frequencies and percentages. Continuous variables were summarized using median and interquartile range (IQR). To compare the pre- and post-POEM Eckardt scores we used the Wilcoxon signed-rank test for paired samples. The Speedboat knife has an insulating cover on one side that reduces the risk of accidental mucosal injury, is 1:1 rotatable, and incorporates a needle/injection channel. The CROMA platform provides bipolar radiofrequency cutting as well as microwave coagulation, making the use of a hemostatic forceps hardly necessary.

Results Seventy-five patients were included (median age 52 years, 61.3% male, 83.8% ASA I–II). Achalasia was the most frequent indication (86.6%). Forty-six point seven per cent had undergone previous treatment (29.3% with one technique and 17.3% with more than one technique). The median length of the submucosal tunnel was 11 cm (IQR 11–15). In most cases, the myotomy was posterior (89.3%) and full-thickness (97.3%), with a median length of 5 cm (IQR 5–8) in the esophagus and 2.5 cm (IQR 2–3) in the stomach. The location of the gastric myotomy was determined by visual inspection in 98.7% of cases. A

total of 5 clips (IQR 4–5) were used for mucosotomy closure. Technical success was 100%, and clinical success (post-POEM Eckardt score ≤ 3) was 93.3% after 24 months follow-up (IQR 12–24). The median Eckardt score decreased from 6 (IQR 3–8) pre-POEM to 1 (IQR 0–2) post-POEM ($p < 0.0001$). Proton pump inhibitors use increased from 34.7% pre-procedure to 75.7% after POEM. Complications occurred in 5 cases (6.7%): 1 inadvertent mucosotomy, 1 bleeding, 2 pneumonias, and 1 esophagopleural fistula. Median hospital stay was 3 days (► Table 1).

► Table 1

BASELINE PATIENT CHARACTERISTICS	N	Median (IQR) or N (%)
Age (years)	75	52 (37-63)
Sex		
Male		46 (61.3%)
Female	75	29 (38.7%)
ASA		
I-II		62 (83.8%)
III-IV	74	12 (16.2%)
Indication		
Achalasia		65 (86.6%)
Type I		6 (8%)
Type II		43 (57.3%)
Type III		7 (9.3%)
Unknown type		9 (12%)
Distal esophageal spasm		3 (4%)
Hypercontractile esophagus		1 (1.3%)
Other	75	6 (8%)
Prior treatment		
No		40 (53.3%)
1 technique		22 (29.3%)
> 1 technique	75	13 (17.3%)
Duration of prior symptoms (months)	44	24.3-120
Sigmoid esophagus	75	26 (34.7%)
Pre-POEM Eckardt score	63	6 (3-8)
Pre-POEM PPIs use	75	26 (34.7%)
Pre-POEM IRP	45	22 (15.1-31.6)

Conclusions Performing POEM with a bipolar knife seems as effective and safe as using a monopolar knife and may provide additional theoretical advantages regarding the energy delivery (lower risk of peripheral tissue damage, no interference with implanted devices).

Conflicts of Interest Authors do not have any conflict of interest to disclose.

15/05/2026, 13:30–14:00

ePoster Connect:
Station 2 (Level 0)

eP1218 Biliary strictures in liver transplantation recipients: recurrence risk factors after treatment with fully-covered self-expanding metal stents via ERCP

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DOI 10.1055/s-0046-1822545

Aims Biliary complications after liver transplantation (LT) occur between 5% and 25% of patients in some studies. Out of those, biliary strictures (BS) are the most frequent. Such can be divided into anastomotic or non-anastomotic and early or late regarding to its location in the biliary tract and time of onset. Standard treatment is the placement of a fully-covered self-expanding metal stent (FC-SEMS) via endoscopic retrograde cholangiopancreatography (ERCP) for six months, although there are no clear recommendations in guidelines. However, some patients present a BS recurrence after FC-SEMS withdrawal. Although risk factors for BS have been studied, no studies analyse risk factors for recurrence [1–3].

Methods We collected, retrospectively, our center's ERCP data from January 2012 to July 2023. Out of 2647 ERCPs, 1036 of them identified BS. After careful revision of those, 136 procedures were done on LT recipients with BS. Out of those, patients who were treated with FC-SEMS were selected as the study population (► **Table 1**).

► **Table 1** Simplified statistical results comparing patients with recurrent BS (column 2) to patients without recurrent BS (column 3) and Odds Ratio.

	Patients with recurrent BS after first ERCP (n = 33)	Patients without recurrent BS after first ERCP (n = 17)	Calculated Odds Ratio (IC 95 %)
Sex (M/F)	26 / 7	14 / 3	0.79 (0.18 – 3.57)
Cardiovascular risk factors	15/33	10/17	0.59 (0.18 – 1.91)
CMV incompatibility in serological test	3/33	1/17	1.60 (0.15 – 16.67)
Hepatic artery stenosis	14/33	5/17	1.77 (0.51 – 6.18)
Use of T-tube	4/33	5/17	0.33 (0.08 – 1.45)
Early biliary leak	10/33	2/17	3.26 (0.62 – 17.01)

► **Table 1** Simplified statistical results comparing patients with recurrent BS (column 2) to patients without recurrent BS (column 3) and Odds Ratio.

	Patients with recurrent BS after first ERCP (n = 33)	Patients without recurrent BS after first ERCP (n = 17)	Calculated Odds Ratio (IC 95 %)
Early biliary stricture	24/33	6/17	4.89 (1.39 – 17.16)
Early post-LT infection	13/33	7/17	0.93 (0.28 – 3.06)
Early post-LT CMV infection	6/33	1/17	3.56 (0.39 – 32.27)

50 patients were included in this study, 33 presenting recurrence of BS (case group) while 17 did not develop a recurrence (control group). Patient selection is summarized in Figure 1. Factors related to the surgical procedure (use of biliary T-tube), patient (sex, age, LT indication, cardiovascular risk factors) and transplant (ABO incompatibility, DSA incompatibility, CMV serological incompatibility, early biliary leak, early BS, hepatic artery stenosis, early post-LT infection and early post-LT CMV infection) were considered. Early BS was considered when the diagnosis was established within the first month after the LT after literature review, as well as the other early factors, although it has not been formally defined.

Results Early BS was associated with a higher risk of recurrence with an OR 4.89 (CI 95 %: 1.39 – 17.16). Other factors such as early CMV infection, early biliary leak or arterial hepatic pathology showed strong, but not statistically significant associations.

Conclusions Patients with early BS have a higher risk of recurrence after FC-SEMS for six months and may benefit from early follow-up. Recurrence of BS in the context of LT is a pathology that needs further studies to establish treatment strategies. For instance, in patients with early BS, to implant a second FC-SEMS after the withdrawal of the first in six months.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Benign Biliary Stenoses Working Group Poley JW, Ponchon T, Puespoek A, Bruno M et al. Fully covered self-expanding metal stents for benign biliary stricture after orthotopic liver transplant: 5-year outcomes. *Gastrointest Endosc* 2020; 92 (6): 1216–1224. doi:10.1016/j.gie.2020.04.078
- [2] Becq A, Laurent A, De Roux Q, Cremone C, Rotkopf H, Le Baleur Y, Mesli F, Duvoux C et al. Long-Term Results of Endoscopic Metal Stenting for Biliary Anastomotic Stricture after Liver Transplantation. *J Clin Med* 2023; 12 (4): 1453. doi:10.3390/jcm12041453
- [3] Bofill A, Cárdenas A. A practical approach to the endoscopic management of biliary strictures after liver transplantation. *Ann Hepatol* 2024; 29 (2): 101186. doi:10.1016/j.aohep.2023.101186

eP1219 EUS-guided Celiac Plexus Interventions in Pancreatitis and Pancreatic Cancer: A Systematic Review and Meta-Analysis of Randomized Controlled Trials

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DOI 10.1055/s-0046-1822546

Aims Chronic abdominal pain is a major source of morbidity for patients with chronic pancreatitis and pancreatic cancer, and effective pain management

options are limited. Endoscopic ultrasound (EUS)-guided celiac plexus interventions are minimally invasive procedures designed to alleviate severe upper abdominal pain associated with these conditions, however, data reporting the effect of these interventions are scarce and based in small reports. This systematic review and meta-analysis evaluates the effectiveness and safety of EUS-guided celiac plexus interventions for managing abdominal pain in patients with chronic pancreatitis and pancreatic cancer.

Methods A comprehensive search of OVID MEDLINE, EMBASE, and Cochrane CENTRAL was conducted from inception to September 1st, 2025. We included full-text randomized controlled trials (RCTs) evaluating EUS-guided celiac plexus block (CPB), celiac plexus neurolysis (CPN), or celiac ganglion neurolysis (CGN) in patients with chronic pancreatitis or pancreatic cancer. The primary outcome was the proportion of patients experiencing pain relief. Secondary outcomes included duration of pain relief, reduction in opioid consumption, and adverse events. Subgroup analyses were performed based on patient diagnosis and intervention type.

Results Fourteen RCTs (n = 596 patients) met the inclusion criteria. Four studies evaluated EUS-CPB in patients with chronic pancreatitis, and ten studies evaluated EUS-CPN or EUS-CGN in patients with pancreatic cancer. The overall pooled proportion of patients with pain relief was 70 % (95 % CI: 0.60-0.79), with significant heterogeneity ($I^2 = 80$ %). In subgroup analyses, the pooled proportion of pain relief was 73 % (95 % CI: 0.50-0.91) for patients with chronic pancreatitis and 68 % (95 % CI: 0.57-0.78) for patients with pancreatic cancer. Complete pain response was reported in five studies with a pooled proportion of complete pain response of 23 % (95 % CI: 0.09-0.41). The mean duration of pain relief, reported in four studies, was 89.8 days, and seven studies reported on changes in opioid consumption with a pooled reduction of opioid use by 39 % (95 % CI: 0.20-0.58). Unilateral versus bilateral technique for EUS-guided interventions did not have any significant differences in pain reduction. Serious adverse events were infrequent; three studies reported a total of three major events (one upper gastrointestinal bleed, one irreversible paralysis, and one hematoma). Furthermore, two studies reported that six patients required hospitalization or an emergency department visit for severe abdominal pain.

Conclusions EUS-guided celiac plexus interventions are safe and provide significant pain relief for patients with abdominal pain secondary to chronic pancreatitis and pancreatic cancer. These findings support their use as a key component in a multimodal pain management strategy for this challenging patient population. However, significant heterogeneity across studies and few RCTs with small sample sizes highlights the need for larger, well-designed RCTs. Future research should focus on standardizing endoscopic techniques, identifying key predictors of response, and evaluating long-term effects on opioid consumption reduction and quality of life to better define the role of these interventions.

Conflicts of Interest Gary R May – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic/Jeffrey D Mosko – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji. All other authors (Malini Hu, Kareem Khalaf, Yuhong Yuan, Tomoyuki Nishimura, Huaqi Li, Mohamed Bucheeri, Natalia Calo) have no financial disclosures or conflicts of interest to declare.

eP1220V Cholangioscopy-guided Radiofrequency Ablation to Treat Biliary Intraductal Papillary Mucinous Neoplasia

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DOI 10.1055/s-0046-1822547

Abstract Text

Bile duct intraductal papillary mucinous neoplasia (BD-IPMN) is a pre-malignant precursor to cholangiocarcinoma traditionally managed by surgery with limited data on endoscopic management. We present a case of an elderly comorbid patient with long segment BD-IPMN containing high grade dysplasia who declined surgery. Cholangioscopic and fluoroscopic videos demonstrate charac-

teristic BD-IPMN morphology, application of cholangioscopy-guided radiofrequency ablation (RFA), post-treatment appearances, and subsequent recurrence. In this case, RFA did not achieve complete eradication but substantially reduced the overall disease length, permitting a more conservative surgical resection approach. This video highlights key diagnostic features, technical considerations, and the potential role and limitations of RFA in selected patients with BD-IPMN who are poor surgical candidates [1–4].

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/67351a46-af3d-4107-8312-3de6dd0d52f7/Uploads/19978_bdpipmn.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Tang W., Qiu J.-G., Wei X.-F., Xiao H., Deng X., Wang S.-D., Du C.-Y., Wu Q. 2021 Endoscopic Endoluminal Radiofrequency Ablation and Single-Operator Peroral Cholangioscopy System (SpyGlass) in the Diagnosis and Treatment of Intraductal Papillary Neoplasm of the Bile Duct: A Case Report and Literature Review. *Frontiers in Medicine*. 8: 675720. doi:10.3389/fmed.2021.675720
- [2] Natov N.S., Horton L.C., Hegde S.R. 2017; Successful endoscopic treatment of an intraductal papillary neoplasm of the bile duct. *World Journal of Gastrointestinal Endoscopy* 9 (5): 238–242. doi:10.4253/wjge.v9.i5.238
- [3] Deng X., Mou T., Wu Q. 2025; Digital single-operator cholangioscopy-guided endoluminal radiofrequency of an intraductal papillary mucinous neoplasia of the bile duct. *Digestive Endoscopy* 37 (4): 436–437. doi:10.1111/den.14962
- [4] Delaney S., Zhou Y., Pawa S., Pawa R. 2021; Intraductal papillary neoplasm of the left hepatic duct treated with endoscopic retrograde cholangiopancreatography guided radiofrequency ablation. *Clinical Journal of Gastroenterology* 14 (1): 346–350. doi:10.1007/s12328-020-01284-4

eP1221 Comparison between early (<4 weeks) versus late endoscopic drainage of necrotic pancreatic collections: a propensity score analysis

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► Table 1

Outcome	pre-IPTW			IPTW			
	WON (n=64)	ANC (n=43)	p	WON (n=62.6)	ANC (n=50.4)	p	OR
Main outcome							
Surgery rescue	2/64 (3.12%)	8/41 (19.5%)	0.013	1.54/62.62 (2.46%)	4.97/50.45 (10.9%)	0.069	4.851 [0.899; 47.466]
Safety							
Early AE (24h-14d)	6/64 (9.38%)	1/33 (3.03%)	0.417	6.51/62.62 (10.4%)	0.59/50.45 (1.42%)	0.045	0.124 [0.002; 1]
Late AE (> 14d)	4/64 (6.25%)	2/34 (5.88%)	1.000	2.64/62.62 (4.21%)	1.11/50.45 (2.66%)	0.630	0.623 [0.036; 5.228]
Overall AE	10/64 (15.6%)	3/43 (6.98%)	0.298	9.15/62.62 (14.61%)	1.7/50.45 (3.37%)	0.033	0.204 [0.025; 0.893]
Mortality	3/64 (4.69%)	6/40 (15.0%)	0.084	2.23/62.62 (3.56%)	7.31/50.45 (16.2%)	0.058	5.237 [1.254; 32.515]
Related-Mortality	2/64 (3.12%)	1/40 (2.50%)	1.000	1.56/62.62 (2.49%)	3.63/50.45 (8.06%)	0.324	3.437 [0.56; 34.526]

Aims Current guidelines recommend delaying endoscopic drainage until at least 4 weeks after the onset of acute necrotizing pancreatitis. However, in clinical practice, "early" drainage is sometimes considered for acute infected collections, despite a lack of strong supporting evidence. The primary objective of this study was to compare the clinical efficacy and safety of "early" versus "delayed" endoscopic drainage of necrotic pancreatic collections [1–4].

Methods Patients with necrotizing pancreatitis and pancreatic collections treated with "early" endoscopic drainage (<4 weeks) in a multicentre retrospective cohort (2010–2025) were compared with patients undergoing "late" drainage (≥4 weeks) from a recent multicentre randomized controlled trial (PRO-METHEUS, NCT03100578). A propensity score analysis using Inverse Probability of Treatment Weighting (IPTW) was performed to minimize confounding (age, sex, infection status, ASA score). The primary outcome was the need for surgical rescue. Secondary outcomes included clinical success, number of endoscopic sessions, procedure-related adverse events, and mortality (► Table 1).

Results From a total of 648 patients screened who underwent endoscopic drainage, 107 were included in the analysis: 43 in the "early" group and 64 in the "late" group. Median age was 60–65 years in both groups. The predominant aetiology was biliary pancreatitis. Confounding factors were adequately balanced after IPTW adjustment. In descriptive analysis, the need for surgical rescue was numerically higher in the "early" group, but this difference was not significant after propensity score adjustment. Early and overall adverse events were higher in the "late" group, reaching statistical significance in the propensity analysis but not in the descriptive analysis. No significant differences in mortality or clinical success were observed in either analysis. The necrosectomy rate was significantly higher in the "early" drainage group in both descriptive and propensity-adjusted analyses.

Conclusions Clinical outcomes were comparable between early and late endoscopic drainage in terms of surgical rescue, clinical success, and mortality. The "early" group required a greater number of endoscopic sessions and more frequent necrosectomy. Major adverse events were more frequent in the "late" group on propensity analysis. These findings suggest that early drainage may be a reasonable option in selected patients, although the comparison of retrospective data with RCT data represents an inherent limitation that warrants cautious interpretation.

Conflicts of Interest Boston Scientific consultant Fujifilm – lecture /speaker paid

References

- [1] Bomman S, Sanders D, Coy D, La Selva D, Pham Q, Zehr T, Law J, Larsen M, Irani S, Kozarek RA, Ross A, Krishnamoorthi R. Safety and clinical outcomes of early dual modality drainage (<28 days) compared to later drainage of pancreatic necrotic fluid collections: a propensity score-matched study. *Surg Endosc*. 2023; 37: 902–911
- [2] Escuer-Turu J, Homdedeu-Montaña S, Alonso V, Lores-Obradors A, Maisterra-Santos S, Busquets-Barenys J, Guarner E, Navajas S, Guarner-Argente C, Fernandez-Herrera S, Loras-Alastruey C, Santafosta-Gomez E, Gornals JB. Early endoscopic drainage (< 4 weeks) for necrotic pancreatic collections: recklessness or advisable. *Endoscopy* 2025; 57: S254–S255
- [3] Ramai D, Enofe I, Deliwala SS, Mozell D, Facciorusso A, Gkolfakis P. et al. Early (< 4 weeks) versus standard (≥ 4 weeks) endoscopic drainage of pancreatic walled-off fluid collections: a systematic review and meta-analysis. *Gastrointest Endosc* 2023; 97: 415–421
- [4] Oblizajek N, Takahashi N, Agayeva S, Bazerbach F, Chandrasekhara V, Levy M, Storm A, Baron T, Chari S, Gleeson FC, Pearson R, Petersen BT, Vege SS, Lennon R, Topazian M, Abu Dayyeh BK. Outcomes of early endoscopic intervention for pancreatic necrotic collections: a matched case-control study. *Gastrointest Endosc* 2020; 91: 1303–1309

eP1222 Pre-Papillectomy EUS and ERCP accordance rate of ampullary adenomas intraductal growth: a blind prospective pilot study

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DOI 10.1055/s-0046-1822549

Aims To prospectively evaluate the accordance rate between contrast-enhanced Endoscopic Ultrasound (CE-EUS) and Endoscopic Retrograde Cholangiopancreatography (ERCP) in defining intraductal tumor extension and endoscopic resectability of ampullary adenomas (AAs). Secondary aims were: to describe a tertiary referral centre's experience with endoscopic papillectomy (EP); to assess the accordance rate between endoscopic tumor size and final histopathology; to evaluate the association between CE-EUS enhancement patterns and final histopathology, including stratification by size; to determine CE-EUS uTNM and final pTNM congruity.

Methods This prospective monocentric interventional study included all consecutive patients referred for EP between January 2024 and June 2025. Inclusion criteria were: age 18–90 years, endoscopic diagnosis of ampullary tumor, absence of lymph node or distant metastases at staging MRI (if performed), ≥ 3 -month follow-up, and informed consent. Exclusion criteria included prior sphincterotomy/stenting, altered anatomy, and metastatic disease. All patients underwent CE-EUS before ERCP. EUS evaluation included lesion size, ductal involvement, ductal diameters, depth of invasion, lymph nodes, presence of CBD/PD stones, and CE-EUS enhancement pattern. ERCP was performed by endoscopists blinded to EUS findings; cholangiography and wirsungography assessed intraductal growth before papillectomy. EP was performed with hot-snare resection; stenting was routinely performed except for cases with concomitant IPMN. Diagnostic accuracy of EUS and ERCP was analyzed using ROC curves and compared with DeLong's test. Follow-up duodenoscopy with biopsies was scheduled at 3, 6, and 12 months. Residual intraductal disease was treated with endoscopic resection or intraductal radiofrequency ablation (RFA).

Results To date, a total of 25 patients (52 % male; median age 58 years) were included. Median AAs size was 20 mm. CE-EUS suspected intraductal invasion in 36 % ($n=9$), whereas ERCP confirmed it in 32 % ($n=8$), with a median intraductal extension of 5 mm. All lesions were resected endoscopically, with en-bloc resection in 56 %. Post-procedural adverse events occurred in 40 %, mainly bleeding, all managed endoscopically or conservatively. Final histopathology showed 17 LGD (68 %), 5 HGD (20 %), 2 no dysplasia (8 %), and 1 adenocarcinoma (uT1bN0M0 / pT1bN0M0). R0 resection was achieved in 56 %, R1 in 20 %, and R2 in 24 %, the latter exclusively in cases with intraductal involvement. Excluding the adenocarcinoma and the two lesions not confirmed as adenomas, 15 out of the 22 confirmed AA (68.2 %), were uTis/uT1a on EUS, whereas 7 (31.8 %) were overstaged as uT1b despite the absence of invasive behavior at final pathology. No significant association emerged between CE-EUS uT staging and dysplasia grade (HGD: 14.3 % in uT1b vs 26.7 % in uTis/uT1a; $p=0.36$). EUS and ERCP showed excellent diagnostic accuracy for intraductal invasion (AUC 0.96 vs 1.00; $p=0.9$) and high accordance rate (88.9 %). One minimal 5 mm ductal extension suspected by EUS was not confirmed by ERCP or pathology. Tumor size and CE-EUS enhancement pattern were not associated with malignancy ($p>0.1$). Kudo and JNET classifications showed limited accuracy (52 %). At 3-month follow-up, residual adenoma was found in 37.5 % of cases, mostly those with initial ductal involvement. Endoscopic retreatment, mainly RFA, yielded an overall clinical success rate of 81 %. No deaths occurred.

Conclusions According to our limited experience, in patients without nodal or metastatic disease at MRI, EUS and ERCP showed very high accordance rate in assessing intraductal extension of AAs. ERCP was slightly more specific, whereas EUS tended to overestimate minimal intraductal involvement. Furthermore, EUS overstaged uT-staging in over 30 % of AAs. CE-EUS enhancement patterns and endoscopic surface classifications were not predictive of malignancy. Routine pre-papillectomy EUS, even with CE, may therefore not be required for all lesions. EP proved to be safe and effective, with high clinical success using a stepwise endoscopic approach including intraductal RFA when required. Larger multicentre studies are needed to refine criteria for EUS selective application.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1223 Determinants of Clinical Success After Interventional Therapy in Genetic Chronic Pancreatitis

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DOI 10.1055/s-0046-1822550

Aims Chronic and recurrent acute idiopathic pancreatitis remains a clinical challenge, particularly regarding the management of disease flares, interventional therapies and long-term outcomes. This study aimed to identify potential risk and protective factors associated with clinical outcomes and to guide therapeutic management, particularly endoscopic and surgical strategies, in these patients [1–4].

Methods We conducted a retrospective single-centre cohort study at a tertiary university hospital, including 80 consecutive patients with chronic or recurrent acute idiopathic pancreatitis carrying at least one pathogenic or likely pathogenic variant associated with hereditary or genetic pancreatitis. The main outcome was clinical remission, defined as absence of symptoms and no stent dependency at last follow-up, in patients who underwent at least one interventional treatment. Demographic, genetic, morphological and clinical variables were collected. Univariable logistic regression was used to assess predictors of clinical remission. Cox proportional hazards models were applied to evaluate time-to-event outcomes, using death, documented recurrence or ongoing stent dependency as events.

Results Among 80 patients, 32.5 % ($n=26$) were children (age at diagnosis <18 years) and 60 % ($n=48$) were female. The median age at diagnosis was 27 years (IQR 13–46), and 9 years (IQR 7–13) among children. A total of 120 genetic variants were identified, including 39 CFTR, 36 PRSS1 and 28 SPINK1 mutations. A positive family history of pancreatitis was present in 28.8 % ($n=23$). Pancreas divisum and toxic exposure were each present in 35 % ($n=28$). Exocrine and endocrine insufficiency occurred in 33.8 % ($n=27$) and 22.5 % ($n=18$), respectively. One patient died from pancreatic cancer. Fifty-five patients underwent at least one interventional treatment, with a median of 2 procedures (IQR 0–5). A total of 323 interventions were performed, including 8 pancreatic resections and 7 drainage surgeries. The median disease duration at first interventional treatment was 4 years (IQR 0–9). The median total follow-up was 12.5 years (IQR 4.3–16.8), and the median follow-up after the last interventional treatment was 12 months (IQR 2–24). At the last clinical evaluation, 71 % ($n=39$) of treated patients were asymptomatic and free of stenting, with a median post-interventional follow-up of 17 months (IQR 7–37) in this subgroup. In univariable logistic regression, none of the demographic, genetic or clinical variables reached statistical significance for predicting clinical remission. However, older age at diagnosis (OR 1.01; 95 % CI 0.98–1.04; $p=0.59$) and longer disease duration at first interventional treatment (OR 1.04; 95 % CI 0.96–1.13; $p=0.36$) trended toward higher odds of remission. Conversely, pancreas divisum (OR 0.34; 95 % CI 0.10–1.12; $p=0.076$), toxic exposure (OR 0.39; 95 % CI 0.11–1.33; $p=0.13$) and endocrine insufficiency (OR 0.43; 95 % CI 0.12–1.54; $p=0.20$) trended toward lower odds of remission. In multivariable logistic regression including pancreas divisum, toxic exposure, endocrine insufficiency, disease duration at first treatment and age at diagnosis, none of the variables reached statistical significance (all $p>0.10$), although pancreas divisum (adjusted OR 0.44; 95 % CI 0.13–1.50; $p=0.19$) and toxic exposure (adjusted OR 0.34; 95 % CI 0.09–1.38; $p=0.13$) remained associated with lower odds of remission. In Cox proportional hazards analysis, pancreas divisum was associated with a higher hazard of clinical recurrence (HR 2.83; 95 % CI 1.02–7.87; $p=0.046$), whereas no other clinical, genetic or morphological factor showed a robust association with time-to-event outcomes. Although the Cox model suggested a higher hazard of recurrence in patients with pancreas divisum

(HR ≈ 2.8), the log-rank test comparing Kaplan–Meier curves did not reach statistical significance (p = 0.23).

Conclusions Despite the heterogeneity of disease expression, 71 % of treated patients achieved clinical remission, indicating that most individuals derived meaningful benefit from interventional treatment management. Older age at diagnosis and longer disease duration at first interventional treatment tended to be associated with a higher likelihood of remission. Conversely, pancreas divisum, toxic exposure and endocrine insufficiency tended to be associated with a higher risk of recurrence, although these trends did not hold statistical significance.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Fernandez M, Arvanitakis M, Musala C, Devière J, Van Steenberghe W, Putzeys V, Ausloos F, Bastens B, Gast P, Roeyen G, Berrevoet F, Scheers I, Delhaye M, Deprez PH. The Belgian national registry on chronic pancreatitis: A prospective multi-centre study covering more than 800 patients in one year. *Pancreatology* 2017; 17: 572–579. doi:10.1016/j.pan.2017.05.387. Epub 2017 May 26 PMID: 28600220
- [2] Olesen SS, Mortensen LH, Zinck E, Becker U, Drewes AM, Nøjgaard C, Novovic S, Yadav D, Tolstrup JS. Time trends in incidence and prevalence of chronic pancreatitis: A 25-year population-based nationwide study. *United European Gastroenterol J* 2021; 9: 82–90. doi:10.1177/2050640620966513. Epub 2021 Feb 22 PMID: 33176616 PMID: PMC8259237
- [3] Liyen Cartelle A, Bocchino R, Shah I, Ahmed A, Freedman SD, Sheth SG. Natural History, Clinical Characteristics, and Outcomes in Idiopathic Chronic Pancreatitis. *Gastro Hep Adv*. 2023; 2: 449–453. doi:10.1016/j.gastha.2023.01.005. PMID: 39132046 PMID: PMC11308065
- [4] von Widdern JC, Rosendahl J, Ammer-Herrmann C. Chronic and Idiopathic Pancreatitis-A Personalized Treatment Approach. *United European Gastroenterol J*. 2025; 13: 116–124. doi:10.1002/ueg2.12741. Epub 2024 Dec 20 PMID: 39704081 PMID: PMC11866313

ePoster Connect: Stomach and Duodenum

15/05/2026, 13:30–14:00

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Station 3 (Level 0)

eP1224 Synchronous gastric mantle cell lymphoma and early gastric adenocarcinoma: endoscopic diagnosis and curative resection of an exceptionally rare presentation

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DOI 10.1055/s-0046-1822551

Abstract Text

Synchronous gastric neoplasms are exceptionally rare, with reported coexistence of adenocarcinoma and lymphoma in only 0.08 % to 0.1 % of gastric malignancies [1]. Among them, the association of gastric adenocarcinoma with mantle cell lymphoma (MCL) is exceedingly uncommon with very few cases reported worldwide [2, 3]. Most reported cases have been diagnosed incidentally during endoscopy performed for nonspecific upper gastrointestinal symptoms. Careful endoscopic evaluation and multiple targeted biopsies are therefore crucial to identify distinct lesions that may otherwise be overlooked, highlighting the indispensable role of endoscopy in detecting such complex presentations and, in cases such as this one, enabling curative treatment through endoscopic resection techniques. We present a 68-year-old man with diabetes mellitus and peripheral arterial disease who developed new-onset dyspepsia. Initial endoscopy revealed a 50-mm ulcerated, infiltrative lesion in

the antrum. Biopsies showed an atypical lymphoid infiltrate. A second endoscopy demonstrated additional ulcers in the proximal body and antrum. Immunohistochemistry identified small- to large-sized blastoid lymphoid cells positive for CD20, CD5, and cyclin D1, with Ki-67 around 70 %, and negative for CD3, CD10, and CD23, findings consistent with blastoid-variant MCL with focal gastric involvement. The surrounding mucosa displayed atrophic follicular gastritis and intestinal metaplasia without *Helicobacter pylori*. Systemic therapy with R-CHOP was initiated, achieving complete metabolic response after three cycles. Follow-up endoscopic surveillance showed mucosal healing without lymphoid infiltration, a 40 × 40 mm antral scar, and a 0-IIc lesion of 12 mm on the subcardial lesser curvature whose biopsies showed high-grade dysplasia. After multidisciplinary discussion, endoscopic submucosal dissection (ESD) with Flush knife BT 2.0 was performed, yielding a 32 × 20 mm specimen. Histopathology revealed a well-differentiated tubular adenocarcinoma (pT1b, Sm1, 400 µm submucosal invasion) measuring 16 mm, with no lymphovascular invasion and negative lateral and deep margins. The resection was deemed curative, with no indication for gastrectomy. The patient completed R-CHOP for lymphoma and remains under surveillance due to persistent atrophic gastritis and multifocal intestinal metaplasia. At 3-month endoscopic follow-up with biopsies, post-ESD scarring was observed, without new lesions. This rare case highlights the pivotal role of endoscopy across the entire spectrum of care, from early detection and targeted biopsy to curative resection and post-treatment monitoring. Coexistence of gastric MCL and gastric adenocarcinoma may reflect shared mucosal alterations such as atrophy and intestinal metaplasia that predispose to dual neoplasia (1). The use of the Flush knife BT 2.0 facilitated safe and efficient en bloc ESD, consistent with previously reported advantages of this device, including improved hemostasis and maneuverability that allow high R0 resection rates with minimal complications [4]. Accurate endoscopic assessment, histopathologic correlation, and multidisciplinary care allowed organ preservation and favorable outcome. Ongoing surveillance is essential, as both entities carry potential for recurrence or metachronous lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Toyonaga T, Man-i M, Fujita T, East JE, Coumaros D, Morita Y et al. Endoscopic submucosal dissection using the Flush knife and the Flush knife BT. *Tech Gastrointest Endosc* [Internet]. 2011;[cited 2025 13 (1): 84–90. Available from <https://www.sciencedirect.com/science/article/abs/pii/S1096288311000179>
- [2] Kim YI, Koo MY. Synchronous adenocarcinoma and mantle cell lymphoma of the stomach. *Yonsei Med J* [Internet]. 2007;[cited 2025 Oct 21] 48: 1061–5. Available from: <https://pubmed.ncbi.nlm.nih.gov/18159604/>
- [3] Chong Y, Shin JJ, Cho MY, Cui Y, Kim HY, Park KH. Synchronous primary gastric mantle cell lymphoma and early gastric carcinoma: A case report. *Pathol Res Pract* [Internet]. 2008;[cited 2025 Oct 21] 204: 407–11. Available from: <https://pubmed.ncbi.nlm.nih.gov/18282664/>
- [4] Hamaloglu E, Topaloglu S, Ozdemir A, Ozenc A. Synchronous and metachronous occurrence of gastric adenocarcinoma and gastric lymphoma: A review of the literature. *World Journal of Gastroenterology: WJG* [Internet]. 2006;Jun 14 [cited 2025 Oct 21] 12: 3564. Available from: <https://pmc.ncbi.nlm.nih.gov/articles/PMC4087572/>

eP1225 The Risk of Pathological Upgrade for Gastric Low-grade Intraepithelial Neoplasia in A Short Period of Time: A Nomogram Prediction

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DOI 10.1055/s-0046-1822552

Aims Gastric low-grade intraepithelial neoplasia (LGIN) carries a risk of progression to gastric cancer (GC) in a short time. Identifying predictors of pathological upgrade is critical for precision treatment.

Methods This retrospective study analyzed 260 LGIN patients undergoing ESD within 90 days after biopsy. Clinical data, lesion characteristics (size, location, morphology, ulceration), and immunohistochemical markers (Ki67, c-MYC, MUC5AC, MUC6, CDX-2, P53, H.pylori, MLH1) were assessed. Bioinformatic

analysis identified DEGs in LGIN. A nomogram was developed using multivariable logistic regression and validated via ROC, calibration, and decision curve analysis.

Results In our study, Ki67 positivity > 30% (OR = 2.47), depressed-type lesions (OR = 2.21), and larger lesion size (OR = 1.33) are the independent risk factors for pathological upgrade. Bioinformatic analysis further confirmed Ki67 is one of the key gene in high-grade lesions. The ROC, calibration, and decision curve analysis showed the nomogram has good discrimination (AUC = 0.73) and calibration for predicting pathological upgrade of LGIN patients.

Conclusions The nomogram incorporating Ki67, lesion morphology and size effectively predicts pathological upgrade of LGIN patients in a short period of time, which helps precision treatment decision-making for gastric LGIN.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1227V EUS-guided Percutaneous Endoscopic Jejunostomy to promote healing of an anastomotic leak in patient with total gastrectomy

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DOI 10.1055/s-0046-1822554

Abstract Text

Due to early postoperative anastomotic leak after total gastrectomy, a fully-covered stent was deployed. Given the long-term persisting leak and laparoscopic approach, PEJ was indicated and EUS-guided guidance proposed. A linear echoendoscope was advanced across the esophago-jejunal stent. Transillumination identified a compressible abdominal location suitable for PEJ. An endosonographic target was created placing a saline-filled sterile glove on the skin, which was then punctured with a 19G needle. A guidewire was exteriorized and tied to the kit string, which was then pulled across the abdominal wall from the mouth. Then, a standard "pull" technique was used. To increase the distance from the distal margin of the stent, the PEJ was extended distally via an 8Fr feeding tube. Two months later, after fistula healing and stent removal, PEJ was removed.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/f9240966-07c7-4892-b1d6-d8ff0d7d869c/Uploads/19978_OVvideo.mp4

Conflicts of Interest G. Vanella has received lecture and consultancy fees from Boston Scientific.

eP1228 Prevalence and predictive factors of gastric atrophy

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DOI 10.1055/s-0046-1822555

Aims Assessment of gastric atrophy has long relied exclusively on histological evaluation of systematic biopsies according to the Sydney protocol. A paradigm shift is currently underway: endoscopy is emerging as a standalone diagnostic tool. The validated Kimura Takemoto classification allows real-time diagnosis of gastric atrophy, mapping of its extent, and targeted biopsy sampling. Current recommendations advocate an integrated endoscopy-histology approach with dual risk stratification. In cases of discordance, the higher associated risk dictates surveillance.

The aim of our study was to evaluate the prevalence and predictive factors of gastric atrophy.

Methods This was a single-center, cross-sectional study conducted over six months. Included patients were naïve to Helicobacter pylori eradication therapy and had not received recent antibiotics or proton pump inhibitors (PPIs). After excluding cases of isolated fundic atrophy on histology, 289 patients were analyzed. Endoscopic evaluation of atrophy was performed using the Kimura-Takemoto classification. Biopsies were obtained according to the Sydney protocol. H. pylori infection was diagnosed by histology.

Results The mean age was 46 ± 10 years, with a male-to-female ratio of 1.2 and a mean BMI of 25.4 ± 3.7 kg/m². H. pylori infection was detected in 73.3% of cases. Endoscopic atrophy was present in 35.6% of patients, compared with 5.2% for histological atrophy. No significant association was found between atrophy and H. pylori status (p = 0.79 for endoscopy; p = 0.76 for histology). In multivariate analysis, age was the only independent factor associated with gastric atrophy. Each additional year of age increased the probability of endoscopic atrophy by 3% (OR = 1.03; 95% CI [1.01–1.05]) and histological atrophy by 6% (OR = 1.06; 95% CI [1.02–1.11]). Cohen's kappa coefficient measuring agreement between endoscopy and histology was low (κ = 0.15; 95% CI [−0.03; 0.33]), indicating no significant correlation between both methods.

Conclusions Age is the main determinant of gastric atrophy, potentially reflecting the cumulative mucosal damage over time. The low prevalence of histological atrophy compared with published data from regions with similar H. pylori prevalence may be explained by intrinsic limitations of histology: under-sampling inherent to the Sydney protocol, subjective interpretation, and low sensitivity for early atrophy. The absence of association with H. pylori was unexpected and warrants further investigation. Our findings support the relevance of a combined endoscopy-histology approach with dual stratification to optimize gastric cancer risk assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1229 Updated Diagnostic Approach to Autoimmune Gastritis (AIG): Highlighting Typical Endoscopic Findings

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DOI 10.1055/s-0046-1822556

Aims AIG remains relatively uncommon on a global scale, with epidemiological studies suggesting a prevalence ranging from approximately 0.5% to 4.5% in the general population. A considerable diagnostic gap persists, as the true number of undiagnosed or misdiagnosed AIG cases is still unclear, partly due to non-specific symptomatology in early stages. This underscores the critical importance of mastering its endoscopic recognition. The ability to accurately identify characteristic endoscopic features is therefore paramount, serving as a cornerstone for enhancing diagnostic detection rates, enabling timely intervention, and improving long-term patient management strategies.

Methods This study analyzed data from 149 patients diagnosed with AIG at two medical centers between January 2022 and June 2025. Clinical and endoscopic records were reviewed. The study involved a meticulous review of all available clinical records, laboratory data, and, most importantly, detailed endoscopic documentation (Table 1). A standardized endoscopic protocol was employed for all subjects: each patient underwent high-definition gastroscopy. The primary aim of this methodological approach was to systematically identify, document, and analyze the key endoscopic markers pathognomonic or highly suggestive of AIG.

Results The demographic profile of the studied cohort revealed a mean patient age of 59.9 years, with a marked female predominance, as women constituted 73.5% of the group. Diagnosis was primarily based on endoscopic evaluation. Common reasons for referral included refractory iron deficiency anemia and

previously diagnosed neuroendocrine tumors (NET). Typical endoscopic findings comprised "reverse atrophy" (97.3 % of cases), dense mucus (89.2 %), and remnants of oxyntic mucosa (53.7 %). Additional observations were: white globe appearance (53.0 %), glomus-like lesions (53.6 %), type 1 NET (38.2 %), size less than 5 mm lesions (57.9 %), gastric adenocarcinoma (4.0 %), and adenomas (4.0 %)

Conclusions The study highlights key clinical and endoscopic features that facilitate accurate diagnosis of AIG, including in outpatient settings. The integration of advanced imaging modalities allows precise detection of small, early-stage type 1 NET, thereby enabling proactive management. The documented spectrum of findings—from benign inflammatory patterns to pre-neoplastic and neoplastic lesions—directly contributes to a more nuanced and individualized oncologic risk stratification for patients with AIG. This, in turn, provides a solid evidence base to guide subsequent therapeutic decisions, surveillance intervals, and patient counseling. The ongoing prospective accumulation and analysis of clinical cases within this dedicated cohort are anticipated to further enhance diagnostic precision, validate the observed patterns, and potentially uncover new correlations, ultimately refining the standard of care for this condition.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Colon and Rectum

15/05/2026, 13:30–14:00

ePoster Connect:
Station 4 (Level 0)

eP1230 Expanding endoscopic resection in the rectum: knife-assisted resection (KAR) and submucosal tunneling endoscopic resection (STER) for subepithelial tumors beyond neuroendocrine tumors, a multicenter retrospective cohort study

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DOI 10.1055/s-0046-1822557

Aims To demonstrate the feasibility and real-world effectiveness of KAR and STER techniques for endoscopic resection of rectal subepithelial tumors, excluding neuroendocrine tumors (NETs).

► **Table 1** Patients' Demographics and Clinical Indications for Resection

Variable	n (%)
Type of Hospital _a	Private: 10 (18.2 %); Public: 42 (76.4 %); Not specified: 3 (5.4 %)
Type of Hospital _b	University: 17 (30.9 %); Non-university: 27 (49.1 %); Not specified: 11 (20 %)
Gender	Male: 33 (60.0 %); Female: 22 (40.0 %)
Age, years, median (range)	60 (27–87)
ASA score	I: 24 (43.6 %); II: 28 (50.9 %); III: 3 (5.5 %)
Charlson Comorbidity Index, median (range)	2 (0–4)
Indication for endoscopic resection	Malignant potential: 19 (34.5 %); Diagnostic resection: 17 (30.9 %); Symptom-related: 19 (34.5 %)
Symptoms	None: 32 (58.2 %); Obstruction: 7 (12.7 %); Pain: 8 (14.5 %); Bleeding: 8 (14.5 %)

Methods A retrospective, multicenter study was conducted between January 2017 and October 2025. Data were collected using a standardized case report form (CRF) distributed to all participating centers. Descriptive and comparative analyses were performed to evaluate key outcomes, namely en bloc resection and adverse events, using R software (version 4.4.2).

Results Fifty-five patients were included (30 males, 55 %), with a median age of 60 years (range 27–87), from 11 centers across 9 countries (► **Table 1**). Diagnostic pre-resection sampling was available in 26 cases (47.3 %), most commonly obtained with EUS-FNA/FNB (41.8 %). The main indications for resection were malignant potential (34.5 %) and symptoms (34.5 %) (► **Table 1**). On EUS, the layer of origin was the muscularis propria in 27 cases (49.1 %), the submucosa in 18 (32.7 %), and the muscularis mucosa in 4 (7.3 %). The majority of lesions demonstrated a partially (49.1 %) or mainly endoluminal (38.2 %) growth pattern, while a mainly extraluminal component was noted in 5 cases (9.1 %). KAR was performed in 33 patients (60.0 %), STER in 20 (36.4 %), and 2 patients (3.6 %) underwent knife-assisted hybrid techniques (circumferential incision with snare resection or full-thickness resection using a knife). Lesion size, location, distance from the dentate line, and growth pattern were comparable between groups, whereas muscularis propria origin was more frequent in STER [12/20 (60 %)] than in KAR [14/33 (42 %)], $p = 0.005$. The median distance from the dentate line was 6.0 cm in both groups, while the median tumor size was 20 mm (range 10–58) for KAR and 29 mm (range 9–64) for STER ($p = 0.07$). During dissection, the plane was purely submucosal in 18 cases (32 %), intramucosal in 30 (55 %), and extended into the perirectal fat in 7 (13 %). All tumors were removed en bloc, with no septic complications. The predominant histology was GIST (34.5 %), followed by leiomyoma (21.8 %), lipoma (16.4 %), and schwannoma (9.1 %). Most GISTs were very low or low risk, and five patients received adjuvant Tyrosine Kinase Inhibitor therapy. The median procedure duration was 52.5 minutes (range 15–181). Two adverse events were recorded (3.6 %), neither directly attributable to the endoscopic intervention: one urinary tract infection and one ischemic stroke requiring ICU admission. The median hospital stay was 1 day (range 0–7). Two early recurrences in GIST cases were recorded, one managed endoscopically and the other under surveillance [1–3].

Conclusions KAR and STER appear safe and effective for rectal subepithelial tumor resection. High en bloc rates, low complications, and short hospital stay support their minimally invasive role. Prospective studies are needed to confirm these retrospective findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Hu JW, Zhang C, Chen T et al. Submucosal tunneling endoscopic resection for the treatment of rectal submucosal tumors originating from the muscular propria layer. *J Cancer Res Ther* 2014; 10: Suppl 281–286. doi:10.4103/0973-1482.151533
- [2] Sharzei K et al. AGA Clinical Practice Update on Management of Subepithelial Lesions Encountered During Routine Endoscopy: Expert Review. *Clinical Gastroenterology and Hepatology*. Volume 20 (Issue 11): 2435–2443.e4
- [3] Deprez PH, Moons LMG, O'Toole D et al. Endoscopic management of subepithelial lesions including neuroendocrine neoplasms: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy* 2022; 54 (4): 412–429. doi:10.1055/a-1751-5742

eP1231 Interim multicentre analysis of a thermo-sensitive bioadhesive gel (Covergel) for prevention of delayed bleeding after EMR of large non-pedunculated colorectal lesions

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DOI 10.1055/s-0046-1822558

Aims Delayed bleeding (DB) after endoscopic mucosal resection (EMR) of large non-pedunculated colorectal lesions (LNPL ≥ 20 mm) is a frequent clinically relevant adverse event in patients with intermediate–high bleeding risk according to the GSEED-RE2 score (≥ 4). Covergel is a thermosensitive bioadhesive gel designed to seal post-EMR defects and may reduce bleeding risk. This interim analysis of the multicentre study COVER-PIC01-2023 evaluates the preliminary efficacy and safety of Covergel for preventing DB after EMR of intermediate-high risk LNPL [1, 2].

Methods This prospective, multicentre, single-arm investigation plans to enrol 121 patients. Adults with ≥ 1 LNPL ≥ 20 mm and GSEED-RE2 ≥ 4 underwent complete EMR followed by uniform application of Covergel using the Covercat catheter. Adjunctive clip placement could be performed at the discretion of the endoscopist. Follow-up occurred at 24–72 h, 15 $\pm$ 3 days, and 30 $\pm$ 3 days. The primary endpoint was clinically relevant DB occurring > 24 h and ≤ 30 days, defined as bleeding requiring hospitalisation, transfusion, therapeutic colonoscopy, radiological intervention, or surgery. Expected DB risk was calculated with the GSEED-RE2 model and compared with observed incidence using an exact one-sided binomial test. This interim analysis includes 69 consecutive patients with complete 30-day follow-up.

Results A total of 69 patients with ≥ 1 LNPL ≥ 20 mm were analysed. The mean GSEED-RE2 score was 5.4 ± 1.4 , corresponding to a mean predicted DB risk of 7.22% (range: 4.1–19.8%). Clips were placed in 39/69 patients (56.5%). Only one DB event occurred (1.45%), corresponding to an absolute risk reduction of 5.77% and a relative reduction of 79.9% compared with the expected risk; the reduction was statistically significant (exact binomial $p \approx 0.04$). The single DB episode occurred in a patient with GSEED-RE2 = 9 and no clip placement. No DB occurred in the Clip + Covergel subgroup (0/39), recognising that the study is not powered for between-group comparisons. No perforations, severe post-polypectomy syndrome, or device-related adverse events were identified (► Table 1).

► Table 1 Summary of interim outcomes (n = 69)

Variable	Result
Mean predicted delayed bleeding risk	7.22 %
Observed delayed bleeding	1/69 (1.45 %)
Absolute risk reduction	5.77 %
Relative risk reduction	79.9 %
Clip + Covergel cases	39/69
Delayed bleeding in Clip + Covergel group	0/39
Serious adverse events	0

Conclusions In this interim analysis, prophylactic application of Covergel after EMR of intermediate-high risk LNPL was associated with a significant reduction in delayed bleeding compared with GSEED-RE2–predicted risk and showed a favourable safety profile. The absence of delayed bleeding in patients treated with both Covergel and selective clip placement is clinically promising, although not definitive in this non-comparative interim analysis. Recruitment is ongoing toward the target of 121 patients, and final results will be presented at ESGE Days 2026.

Conflicts of Interest V. Lorenzo-Zúñiga is co-inventor of a patent related to the Covergel technology.

References

- [1] Albéniz E et al. *Gastrointest Endosc*. 2020; 91 (4): 868–878
- [2] Lorenzo-Zúñiga et al. *Digestive Endoscopy*. 2017; 29 (6): 702–711

eP1232V A Laparoscopic Endoscopic Cooperative Surgery approach for safe and curative resection of appendiceal serrated lesions in Serrated Polyposis Syndrome: a single-center case series

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DOI 10.1055/s-0046-1822559

Problem to solve Serrated polyposis syndrome (SPS) carries an elevated colorectal cancer (CRC) risk. Serrated lesions involving the appendix (SLAs) are relatively frequent in SPS but remain challenging to treat. Endoscopic mucosal resection and endoscopic submucosal dissection are hampered by limited visualization of the deep appendiceal margin, resulting in a high risk of incomplete resection and perforation. Endoscopic full-thickness resection (EFTR) improves R0 rates but typically cannot achieve complete removal of the appendix and carries a substantial risk of post-procedural appendicitis, likely due to impaired appendiceal drainage. Meanwhile, standard laparoscopic appendectomy may leave residual peri-orificial serrated mucosa. A laparoscopic appendectomy extended to the cecum can theoretically ensure wider margins, but defining an adequate lateral boundary without jeopardizing the ileocecal valve is difficult, often leading to ileocecal resection. In summary, no current strategy reliably combines complete resection, anatomical preservation and procedural safety for SLAs in patients with SPS [1–3].

Innovation We propose a laparoscopic–endoscopic cooperative surgery (LECS) approach combining, in a single session, an endoscopic full-thickness

resection performed with an over-the-scope full-thickness resection device and a laparoscopic appendectomy. Endoscopic delineation and full-thickness excision of the serrated lesion allow a radical resection while preserving ileocecal anatomy. The subsequent complete removal of the appendix prevents post-EFTR appendicitis.

Results Among 1,936 patients undergoing colonoscopy within the CRC screening program of Friuli Venezia Giulia (2021–2025), 18 (1:108) met the 2019 World Health Organization criteria for SPS. 7 of these patients (39%) had a SLA and underwent LECS. All achieved en bloc full-thickness resection with R0 margins. Median postoperative stay was 3 days, and no postoperative complications were observed. In 3 patients (43%), histology revealed an additional serrated lesion within the laparoscopically resected appendiceal stump, concomitant to the SLA treated, suggesting that endoscopic removal alone would not have achieved complete eradication of the disease.

Conclusions In SPS patients, SLAs remain difficult to manage with standard endoscopic or surgical approaches. Our results show that a LECS strategy enables safe and radical full-thickness resection while preserving ileocecal anatomy and eliminating the risk of post-EFTR appendicitis through complete appendiceal removal. Histology revealed additional serrated lesions within the surgically resected appendix in 3 patients, underscoring the multifocal nature of appendiceal involvement in SPS and the diagnostic and therapeutic value of complete appendectomy, and reinforcing the concept that the appendix represents a blind spot in the endoscopic surveillance of SPS. Therefore, LECS proved safe and effective for the complete resection of appendiceal and peri-appendiceal serrated lesions in SPS. These findings support considering LECS as a promising therapeutic option for SLAs in this setting.

Video [http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/cf409fff-f732-4051-99e7-adf3551ac9a5/Uploads/19990_ESGE_2026_SPS_VideoCase\(1\).mp4](http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/cf409fff-f732-4051-99e7-adf3551ac9a5/Uploads/19990_ESGE_2026_SPS_VideoCase(1).mp4)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Schmidbaur S, Wannhoff A, Walter B, Meier B, Schäfer C, Meining A, Caca K. Risk of appendicitis after endoscopic full-thickness resection of lesions involving the appendiceal orifice: a retrospective analysis. *Endoscopy*. 2023; 55 (9): 847–854. doi:10.1055/a-2111-1234
- [2] Dierick NR, Nicholson BD, Fanshawe TR, Sundaralingam P, Kostalas SN. Serrated polyposis syndrome: defining the epidemiology and predicting the risk of dysplasia. *BMC Gastroenterol* 2024; 24: 167. doi:10.1186/s12876-024-03068-6
- [3] Dutch Spanish British Serrated Polyposis Syndrome Collaboration Dekker E, Bleijenberg A, Balaguer F Update on the World Health Organization Criteria for Diagnosis of Serrated Polyposis Syndrome. *Gastroenterology* 2020; 158 (6): 1520–1523. doi:10.1053/j.gastro.2019.11.310

eP1233 Combining different strategies improves colonoscopy adenoma and sessile serrated lesions detection: a systematic review and network meta-analysis

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DOI 10.1055/s-0046-1822560

Aims Computer-aided detection (CADe) systems based on artificial intelligence can assist endoscopists in identifying colorectal neoplasia. Although CADe has been consistently associated with increases in the adenoma detection rate (ADR)—a key quality indicator—its benefit in detecting sessile serrated lesions is uncertain, raising questions about its actual impact on reducing colorectal cancer (CRC) incidence. Moreover, how CADe integrates with existing advanced imaging techniques and distal attachment devices is still unclear.

Methods In this systematic review and network meta-analysis, we conducted a comprehensive search of PubMed/MEDLINE, Embase, and Scopus from inception to November 30, 2024 for randomised controlled trials evaluating the effectiveness of high-definition (HD) white-light endoscopy, chromoendoscopy, add-on devices to enhance mucosal visualisation (e.g., cuffs, caps, balloons), CADe alone, or CADe combined with other strategies, for detecting colorectal neoplasia. Outcomes included ADR and sessile serrated lesion detection rate (SDR). We performed a frequentist random-effects network meta-analysis comparing HD white-light endoscopy, chromoendoscopy, mucosal exposure systems, CADe, and combined strategies, and estimated odds ratios (ORs) with 95% CIs. Heterogeneity and inconsistency were assessed. Risk of bias and certainty of evidence were assessed using the GRADE framework.

Results A total of 107 randomised controlled trials, comprising 84493 participants, were included in the main analysis. Compared with HD white-light endoscopy, ADR was significantly higher with CADe (OR 1.41 [95% CI 1.29–1.53]), chromoendoscopy (OR 1.22 [95% CI 1.13–1.31]), mucosal exposure systems (OR 1.23 [95% CI 1.15–1.32]), and combined strategies (OR 1.74 [95% CI 1.48–2.04]). Combined strategies ranked as the most effective approach for adenoma detection and showed significant improvements compared with each individual strategy (vs CADe: OR 1.23 [95% CI 1.04–1.47]; vs chromoendoscopy: OR 1.43 [95% CI 1.20–1.67]; vs mucosal exposure: OR 1.41 [95% CI 1.19–1.67]). Combined strategies also ranked first for detecting sessile serrated lesions and were the only approach to significantly outperform HD white-light endoscopy (OR 1.93 [95% CI 1.06–3.50]). However, they did not show statistically significant superiority when compared directly against individual strategies.

Conclusions Combining CADe with other endoscopic strategies yields the highest detection rates for both adenomas and sessile serrated lesions. These findings support broader implementation of CADe in endoscopy services, while also highlighting that CADe alone may be insufficient to achieve optimal performance for subtle, high-risk precursors. The combination of CADe with complementary strategies may therefore better meet the clinical need for maximizing diagnostic yield.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1234 Combining different strategies improves colonoscopy advanced adenoma detection performance: a systematic review and network meta-analysis

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DOI 10.1055/s-0046-1822561

Aims Computer-aided detection (CADe) systems based on artificial intelligence can assist endoscopists in identifying colorectal neoplasia. Although

CADe has been consistently associated with increases in the adenoma detection rate (ADR)—a key quality indicator—its benefit in detecting advanced adenomas remains uncertain, raising questions about its actual impact on reducing colorectal cancer (CRC) incidence. Moreover, how CADe integrates with existing advanced imaging techniques and distal attachment devices is still unclear.

Methods In this systematic review and network meta-analysis, we conducted a comprehensive search of PubMed/MEDLINE, Embase, and Scopus from inception to November 30, 2024 for randomised controlled trials evaluating the effectiveness of high-definition (HD) white-light endoscopy, chromoendoscopy, add-on devices to enhance mucosal visualisation (e.g., cuffs, caps, balloons), CADe alone, or CADe combined with other strategies, for detecting colorectal neoplasia. The primary outcome was advanced adenoma detection rate (aADR). We performed a frequentist random-effects network meta-analysis comparing HD white-light endoscopy, chromoendoscopy, mucosal exposure systems, CADe, and combined strategies, and estimated odds ratios (ORs) with 95% CIs. Heterogeneity and inconsistency were assessed. Risk of bias and certainty of evidence were assessed using the GRADE framework.

Results From a pool of 107 randomised trials, 48 trials ($n = 46406$) reporting advanced adenoma detection were included in this sub-analysis. Unlike general ADR, where individual technologies consistently outperformed white-light endoscopy, results for advanced adenomas were distinct. Combined strategies ranked first and were the sole approach to significantly outperform HD white-light endoscopy (OR 1.43 [95% CI 1.15–1.78]) for aADR. Furthermore, combined strategies showed significant superiority when compared head-to-head against every individual technique (vs CADe: OR 1.30 [95% CI 1.04–1.63]; vs chromoendoscopy: OR 1.27 [95% CI 1.00–1.61]; vs mucosal exposure: OR 1.31 [95% CI 1.03–1.66]).

Conclusions Across the available literature, combining CADe with other endoscopic strategies results in higher detection rates for colorectal neoplasia and uniquely enhances the detection of advanced adenomas. These findings support broader implementation of CADe in endoscopy services, while also highlighting that CADe alone may be insufficient to achieve optimal performance for lesions with the highest malignant potential. The combination of CADe with complementary strategies may therefore better meet the clinical need for improving detection of high-risk lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1235 Comparative Analysis of Pocket Creation Method Versus Traction-assisted Colorectal Endoscopic Submucosal Dissection

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DOI 10.1055/s-0046-1822562

Aims While both traction-assisted (TRC) and pocket creation method (PCM) techniques have been developed to facilitate colorectal endoscopic submucosal dissection (ESD), yet comparative data remain limited. This study aimed to compare clinical outcomes between TRC and PCM, with a particular focus on dissection speed and factors influencing it.

Methods 256 consecutive colorectal ESD procedures were retrospectively analyzed at our institution (145 PCM, 111 TRC). Primary outcomes included en bloc resection, R0 resection, curative resection rates, and dissection speed. Secondary outcome includes adverse events. Statistical analysis included Fisher's exact test and the Chi-squared test for categorical variables and the Mann-Whitney U test for continuous variables. Multivariable Firth logistic regression adjusted for lesion size, lateral spreading tumor (LST) classification, anatomical location, gender, invasion depth, and fibrosis.

Results Both techniques achieved 100% en bloc resection with comparable R0 (98.6% PCM vs 100% TRC, $p = 0.214$) and curative resection rates (91.0% PCM vs 96.4% TRC, $p = 0.088$). Notably, mean dissection speed showed no statistical difference ($48.6 \pm 29 \text{ mm}^2/\text{min}$ PCM vs $49.9 \pm 34.9 \text{ mm}^2/\text{min}$ TRC, $p = 0.722$) with similar mean dissection times (43.7 vs 42.2 min, $p = 0.218$). In

univariate analysis, technique choice was not a significant determinant of dissection speed ($p = 0.344$), while multivariable analysis revealed F2 fibrosis as the strongest determinant of dissection speed ($p < 0.001$), and larger dissection size associated with faster speed ($p = 0.021$). No significant differences were observed in adverse events (perforation: 0.7% PCM vs 1.8% TRC, $p = 0.581$). PCM was predominantly used for rectal lesions (36.6% vs 6.3%, $p < 0.001$), while TRC was preferred for colonic lesions. The PCM group had more carcinomas (33.8% vs 14.4%, $p < 0.001$) and invasive lesions (17.2% vs 5.4%, $p = 0.004$). LST morphology distribution differed significantly ($p = 0.017$).

Conclusions Both PCM and TRC techniques demonstrate equivalent efficacy in terms of en bloc, R0, curative resection, and safety profile, but neither technique provided a speed advantage. These findings support both PCM and TRC as valuable, complementary tools in colorectal ESD and indicate that technique choice should be guided by lesion characteristics rather than expectations of faster and safer dissection.

Conflicts of Interest Fatih Aslan received educational grants, honoraria, and conference support from Boston Scientific and Olympus

ePoster Connect: Endoscopy service

15/05/2026, 15:35–15:55

ePoster Connect:
Station 1 (Level 0)

eP1236 The AGREE classification for gastrointestinal endoscopy-related adverse events: three-year evaluation and extended recommendations

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Aims In 2021, a new classification for grading adverse events (AEs) related to gastrointestinal (GI) endoscopy was introduced: the AGREE classification [1]. This classification aimed to minimize subjectivity in AE assessment and severity grading compared to existing classifications, and allow for easier and more robust comparisons of endoscopic and surgical interventions. The aim of this review was to evaluate the impact and status of the classification three years following its introduction.

Methods We performed a systematic scoping review to identify articles referencing the original AGREE publication [1] up to March, 2025. Articles were reviewed to evaluate the classification's global uptake, use for intra- and interdisciplinary comparisons, and comparability with other classifications. Moreover, identified articles were screened to identify complex AE scenarios, defined as (potentially) incorrectly graded AEs, and AEs for which assignment of a severity grade based on the case description was considered challenging. Complex scenarios were discussed in a consensus meeting involving the lead authors of the original AGREE publication. For all scenarios, consensus on grading was reached through discussion among three of the lead authors (K.N., M.V., P.F.) of the original AGREE publication. A selection of illustrative complex scenarios was made and additional recommendations for grading of these scenarios were established. Additionally, articles were screened for AE reporting practices that may impede the accurate definition, interpretation, and comparison of AEs. The identified reporting practices were used to develop a new checklist to guide more standardized AE reporting using the AGREE classification.

Results A total of 167 unique articles referencing the original AGREE publication were identified, involving 33 countries across five continents. A notable year-over-year increase in annual citations was observed (range: 8 to 83). In

terms of intradisciplinary comparisons, the AGREE classification was proven feasible for direct comparison of AEs across (i) different endoscopic treatment modalities in similar patient groups (21 studies), (ii) similar endoscopic treatment modalities in different patient populations or performed by endoscopists with different levels of expertise (8 studies), and (iii) endoscopy units (1 study). In terms of interdisciplinary comparisons, the AGREE classification facilitated comparison of AEs related to endoscopic interventions with both surgical (3 studies, 3 study protocols) and radiology-guided alternatives (1 study). Moreover, a significant correlation between AE severities as graded by the AGREE classification and the American Society for Gastrointestinal Endoscopy (ASGE) classification was reported (2 studies). Concordance in AE severities among clinicians was greater for AEs assessed using the AGREE compared to the ASGE classification ($\kappa = 0.80$ vs. 0.60) [2]. In terms of complex scenarios, nine illustrative scenarios were selected, for which consensus-based recommendations were established. Based on identified (variability in) AE reporting practices, a checklist to guide standardized AE reporting was composed (key recommendations included in ► Table 1).

► Table 1

- 1. Describe the used definition for AEs
- 2. Describe how AEs were identified and where AEs were registered or recorded
- 3. Describe the timeframe during which AEs were monitored (+ preferably adhere to the recommended 30 post-procedural days timeframe; if not, provide rationale)
- 4. If applicable, describe the different groups for which AEs were evaluated
- 5. Report the incidence, type and severity of all AEs (+ avoid subjective terminology)
- 6. Consider reporting relevant events not meeting the criteria for an AE as “incidents”
- 7. Consider reporting additional textual information on any unexpected or unusual AEs

Conclusions This review illustrates the rapid uptake of the AGREE classification and outlines its feasibility to facilitate intra- and interdisciplinary comparisons, along with greater interobserver agreement in AE severity grading when compared to other classifications. Findings of this review highlight the potential of the AGREE classification to serve as a widely accepted classification for GI endoscopy-related AEs. The extended recommendations provided in this review could help to further standardize the identification, grading, and reporting of AEs, thereby increasing opportunities for evaluating and optimizing quality of GI endoscopy.

Conflicts of Interest E. Dekker has received a research grant from Fujifilm, honoraria for consultancy from Olympus, Fujifilm, Ambu, InterVenn, Norgine, and Exact Sciences, and speaker fees from Olympus, GI Supply, Norgine, IPSSEN/ Mayoly, Fujifilm, and Steris. P. Fockens has received consulting fees from Olympus and Cook Endoscopy. The other authors declare that they have no conflict of interest.

References

- [1] Crispino F, Merola E, Tasini E, Camma C, di Marco V, de Pretis G et al. Adverse events in gastrointestinal endoscopy: Validation of the AGREE classification in a real-life 5-year setting. *Dig Liver Dis* 2023; 55 (7): 933–7
- [2] Nass KJ, Zwager LW, van der Vlugt M, Dekker E, Bossuyt PMM, Ravindran S et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc* 2022; 95 (6): 1078–85 e8

eP1237 Optimizing Anticoagulant Resumption After Gastrointestinal Bleeding: A Prospective Single-Center Cohort of 162 Patients

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DOI 10.1055/s-0046-1822564

Aims Resuming anticoagulant therapy after gastrointestinal bleeding is a frequent and critical clinical dilemma. Early resumption may increase recurrent bleeding, whereas delayed resumption raises thromboembolic risk. Prospective data evaluating timing and structured protocols remain limited.

Methods We conducted a prospective single-center cohort study including 162 consecutive adult patients presenting with gastrointestinal bleeding over two years, confirmed endoscopically. Exclusion criteria were hereditary hemorrhagic telangiectasia, portal hypertensive gastropathy, radiation-induced vascular lesions, inflammatory bowel disease, post-endoscopic duodenal bleeding, and incomplete follow-up. Patients were managed according to a standardized anticoagulant resumption protocol, stratifying timing into < 7 days, 7–14 days, and > 14 days post-bleeding. Recurrent bleeding was defined as new hematochezia or melena, hemoglobin drop ≥ 2 g/dL, need for transfusion, or endoscopic confirmation. Follow-up included scheduled visits, electronic records, and structured telephone contact. Kaplan-Meier curves estimated recurrence-free survival and Cox proportional hazards models identified predictors.

Results Recurrent bleeding occurred in 28 patients (17.3%). Recurrence was highest in patients resuming anticoagulants < 7 days (12/42, 28.6%), intermediate for 7–14 days (10/68, 14.7%), and lowest for > 14 days (6/52, 11.5%; log-rank $p = 0.03$). Cox regression identified early resumption (< 7 days, HR 2.3, 95% CI 1.1–4.9, $p = 0.03$), chronic kidney disease (HR 1.9, 95% CI 1.0–3.5, $p = 0.04$), and age > 75 years (HR 1.8, 95% CI 1.0–3.2, $p = 0.05$) as independent predictors of recurrence. No thromboembolic events were observed during follow-up in patients with delayed resumption (7–14 or > 14 days). The standardized resumption protocol allowed individualized risk stratification and guidance for clinical management.

Conclusions This prospective single-center study demonstrates that timing of anticoagulant resumption critically impacts recurrent gastrointestinal bleeding. Early resumption within 7 days is associated with the highest recurrence. A structured resumption protocol enables safer, evidence-based management, allowing clinicians to tailor therapy while minimizing bleeding risk. These findings provide practical guidance for daily clinical decision-making and can inform multicenter validation studies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1238 Evaluation of Procedural Simulation as a Teaching Method in Diagnostic Digestive Endoscopy

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DOI 10.1055/s-0046-1822565

Aims Procedural simulation is an innovative educational method that provides a safe environment for learning diagnostic digestive endoscopy techniques. It complements traditional apprenticeship-based clinical training, thereby reducing risks to patients. Since the introduction of simulators at the Simulation Center in Marrakech, this approach has been integrated into gastroenterology resident training.

The objective of this study was to evaluate the effectiveness of procedural simulation-based learning for residents in diagnostic digestive endoscopy.

Methods This prospective cross-sectional study involved 13 first- and second-year gastroenterology residents aged 26 to 28 years. Training was con-

ducted at the Simulation Center using low-fidelity simulators under the supervision of experienced instructors. The training protocol included repeated and progressive practical sessions, followed by two types of assessments. Self-assessment was performed by the residents before and after training. External assessment was conducted by instructors to evaluate technical skills, including endoscope handling, navigation, and anatomical recognition, as well as behavioral competencies.

Results Results showed that all 13 residents reported significant improvement in technical skills in the self-assessment, with an average gain of 45 percent. Instructor evaluation confirmed notable progress in mastering technical gestures, with improved performance in both upper and lower endoscopy. The average satisfaction score among participants, measured on a scale from 1 to 5, was 4.3 ± 0.6 , indicating high perceived effectiveness and usefulness of the training. Instructors also noted improvement in relational skills and professional behavior. Only one resident reported minimal progression, perceiving no change in skills after the training.

Conclusions In conclusion, procedural simulation is an effective educational method that allows gastroenterology residents to rapidly acquire the technical skills required for diagnostic digestive endoscopy. Residents demonstrated significant progress in a safe learning environment with high satisfaction, supporting the systematic integration of procedural simulation into gastroenterology training programs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1239 Sellick Maneuver Improves Gastric Visualization in Patients with Weak LES

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DOI 10.1055/s-0046-1822566

Aims The Sellick maneuver (cricoid pressure) is traditionally used to prevent aspiration during intubation. This study aimed to evaluate the safety and efficacy of the Sellick maneuver in improving gastric visualization and diagnostic yield in patients with weak lower esophageal sphincter (LES) during sedated gastroscopy (► **Table 1**).

Methods This prospective study included 43 patients (ASA 1-2, Hill Grade 2-4) who underwent deep sedation EGD between July 2024 and July 2025. Patients demonstrating inadequate gastric inflation due to air reflux were included. A cricoid pressure of approximately 30 Newtons was applied by the anesthesiologist. We compared gastric mucosal fold visibility scores (scored 0-1 for greater curvature, lesser curvature, and fundus), air reflux presence, vital signs (SpO₂, heart rate), and procedure duration before and during the maneuver. Statistical analysis was performed using McNemar and paired samples t-tests [1–3].

Results total of 43 patients (22 males, 21 females; mean age 58.2 ± 2.7 years) were analyzed. The distribution of Hill Grades was Grade II (23.3 %), Grade III (53.5 %), and Grade IV (23.3 %). The Sellick maneuver successfully provided adequate gastric distension in 93 % ($n = 40$) of patients, while failure in 3 cases was attributed to incomplete esophageal closure. The total gastric mucosal fold spreading score improved significantly from a baseline of 0.46 ± 0.59 to 2.79 ± 0.55 during the maneuver ($p < 0.001$). Gastroesophageal air reflux, which prevented visualization in all patients initially, was completely eliminated during the maneuver ($p < 0.001$). Most importantly, the maneuver increased diagnostic yield: new pathological findings not visible during standard insufflation were detected in 41.9 % ($n = 18$) of patients. These missed lesions included peptic erosions ($n = 6$), gastric polyps ($n = 4$), subepithelial lesions ($n = 2$), Cameron ulcers ($n = 1$), Dieulafoy lesions ($n = 1$), and gastric masses ($n = 2$). Regarding safety, no statistically significant changes were observed in SpO₂ (95.83 % vs. 95.69 %, $p = 0.52$) or heart rate (80.8 vs. 81.3 bpm, $p = 0.23$). Coughing was

absent in 83.7 % of cases, with only minor coughing (1-2 times) observed in 14 % (► **Table 2**).

► **Table 1**

Pathologic findings	Number
Erosion in the corpus	6
Ulcer in the corpus	1
Cameron ulcers	1
Dieulafoy lesion at the corpus	1
Isolated Gastric Varices (IGV)-1	1
Subepithelial lesion at the corpus	2
Mass at the corpus greater curvatur	1
Polyp at the corpus	3
Polyp at the antrum	1
Mass at the antrum lesser curvatur	1

► **Table 2**

scoring criteria	No Sellick maneuver	Sellick maneuver	P-value
Esophageal clusur status	0,00	$1,77 \pm 0,57$	$p < 0.001$
Greater curvature fold	$0,47 \pm 0,21$	$0,90 \pm 0,29$	$p < 0.001$
Gastric lesser curvature	$0,07 \pm 0,25$	$0,88 \pm 0,32$	$p < 0.001$
Gastric fundic mucosa	$0,37 \pm 0,48$	$1,00 \pm 0,00$	$p < 0.001$
Total score of vision	$0,46 \pm 0,59$	$2,79 \pm 0,55$	$p < 0.001$
Reflux findings	$0,35 \pm 0,48$	0	$p < 0.001$

Conclusions The Sellick maneuver is a highly effective, safe, and readily available technique for optimizing gastric distension in patients with hiatal hernia or weak LES. By preventing retrograde air escape, it significantly enhances mucosal visualization, allowing for the detection of critical benign and premalignant lesions that are otherwise missed during standard sedated gastroscopy. The procedure does not induce hemodynamic instability or significant adverse events. Therefore, the Sellick maneuver should be considered a standard adjunctive tool in cases of suboptimal gastric inflation to avoid repeat procedures and improve diagnostic accuracy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Zhang L., Shu L., Shi Z., Chen Z. 2023; Effectiveness of the Sellick maneuver for painless gastroscopy in patients with esophageal hiatal hernia: A randomized, self-control trial. *Experimental and Therapeutic Medicine* 26 (5): 519
- [2] Tack J., Pandolfino J.E. Pathophysiology of gastroesophageal reflux disease. *Gastroenterology* 2018; 154 (2): p 277–288
- [3] Salem M.R. et al. Cricoid Pressure Controversies: Narrative Review. *Anesthesiology* 2017; 126 (4): p 738–752

eP1240 Usefulness of Transnasal Endoscopic Pharyngeal Observation in Surveillance of Esophageal CancerAuthor Kitamura Y¹

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DOI 10.1055/s-0046-1822567

Aims Due to field cancerization, patients with esophageal squamous cell carcinoma (ESCC) have a high risk of synchronous or metachronous head and neck cancer (HNC). Advances in image-enhanced endoscopy and increased awareness among endoscopists have improved detection rates. However, pharyngeal assessment using the transoral Valsalva maneuver often provides insufficient visualization, partly because laryngeal elevation varies widely among individuals. Moreover, anatomical constraints make the tongue base difficult to observe. Since 2025, our institution has introduced systematic pharyngeal observation using a transnasal endoscope (GIF-1200N). For patients scheduled for esophageal ESD who show inadequate pharyngeal visibility despite the transoral Valsalva maneuver, additional preoperative evaluation using a curved laryngoscope is performed in the operating room.

To evaluate the usefulness of transnasal endoscopy for pharyngeal observation by analyzing lesion distribution and diagnostic methods before and after its introduction.

Methods We retrospectively reviewed patients diagnosed with superficial HNC at our department between April 2012 and October 2025. Nineteen patients with 36 lesions were included. The study period was divided into an early phase (2012–2024; 24 lesions) and a late phase (2025; 12 lesions). We compared the methods used at lesion detection, including transoral observation, transoral Valsalva maneuver, transnasal Valsalva maneuver, intra-oropharyngeal U-turn method, and observation using a curved laryngoscope. Endoscope type and lesion location were also evaluated.

Results 11 patients were male, with a median age of 74 (range 59–84) in the early phase and 70 (62–82) in the late phase. Observation methods in the early vs. late phase were: transoral observation (17 vs. 4), transoral Valsalva (7 vs. 0), transnasal Valsalva (0 vs. 4), intra-oropharyngeal U-turn (0 vs. 4), and curved laryngoscope (0 vs. 4). Endoscopes used (H260Z / H290Z / 1200N) were 18/6/0 in the early phase and 4/4/4 in the late phase. Lesion locations in the early vs. late phase were: oral cavity (1 vs. 0), oropharynx (4 vs. 3), hypopharynx (15 vs. 2), post-cricoid region (1 vs. 3), epiglottic vallecula (3 vs. 0), and tongue base (0 vs. 4).

Lesion detection increased in the late phase after the introduction of transnasal endoscopy. Notably, tongue-base cancers were not detected in the early phase, whereas four such lesions were identified in the late phase. Transnasal intra-oropharyngeal U-turn provided excellent visualization of the tongue base, leading to improved detection. Many ESCC/HNC high-risk patients had multiple missing teeth, which often limited laryngeal elevation during the transoral Valsalva maneuver. In contrast, the transnasal Valsalva maneuver is unaffected by dentition and therefore enhances pharyngeal visibility. Nevertheless, laryngeal elevation with the transnasal approach also varied among patients. In cases with insufficient visualization, additional observation using a curved la-

ryngoscope enabled identification of lesions—especially in the post-cricoid area—that had previously been difficult to detect.

Conclusions In patients at high risk for head and neck cancer, the transnasal Valsalva maneuver and transnasal intra-oropharyngeal U-turn are highly effective for observing the tongue base and post-cricoid region, which are key blind spots during standard transoral endoscopy. For cases with inadequate laryngeal elevation during the Valsalva maneuver, supplementary evaluation using a curved laryngoscope further improves early detection. Introducing a structured transnasal pharyngeal observation protocol may significantly enhance surveillance accuracy in ESCC patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1241 How can endoscopic yield be improved in young patients with reflux? A large single site UK prospective cohort studyAuthors Kumar R¹, Santa E¹, Cole F¹, Shaw K¹, Morris D¹

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DOI 10.1055/s-0046-1822568

Aims Patients < 55yr with Reflux symptoms account for a heavy burden on endoscopy, yet significant endoscopic findings are rare: most have functional heartburn and may be managed without investigation. Oesophageal adenocarcinoma (OAC) and precursor Barrett's oesophagus (BO) are also uncommon hence selective screening is not recommended. However epidemiological studies show increasing incidence of OAC in younger patients often being diagnosed at a later stage. Less invasive tests that identify those younger patients at increased risk of BO/OAC and reassure most patients and referrers without endoscopy are needed. Capsule sponge testing (CS) was introduced in UK national studies with outcomes showing feasibility acceptability and efficacy in detecting BO, reduction in endoscopy and lower costs. Details by age group are not published [1].

Methods This prospective cohort study of patients routinely referred with reflux symptoms to a single UK non-specialist hospital 2020–2023. Patients were offered CS oesophageal cell sampling as part of an early diagnosis pathway. Detailed methods previously published.¹ Only patients with abnormal CS, inadequate samples or ongoing symptoms after treatment advice were offered endoscopy. Records were review in all patients > = 1y follow-up. Endoscopic histology yield of BO were recorded in patient categories of younger (<50y male/65 female) and older (> = 50 male/65y female) according to previous modelling. Detailed analysis of the younger age group is presented (► Table 1).

Results 871 patients (median age 54 years) were offered CS of which 572 (65.7 %) were in the younger age group. Abnormal results (TFF3, atypia, p53) were found in 48/507 (9.5 %) adequate CS tests, with all 48 having subsequent endoscopy. 65 (11.4 %) had failed or inadequate CS of whom 49 had subsequent endoscopy (16 declined). 115 patients (20.1 %) with normal CS went on to endoscopy due to persistent symptoms. Older age group shown for comparison but not described further here. 11 younger patients were offered surveillance based on current BSG guidelines: 5 having long segments maximal extent > = 4cm. 1 had indefinite for dysplasia.

Atrophic gastritis was also found in 4/212 patients in the young cohort and 6/119 in the older cohort. 360/572 (63 %) patients in the younger and 180/299 (60.2 %) in the older cohort avoided gastroscopy- median follow up 27.2 months.

► **Table 1** Histology on patients going on to endoscopy by Age Category

Indication for endoscopy	Yield of BO on Histology < 50y M/ < 65y F (%)	Yield of BO/OAC on Histology > = 50y M/ > 65y F
Abnormal CS	19/48 (37.5 %)	18/37 (48.6 %)
Inadequate CS	1/49 (2.0 %)	2/34 (5.9 %)
Negative CS/ persistent symptoms	1/115 (0.9 %)	2/48 (4.1 %)
Overall Service	21/212 (9.9 %)	25/119 (21.0 %)*

*p = .005 Chi Sq = 7.85

Conclusions A low overall presumed incidence of BO in younger lower risk cohort is as expected (3.67 %), but the yield of histologically confirmed BO is greatly enhanced by using CS triage to 9.9 % whilst avoiding endoscopy in 63 % patients. A significantly increased yield to 21 % is found in older cohorts. This demonstrates the value of a CS pathway in managing younger patients (as well as older) presenting with chronic reflux and may also potentially be valuable in primary care. It can provide prompt reassurance whilst detecting the small number of patients with significant disease and is resource-saving.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Angel D, Kumar R et al. Evaluation of a capsule sponge triage pathway for patients with reflux symptoms: safety, long-term outcomes and impact on endoscopy in a large single-centre cohort. *Frontline Gastroenterol.* 2025; (in press)

eP1242 Outcomes of a Novel Double-Tunnel Traction (DTT) Technique for Circumferential Endoscopic Submucosal Dissection of the Oesophagus

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DOI 10.1055/s-0046-1822569

Aims Circumferential oesophageal endoscopic submucosal dissection (ESD) is technically feasible but frequently inefficient. Although tunnelling and traction strategies improve standard ESD, their benefit in circumferential resections is uncertain. We developed a novel double-tunnel traction (DTT) technique to improve stability and submucosal exposure. This study compared DTT with conventional ESD (cESD). Circumferential oesophageal endoscopic submucosal dissection (ESD) is technically feasible but frequently inefficient. Although tunnelling and traction strategies improve standard ESD, their benefit in circumferential resections is uncertain. We developed a novel double-tunnel traction (DTT) technique to improve stability and submucosal exposure. This study compared DTT with conventional ESD (cESD).

Methods We performed a retrospective analysis of a prospectively maintained registry of ESDs for Barrett's or squamous neoplasia between September 2017 and August 2025. Circumferential cases were analysed, comparing DTT with cESD overall and with traction (C + T) or without traction (C – T). Outcomes included dissection speed (min/cm²), R0 excision, recurrence and adverse events.

Results Among 320 oesophageal ESDs, 51 (15.9 %) were circumferential (15 DTT, 36 cESD). Median defect length was 100 mm (range 40–200 mm), with similar baseline characteristics between groups. DTT achieved shorter procedure times than cESD (120 vs 160 minutes; P = 0.009) and faster dissection speed (2.16 vs 3.33 min/cm²; P < 0.001). Dissection speed remained superior to both C + T (3.56 min/cm²; P < 0.001) and C – T (3.07 min/cm²; P = 0.004). En-bloc resection was achieved in all DTT cases. R0 excision was numerically higher with DTT than cESD (86.7 % vs 63.9 %) and significantly higher than C + T (52.6 %; P = 0.035). Luminal recurrence was 0 % with DTT versus 20.6 % for cESD (P = 0.076) and 27.8 % for C + T (P = 0.031). Adverse events were similar between groups.

Conclusions Compared with conventional ESD, DTT improves efficiency and oncological outcomes with regard to R0 excision and luminal recurrence, without compromising safety. DTT offers a reproducible approach for these technically challenging resections.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1243V Over-the-scope clip (OTSC) as salvage therapy for acute esophageal arteriovenous malformation rebleeding

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DOI 10.1055/s-0046-1822570

Abstract Text

Rendu–Osler–Weber syndrome is characterized by fragile arteriovenous malformations that can lead to recurrent upper gastrointestinal bleeding. In this case, initial endoscopic therapy using standard haemoclips achieved only temporary control, with two subsequent episodes of rebleeding from an oesophageal AVM. During the third bleeding event, bipolar coagulation was insufficient to obtain haemostasis. After removal of previously placed haemoclips, an over-the-scope clip (OTSC) was deployed directly onto the malformation, providing stable mechanical haemostasis. Minor residual mucosal oozing from the top of the tissue grasped by the clip was successfully treated with a bipolar probe. Following this combined intervention, no further bleeding occurred. To our knowledge, this is the first reported use of an OTSC for haemostasis of an oesophageal AVM [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/010ecd17-d48f-492e-b779-3ce4a392712b/Uploads/19978_Video_case%20ROW%20ESGE%20Days%202026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jargiello A, Rzyck A, Kasztelan-Szczerbinska B, Cichoz-Lach H. A Rare Case of Upper Gastrointestinal Bleeding: Osler-Weber-Rendu Syndrome. *Medicina (Kaunas)* 2022; 58 (3): 333
- [2] Kathi PR, Tama M, Kundumadam S, Gulati D, Ehrinpreis MN. Esophageal arteriovenous malformation, a rare cause of significant upper gastrointestinal bleeding: Case report and review of literature. *Intractable Rare Dis Res* 2018; 7 (3): 196–199
- [3] Manfredi G, Crinò SF, Alicante S et al. Gastrointestinal bleeding in patients with hereditary hemorrhagic telangiectasia: Long-term results of endoscopic treatment. *Endosc Int Open* 2023; 11 (12): E1145–E1152

eP1244 Keeping the fistula open: paradigm shift in the endoscopic management of hepatic hydatid cysts with cystobiliary communication

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DOI 10.1055/s-0046-1822571

Aims In hepatic hydatid disease with biliary communication, ERCP traditionally aims to clear hydatid material from the bile ducts and close the cystobiliary fistula through stenting. In contrast to the conventional approach, this study aimed to investigate the efficacy and safety of complete endoscopic evacuation of the cyst content as a curative treatment in selected patients, with dilation of the fistulous tract when necessary [1].

Methods This retrospective, single-center study included consecutive patients who underwent endoscopic cyst evacuation performed by a single endoscopist. The procedure was carried out in centrally located cysts that were completely surrounded by liver parenchyma, without exophytic extension, and whose cavities could be cannulated endoscopically. In patients whose fistulous tracts were not suitable for endoscopic evacuation, the tract was dilated with a 6–8 mm balloon. The cyst cavity was irrigated with saline and debrided in multiple sessions using endoscopic accessories such as stone extraction balloons and Dormia baskets. At the end of each session, a plastic stent, fully covered metal stent, or nasocystic drain was placed extending into the cyst cavity. Clinical success was defined as endoscopic clearance and reduction in the size of the cyst cavity.

Results Among 102 patients who underwent ERCP for biliary hydatid disease, 37 consecutive patients who received endoscopic cyst evacuation were included in the study. The mean age was 46.8 ± 19.1 years, and the mean cyst diameter was 82.9 ± 36.1 mm. A total of 184 ERCP procedures (median: 5) were performed. Sphincterotomy was performed in all cases. Balloon dilation of the cystobiliary opening orifice was carried out in 19 patients (51.4%). Nasocystic drainage was performed in 12 patients (32.4%). A fully covered metal stent was used in four patients (10.8%) due to dense cyst content. Clinical success was achieved in 36 patients (97.3%). One patient required surgery (right hepatectomy) due to multiple hepatic abscesses. No recurrence or procedure-related or disease-related mortality was observed during follow-up. Complications occurred in nine procedures (4.8%), all successfully managed with endoscopic and/or conservative treatment.

Conclusions Endoscopic evacuation provides a safe and effective curative treatment option for hepatic hydatid disease with biliary communication, achieving high success rates with a low risk of complications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dumas R, Le Gall P, Hastier P et al. The role of endoscopic retrograde cholangiopancreatography in the management of hepatic hydatid disease. *Endoscopy*. 1999; 31 (3): 242–7

eP1245 Compliance with ESGE-UEG endoscopy performance measures and Incidence of ERCP complications in real clinical practice. A Prospective Multicenter National ERCP Registry in Spain

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DOI 10.1055/s-0046-1822572

Aims Endoscopic retrograde cholangiopancreatography (ERCP) is associated with higher rates of adverse events (AEs) than other endoscopic procedures. The European Society of Gastrointestinal Endoscopy (ESGE) and the United European Gastroenterology (UEG) have defined specific ERCP quality performance measures, but prospective national ERCP registries are scarce. The aim of this study was to evaluate compliance with ESGE-UEG quality indicators in the first Spanish ERCP registry and determine incidence, severity and predictors of post-ERCP AEs [1–4].

Methods Prospective, multicenter, nationwide study included consecutive ERCPs performed at 17 Spanish hospitals between October 2024 and October 2025. Demographic, clinical, and technical variables were recorded in a standardized electronic database. All patients underwent telephone follow-up at 7 and 30 days. AEs described by AGREE classification. Descriptive statistics were used to evaluate compliance with quality indicators. Logistic regression analyses were conducted to identify independent risk factors for AEs.

Results A total of 1241 ERCP procedures were included (mean age 70.4 ± 16 years; 48.9% female). Compliance with quality indicators was high: successful biliary cannulation was achieved in 91.6%, extraction of stones < 10 mm in 96.2%, and stent placement for distal biliary obstruction in 100% (142/142). Adequate antibiotic prophylaxis was achieved in 99%.

The overall AE rate was 16.8%, and overall mortality was 1.6%. Independent predictors were age (OR 1.72 per 10 years, 95% CI 1.09–2.72) and chronic kidney disease (CKD) (OR 3.17, 95% CI 1.22–8.20). Sex was not associated with mortality.

Post-ERCP pancreatitis (PEP) occurred in 71 cases (5.7%), with AGREE severity grade I-16.9%, II-59.2%, IIIa-9.9%, IIIb-2.8%, IVa-2.8%, IVb-1.4% and V-7%. In the multivariable model, independent predictors of PEP were papilla regular/classic morphology (OR 1.77, 95% CI 1.00–3.12), difficult cannulation (OR 1.86, 95% CI 1.01–3.45) and partially covered metal stent (OR 5.33, 95% CI 2.57–11.09). Unintentional pancreatic cannulation and NSAID prophylaxis were not independently associated with PEP. Cholangitis occurred in 51 cases (4.1%). Severity by AGREE was grade I-6%, II-50%, IIIa-28%, IIIb-2%, IVa-2% and V-12%.

Independent predictors were primary sclerosing cholangitis (OR 8.54, 95% CI 2.11–34.54), malignant stent dysfunction (OR 4.92, 95% CI 1.73–14.02), placement of a plastic biliary stent (OR 2.01, 95% CI 1.08–3.72) and CKD (OR 2.48, 95% CI 1.17–5.26). Female sex showed a protective effect (OR 0.49, 95% CI 0.27–0.90). Cholangitis in suspected malignant stent dysfunction ($n = 31$), occurred in 16.1%, with a trend toward higher risk in those receiving plastic stents (37.5% vs. 8.7%). Bleeding occurred in 60 cases (4.8%). Severity was AGREE I-23%, II-18.3%, IIIa-45%, IV-3.3% and V-5%. Neither antiplatelet nor anticoagulant therapy, comorbidity burden, were associated with bleeding. In multivariable analysis, no independent predictors were identified; sphincterotomy showed only a non-significant trend (OR 1.64, $p = 0.079$). Cholecystitis occurred in 12 patients (1.0%), with AGREE II-33%, IIIa-25%, IIIb-33%, IVa-2% and V-8.3%. Biliary stent placement was independently associated with increased risk (OR 3.93, 95% CI 1.00–15.37). Gallbladder opacification (OR 3.68) and partially covered metal stents (OR 4.41) showed strong but non-significant trends. Fully covered stents were not associated with increased risk. Post-ERCP perforation occurred in 11 patients (0.9%): AGREE II-18%, IIIa-27%, IVa-9.1%, V-45%; intraprocedural 36% and delayed 64%.

Conclusions This Spanish registry demonstrates high compliance with ESGE-UEG performance measures providing robust real-world data on post-ERCP complications. Systematic follow-up enabled comprehensive AE detection, revealing clinically meaningful predictors. These findings highlight the value of national prospective registries in ERCP practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Nass KJ et al. Novel classification for adverse events in GI endoscopy: the AGREE classification. *Gastrointest Endosc* 2022; 95 (6): 1078–1085.e8. doi:10.1016/j.gie.2021.11.038. Epub 2021 Dec 8
- [2] Brindise EM, Gerke H. Monitoring adverse events after ERCP: Call me maybe? *Gastrointest Endosc* 2021; 93 (4): 911–913
- [3] Theunissen F et al. Implementation of mandatory ERCP registration in The Netherlands and compliance with European Society of Gastrointestinal Endoscopy performance measures: a multicenter database study. *Endoscopy* 2022; 54: 262–267
- [4] Domagk D et al. Performance measures for ERCP and endoscopic ultrasound: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2018; 50: 1116–1127

eP1246 Does Timing Matter? ERCP Performed During Acute Versus Post-Acute Pancreatitis: A 25-Year Real-World Comparative Study From Two High-Volume Centers

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DOI 10.1055/s-0046-1822573

Aims The optimal timing of endoscopic retrograde cholangiopancreatography (ERCP) in pancreatitis remains debated, especially in patients without cholangitis or persistent biliary obstruction. This study evaluated technical outcomes, procedural complexity, and adverse events of ERCP performed during the acute phase of pancreatitis compared with ERCP undertaken after clinical and biochemical resolution.

Methods In this retrospective real-world study, consecutive ERCPs performed for pancreatitis at two high-volume hepatopancreatobiliary centers (January 2001–July 2025) were reviewed. Among 5,983 ERCPs, 344 met inclusion criteria. Patients were categorized into: Group A (acute pancreatitis with cholangitis and/or elevated bilirubin; $n = 114$) and Group B (post-acute ERCP performed after resolution of abdominal pain and normalization of amylase $< 3 \times$ normal;

$n = 230$). Demographic, imaging, procedural, and outcome variables were analyzed. Primary endpoints were biliary cannulation success, duct clearance, and ERCP-related adverse events.

Results Overall, successful biliary cannulation was achieved in 309/344 patients (89.8%), increasing to 93.9% when excluding the 15 patients in whom the papilla could not be reached. Cannulation success did not significantly differ between acute and post-acute ERCP (93.0% vs 88.3%; $p = 0.114$). However, procedures in the post-acute group were technically more demanding, with higher rates of precut fistulotomy (33.8% vs 25.2%; $p = 0.040$) and > 5 cannulation attempts (54.1% vs 41.4%; $p = 0.017$). Choledocholithiasis was present in 46.8% of patients and the majority of stones were < 1.5 cm. Complete bile duct clearance was achieved in 140/154 (90.9%) patients, with no significant difference between groups (92.7% vs 89.9%; $p = 0.468$). Periapillary diverticula were significantly more common in the post-acute group, whereas an inflamed papilla was more frequent during the acute phase. ERCP-related adverse events were uncommon overall (17/344; 4.9%) and tended to be more frequent in the post-acute group (6.1% vs 2.6%; $p = 0.128$). Intraprocedural bleeding occurred significantly more often post-acutely (37.8% vs 28.1%; $p = 0.047$), paralleling the increased procedural complexity. Post-ERCP pancreatitis was observed only in Group B (6/230; 2.6%), while other specific events, including perforation (0.3%), clinically significant bleeding (0.9%), cholecystitis (0.6%) and sedation-related serious adverse events (0.3%) were rare. Mortality occurred exclusively in the acute group (4/114; 3.5%; $p = 0.012$) and was largely attributed to severe underlying pancreatitis rather than the procedure itself.

Conclusions In this large, long-term real-world cohort, ERCP performed during either the acute or post-acute phase of pancreatitis achieved high biliary cannulation and duct clearance rates with low overall complication rates when undertaken by experienced endoscopists. These findings suggest that procedural complexity and baseline disease severity, rather than timing alone, are the principal determinants of ERCP risk in pancreatitis-associated indications.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1247 Index Bile Culture as a Predictor of Infectious Complications After EUS-BD – A Single-Center Retrospective Study

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DOI 10.1055/s-0046-1822574

Aims EUS-guided biliary drainage (EUS-BD) is increasingly used for malignant and benign obstruction when ERCP is unsuccessful or not feasible. Due to tract creation and larger stent systems, EUS-BD represents a more invasive endoscopic intervention, potentially increasing the risk of bacteremia and the frequency of infectious complications. We aimed to evaluate the prognostic role of positive index bile cultures for predicting post-interventional infectious morbidity and infection-driven re-interventions.

Methods We performed a retrospective single-center cohort of 227 patients undergoing EUS-guided hepaticogastrostomy or other EUS-guided biliary drainage between March 2020 and March 2025 at our tertiary endoscopy center. Index bile aspirates were classified as positive or non-positive. At our center, bile microbiology sampling is routinely performed in all patients during EUS-BD interventions before stent deployment. Primary endpoints included a 30-day infectious adverse event, notably post-drainage cholangitis, graded by the Tokyo Guidelines. Secondary endpoints were the rate of infection-driven reinterventions within 6 months and mortality.

Results Positive index bile cultures obtained at the time of EUS-guided biliary drainage were found in 62 of 227 patients (27.3%). Patients with culture-positive bile had significantly higher rates of 30-day infectious adverse events compared with non-positive cases (30.6% vs. 8.3%, $p < 0.001$), and more fre-

quent acute cholangitis recurrence within 90 days (17.7 % vs. 4.2 %, $p < 0.001$). A positive index bile culture also translated into increased infection-driven reintervention during 6-month follow-up (29.0 % of culture-positive vs. 5.0 % of non-positive patients, $p < 0.001$), typically managed by restenting through the existing stent lumen when purulent stent occlusion or clinical sepsis signs developed. Most cultured pathogens were MDR gram-negative Enterobacteriaceae. Bile microbiology taken at the index EUS-BD allowed early infection-risk recognition, directly guiding adverse events grading, antibiotic choice, and close 6-month follow-up intensity. In patients with culture-positive index bile, early infectious adverse events were significantly more frequent after hepatogastrostomy than after other EUS-guided biliary drainage techniques (48.4 % vs. 12.9 %, $p < 0.001$), supporting that, in the presence of infected bile, the hepatogastrostomy pathway is associated with greater early infectious activity, likely related to transluminal tract creation.

Conclusions In this real-world cohort, positive bile culture obtained at the index EUS-BD session was strongly associated with early infectious adverse events and a high risk of infection rebound requiring subsequent reintervention for acute cholangitis. Index biliary microbiology provides a practical assessment of infection risk, but negative cultures do not exclude severe or fatal biliary sepsis.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Stomach and Duodenum

15/05/2026, 15:35–15:55

ePoster Connect:
Station 4 (Level 0)

eP1248 The Blockbuster Drug and the Sluggish Stomach: A Case of Mistaken Blame?

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DOI 10.1055/s-0046-1822575

Aims Gastroparesis is a common complication in patients with diabetes mellitus (DM). During video capsule endoscopy (VCE), delayed gastric emptying may lead to incomplete examinations or require endoscopic placement of the capsule into the duodenum. GLP-1 receptor agonists (GLP-1RAs), increasingly used in the treatment of type 2 DM and obesity, are known to slow gastric motility. However, their effect on gastrointestinal transit times during VCE remains unclear. This study aimed to evaluate the association between GLP-1RA use and VCE outcomes in diabetic patients.

Methods We performed a retrospective analysis of diabetic patients who underwent VCE. Patients were categorized based on GLP-1RA therapy. Gastric transit time (GTT) and small bowel transit time (SBTT) were recorded. Prolonged GTT was defined as capsule retention in the stomach for more than 60 minutes. Glycated hemoglobin (HbA1c) and potential confounders (age, sex, hospitalization, smoking status, use of psychotropics, hypothyroidism, and inflammatory bowel disease) were collected.

Results A total of 90 patients were included (50 % male, mean age 70 ± 11 years), of whom 18 (20 %) were receiving GLP-1RA. Prolonged GTT was more frequent among GLP-1RA users (61.1 % vs 34.7 %, $p = 0.041$). However, in multivariable logistic regression, this association was no longer statistically significant (OR 3.51, $p = 0.061$), while HbA1c was the only

independent predictor of delayed gastric emptying (OR 3.24 per 1 % increase, $p < 0.001$).

Median GTT and SBTT did not significantly differ between GLP-1RA and non-GLP-1RA groups (GTT: 49.0 vs 33.0 minutes, $p = 0.252$; SBTT: 161.0 vs 203.1 minutes, $p = 0.558$).

Conclusions An association was observed between GLP-1RA use and prolonged GTT, although this effect did not persist after adjustment for clinical confounders, including HbA1c. Among all variables analyzed, HbA1c emerged as the only independent predictor of delayed gastric emptying. These findings suggest that prolonged GTT may be more closely related to poor glycemic control than to the use of GLP-1RA therapy itself. Optimizing glycemic control may therefore be a key strategy in reducing gastroparesis-related events during VCE in diabetic patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1249 Identification of Clinical and Endoscopic Phenotypes in Non-Variceal Upper GI Bleeding Using an Unsupervised Machine Learning Approach

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DOI 10.1055/s-0046-1822576

Aims To identify distinct clinical and endoscopic phenotypes among patients presenting with non-variceal upper gastrointestinal bleeding (NVUGIB), based on age, sex, clinical presentation, and exposure to antithrombotic or NSAID therapy, using an unsupervised machine-learning clustering technique [1, 2].

Methods We performed an unsupervised clustering analysis using Partitioning Around Medoids (PAM) on a Gower distance matrix. Two-dimensional visualization of the cluster structure was obtained with t-distributed Stochastic Neighbor Embedding (t-SNE). The analysis included 405 patients ≥ 16 years old hospitalized with clinical signs of NVUGIB, without history of gastrointestinal malignancy, portal hypertension, or varices, at the General Hospital of Ioannina, Greece.

Results PAM clustering ($k = 3$) identified three distinct clinical and endoscopic phenotypes among these patients. Cluster 1 included only elderly female patients, most of whom were aged 80 years or older. Nearly all of these patients presented with melena. Endoscopic evaluations revealed no identifiable source of bleeding in 73 % of the cases. The remaining patients showed a mix of low-frequency lesions, such as arteriovenous malformations, Dieulafoy lesions, duodenal ulcers, esophagitis, Mallory-Weiss tears, and gastric ulcers. Despite the lack of clear focal endoscopic findings that could explain the suspected bleeding, patients in this cluster had significant exposure to direct oral anticoagulants (DOACs), along with smaller contributions from heparin, salospir, and dual antiplatelet therapy. This pattern indicates subtle mucosal bleeding caused by anticoagulants, which may result in melena without distinct endoscopic lesions. Cluster 2 included predominantly male patients across a wide age range, including the youngest individuals in the cohort. Drug exposure was limited, with most patients not receiving antiplatelet or anticoagulant therapy, although NSAID and salospir use were present. This group demonstrated the highest prevalence of gastric and duodenal ulcers, forming an “ulcer-driven” bleeding phenotype, likely reflecting underlying peptic ulcer disease rather than drug-related injury. Cluster 3 consisted of very elderly male patients, mostly aged 80 and older, who had significant exposure to DOACs and smaller contributions from heparin, salospir, and Dual Antiplatelet Therapy. Melena was

the dominant mode of presentation. Most endoscopies demonstrated no relevant bleeding-related findings, while the remainder revealed only low-frequency lesions, primarily duodenal ulcers, arteriovenous malformations, and esophagitis. This phenotype reflects bleeding presentations in elderly men receiving DOAC therapy, in whom mucosal bleeding is often subtle, diffuse, or endoscopically inapparent despite clinically evident melena.

Conclusions This analysis identified three distinct phenotypes of NVUGIB based on age, sex, and anticoagulant exposure. Elderly patients on anticoagulants often presented with melena but lacked identifiable endoscopic lesions, suggesting subtle mucosal bleeding. Conversely, patients with minimal drug exposure showed ulcer-related bleeding. These findings underscore the diversity of NVUGIB presentations. Clustering patient profiles may help endoscopists to anticipate endoscopic yield and prepare more effectively for managing potential findings, thereby optimising the endoscopic management of lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Enestvedt BK, Gralnek IM, Mattek N, Lieberman DA, Eisen G. An evaluation of endoscopic indications and findings related to nonvariceal upper-GI hemorrhage in a large multicenter consortium. *Gastrointest Endosc* 2008; 67 (3): 422–9
- [2] Shung D, Simonov M, Gentry M, Au B, Laine L Machine Learning to Predict Outcomes in Patients with Acute Gastrointestinal Bleeding: A Systematic Review. *Dig Dis Sci* 2019; 64 (8): 2078–2087

eP1250 Proximal intestinal mucosal ablation (PIMA) enables discontinuation of exogenous insulin in type 2 diabetes: final results from the STEAM-IE trial

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DOI 10.1055/s-0046-1822577

Aims Proximal intestinal mucosal ablation (PIMA) is a novel metabolic endoscopic procedure under investigation for the treatment of patients with type 2 diabetes (T2D). The aim is to replicate the metabolic benefits of gastric bypass surgery by ablating up to 60 cm of abnormal post-ampullary intestinal mucosa using a through-the-scope radiofrequency vapor ablation (RFVA) catheter. Early pilot data suggests that endoscopic ablation of 10–15 cm of duodenal mucosa could eliminate the need for exogenous insulin therapy in T2D when combined with glucagon-like peptide-1 receptor agonists (GLP-1RA). By extending the length of ablation into the proximal small intestine, we hypothesised that insulin independence could be achieved in patients with insulin-requiring (IR)-T2D without the need for concomitant GLP-1RA therapy. Therefore, we aimed to evaluate the safety and feasibility of PIMA as a treatment for IR-T2D.

Methods A prospective, single-centre study evaluating PIMA using RFVA among patients with IR-T2D on daily long-acting insulin for ≥ 3 months ($\leq 20\%$ dose alteration within the last month and total dose ≤ 0.6 units/kg) and a glycated haemoglobin (HbA1c) $\leq 8\%$ (NCT06655740). Patients were enrolled at Clínica Colonial, Santiago, between Sep-2024 to May-2025. After screening, patients started continuous glucose monitoring (CGM) and entered a 4-week run-in to ensure stable control. Post run-in, insulin was stopped, and PIMA was performed via an adult colonoscope (Olympus HQ190L) with the circumferen-

tial through-the-scope mesh-tip RFVA catheter under general anaesthesia. RFVA was delivered at a dose of 250–275 J with double application to the post-ampullary intestinal mucosa. Post-procedure, patients followed a 14-day modified diet, continued oral glucose-lowering agents (GLA) only, and received standard lifestyle advice for T2D. Primary outcomes were the number of serious adverse events (SAEs), unanticipated adverse device effects (UADEs), and the proportion of patients free of insulin, without need for concomitant GLP-1RA, who had a HbA1c $\leq 7.5\%$ at 6-months. Secondary exploratory outcomes were change in body mass index (BMI), HbA1c, and time-in-range.

Results In total, 20 patients with IR-T2D (average age 50.5 years [IQR 43–52], 60% female) underwent PIMA. The average disease duration of T2D was 4.5 years (IQR 3–7), baseline HbA1c was 7.1% (SD 1.0), BMI was 33.0 kg/m² (SD 5.2), average number of oral GLAs 1 (IQR 1–2), and baseline daily insulin dose 27 units (SD 9.6). PIMA was successful in all patients with an average length of treated bowel of 60 cm (IQR 60–65) and 48.3 (SD 7.7) ablations. Average procedure time was 58.3 minutes (SD 15.0), catheter time 41.5 minutes (SD 25.5), and the majority were treated at 275 J ($n = 18$). Follow-up enteroscopy with biopsy was normal in all patients. There were no SAEs or UADEs, and although asymptomatic sensor readings < 3.9 mmol/L occurred, no clinically significant hypoglycaemia was confirmed by symptoms or finger-stick capillary glucose. At 6-months, 100% of patients remained off exogenous insulin ($n = 19$) without need for concomitant GLP-1RA, and 84.2% ($n = 16$) maintained a HbA1c $\leq 7.5\%$. One patient withdrew at 3-months while still off insulin with a HbA1c of 6.4%. Three patients with worsening control had oral GLA optimised with use of sodium-glucose co-transporter 2 inhibitor ($n = 2$) or dipeptidyl peptidase-4 inhibitor ($n = 1$). Mean time in range (3.9–10.0 mmol/L) at 3- and 6-months was 91.6% (SD 9.8) and 85.7% (SD 13.5), respectively, with corresponding falls in HbA1c by -0.8% (SD 1.0; $p < 0.01$) and -0.6% (SD 1.0; $p < 0.05$). BMI reduced significantly at 3-months (-2.6 [SD 1.9]; $p < 0.001$) and 6-months (-2.7 [SD 2.1]; $p < 0.001$) due to withdrawal of insulin.

Conclusions Among patients with IR-T2D, PIMA safely enabled discontinuation of insulin in all patients, with 84% maintaining independence without additional medications alongside improved glycaemic control and weight reduction.

Conflicts of Interest RH, LARG, PM, PBH, PV, BCN, and NS disclose receipt of research funding from Aqua Medical Inc. to support research infrastructure

eP1251 Cap-assisted endoscopic mucosal resection as a fast and effective endoscopic treatment for gastric dysplasia

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DOI 10.1055/s-0046-1822578

Aims Current European guidelines favor the use of endoscopic submucosal dissection (ESD) for the eradication of gastric dysplasia exceeding 1 cm in size. Despite its efficacy in “uprooting” superficial gastrointestinal lesions, ESD is often time-consuming, requiring additional expertise and resources compared to endoscopic mucosal resection (EMR). The aim of this study was to investigate the efficacy, safety and speed of an EMR variation capable of providing a deeper resection plain, cap-assisted EMR (capEMR), for the endoscopic management of gastric dysplastic lesions measuring up to 2 cm.

Methods Consenting adults with documented by 2 expert histopathologists gastric dysplasia (low and high-grade) were eligible for endoscopic treatment. Lesions > 2 cm were treated with ESD, those < 1 cm with capEMR whereas pa-

tients with lesions in between 1 and 2cm could choose either treatment. In the latter group, if treatment failure using capEMR occurred, patients could receive subsequent treatment with ESD. For the present study, data from cases with gastric dysplasia in between 1 and 2cm in size, diagnosed and treated during the period 2019–2025 were retrospectively collected and analysed. Dysplastic lesions with a diameter up to 2cm were treated using capEMR as follows: using an endoscope with a near focus of 1.5mm and the tip of a crescent-shaped snare, pre-resection marking was performed followed by submucosal injection of succinylated gelatin and indigo carmine solution. Then the crescent-shaped snare was prelooped and fixed onto the ridge of an oblique cap mounted onto the tip of the scope. The lesion was then carefully suctioned into the cap (pseudopolyp formation), tightly enclosed within the snare and resected using blended/mixed current (PulseCut Slow effect 2, 120 watts). Coagulation of visible or bleeding vessels and capEMR defect closure were applied in all cases using coagulation forceps and through-the-scope clips. Midazolam and fentanyl were used for patient sedation [1].

Apart from demographics, en bloc, R0 resection (dysplasia-free margins), recurrence and adverse event rates were calculated and recorded. Additional parameters such as total operation time (from marking until sample acquisition), resection time per lesion, number of resected lesions per endoscopy and depth of resection (deepest layer within the specimen eg muscularis mucosa or submucosa) were also determined.

Results Sixty-four patients (48 % females), mean age $\pm$ SD 62 ± 8.4 years underwent capEMR for 103 lesions of which the vast majority (93/103) harbored low-grade dysplasia (10/103 high-grade dysplasia, $P < 0.001$) and were located in the antrum (77/103), incisura (12/103), corpus (12/103) and cardia (2/103) ($P < 0.001$). Median (interquartile range) size of the lesions was 1.7cm (1.3–2.1). Median (interquartile range) total operation time was 13min (6–21) for a median of 2(1–5) lesions per endoscopic session. Median resection time per lesion was 3min (2.8–4.6). En bloc resection rates were 91 % (94/103) whereas R0 resection rates were 99 %. The submucosa was present in all but three (100/103, 97 %) resection specimens. No recurrences were recorded during follow-up (9–64 months). Adverse events included mild post-procedural pain in 59/64 cases, with only 23 cases requiring paracetamol analgesia, fever up to 38.1°C in 7/64 cases and late onset bleeding in a single case upon resumption of rivaroxaban. The bleeding was successfully treated with additional hemoclip placement.

Conclusions Based on this study capEMR is a fast, effective and safe endoscopic treatment modality for the eradication of gastric dysplasia of moderate size. The endoscopist's expertise in capEMR, the location and histopathology of lesions (predominantly low-grade dysplasia of the antrum) and the routine application of endoscopic bleeding prophylaxis eg coagulation of vessels and clipping may have optimized outcomes. If these findings are confirmed in randomized controlled trials comparing capEMR with ESD then perhaps capEMR can be established as a less time-consuming alternative to ESD for treating gastric dysplasia up to 2cm.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Dinis-Ribeiro M, Libânio D, Uchima H, Spaander MCW, Bornschein J, Matysiak-Budnik T, Tziatzios G, Santos-Antunes J, Areia M, Chapelle N, Esposito G, Fernandez-Esparrach G, Kunovsky L, Garrido M, Tacheci I, Link A, Marcos P, Marcos-Pinto R, Moreira L, Pereira AC, Pimentel-Nunes P, Romanczyk M, Fontes F, Hassan C, Bisschops R, Feakins R, Schulz C, Triantafyllou K, Carneiro F, Kuipers EJ. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy*. 2025; 57 (5): 504–554. doi:10.1055/a-2529-5025 Epub 2025 Mar 20 PMID: 40112834

ePoster Connect: Hepatopancreaticobiliary

15/05/2026, 17:05–17:25

ePoster Connect:
Station 1 (Level 0)

eP1252 Endoscopic or Minimally invasive surgical step-up for Infected Pancreatic Necrosis? – Real world clinical practice evidence to guide treatment choice

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DOI 10.1055/s-0046-1822579

Aims Infected Pancreatic Necrosis (IPN) following Acute Necrotizing Pancreatitis (ANP) remains clinically challenging with associated significant morbidity and mortality despite treatment advances. One of the critical factors that decides the outcome is incorporation/adoption of appropriate treatment strategy at right time in the course of illness. Recent literature suggests similar clinical outcomes by either endoscopic or minimally invasive surgical drainage strategies. 1,2 But in a real-world scenario, the applicability of either treatment strategies, including their feasibility and challenges have not been adequately addressed. We aimed to evaluate the management strategies followed in a cohort of patients of IPN – including their timing, challenges, and outcomes, when managed using standard treatment protocol.

Methods This was a prospective observational study including consecutive patients of ANP with clinical suspected IPN (fever, leukocytosis, persistent organ failure). The study was conducted at 2 tertiary care hospitals over one year (January to December 2023). All patients were managed using standard treatment protocols by multidisciplinary team including clinicians, endoscopists, interventional radiologists, intensivists, and surgeons. IPN was labelled after excluding other causes of infection and SIRS. Blood culture and sensitivity was performed in all subjects before initiating antibiotics. IPN was managed initially with empirical antibiotics and were changed later according to the sensitivity. Patients who didn't improve with appropriate antibiotics within 72 hours were considered for drainage. Assessment for EUS guided drainage with dedicated metals stents, including LAMS (Lumen Apposing Metal Stents) was attempted as a first preference. If EUS drainage was not feasible (due to either immature or distant collections), one or more percutaneous catheter drainage (PCDs) was considered, as a part of minimally invasive surgical (MIS) step-up strategy. Subsequent strategies of MIS approaches including upsizing of catheters, necrosectomy, retroperitoneal surgical approaches were considered during the treatment course if required. The outcome measures included – treatment strategy adopted, timing of intervention from onset of ANP, duration of treatment, clinical outcome, and mortality.

Results 117 patients were included during the study period (males 62 %, mean age 37.46 years). Etiologies were alcohol (38 %), idiopathic (32 %), gall stone related (18 %). 38 patients (32 %) could be managed conservatively. Of the remaining 79 (68 %) patients who required intervention, initial drainage performed was EUS guided in 30 (38 %) while 49 (62 %) underwent PCD placement as a part of MIS step up. The mean time interval between onset of ANP and intervention was 33 days in the MIS and 35 days in the EUS drainage. Early drainages (< 4 weeks) were performed in 30/79 patients (38 %), of which EUS drainage was possible in 8 patients while the majority (22) underwent MIS (10 % vs 28 %; $p = 0.06$). The overall clinical success rates were similar in MIS and EUS drainage. The overall mortality was 20.5 %. There was no significant difference in mortality between EUS drainage (22.2 %) and MIS (30 %).

Conclusions Minimally invasive surgical (MIS) step-up remains the primary modality both in early (<4 weeks) and overall drainages in IPN despite efforts to consider EUS guided drainage. Adopting the specific modality of drainage is decided by the feasibility and safety rather than choice in real world clinical practice. Mortality occurs in about 20% of patients despite standard treatment protocols and aggressive treatment strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1253 Feasibility, safety, and efficacy profile of EUS-guided hepaticogastrostomy for benign and malignant indications: a single-center retrospective cohort study

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DOI 10.1055/s-0046-1822580

Aims Endoscopic ultrasound-guided hepaticogastrostomy (EUS-HGS) and hepaticojunostomy (EUS-HJS) have emerged as reliable techniques for internal biliary drainage when ERCP fails or is technically unfeasible. This study aimed to evaluate the feasibility, safety, and efficacy of EUS-HGS/HJS performed at a tertiary referral center over a seven-year period, across different anatomical settings and clinical indications. Secondary objectives included evaluating the impact of tract dilation on procedural outcomes and adverse events (AEs), and exploring long-term stent performance and recurrence rates.

Methods We conducted a retrospective, single-center analysis including all consecutive patients who underwent EUS-HGS/HJS between October 2018 and August 2025. Demographic, anatomical, procedural, and outcome data were retrieved from institutional databases. Technical success was defined as successful creation of a patent biliary-enteric tract with stent placement; clinical success was defined as symptom resolution and/or $\geq 50\%$ bilirubin reduction within 30 days without need for additional drainage. AEs were classified according to the AGREE criteria. Statistical analyses were performed using Fisher's exact and Wilcoxon tests, with $p < 0.05$ considered significant [1–5].

Results A total of 73 patients had an indication for EUS-guided biliary drainage. Biliary puncture proved to be feasible in 69 cases (63 HGS, 6 HJS); in four cases, all in surgically altered anatomy, biliary puncture was unsuccessful resulting in an overall procedural feasibility of 94.5%. The cohort included 42 males (60.9%) with a median age of 73.9 years [67.2–80.7]; 36 patients (52.2%) had surgically altered anatomy. Indications were malignant in 29 (42%) and benign in 40 (58%) cases. Technical success was achieved in 68/69 cases (98.6%), and clinical success occurred in 66 patients (95.7%), after a median of 2 endoscopic procedures [2–3]. Tract dilation was omitted in 20 cases (28.9%), performed mechanically in 29 (42%), by electrocautery in 16 (23.2%), or by balloon in 4 (5.8%). Dilation was more common in benign indications (82.5% vs. 55.2%, $p = 0.01$). Plastic stents were placed in 50 patients (72.5%), and metal stents in 19 (27.5%), the latter more frequent in malignant disease (55.2% vs. 7.5%, $p = 0.001$). Very early (in-hospital) AEs occurred in 5 patients (7.2%) — 2 bleedings, 2 bile peritonitis (1 fatal), and 1 stent migration. One early (≤ 30 days) and two late (> 30 days) AEs were also recorded (overall AE rate 13.5%). Overall AEs occurred more frequently after tract dilatation (14.3% vs. 5%, $p = 0.21$), among altered anatomies (87.5% vs. 47.5%, $p = 0.07$) and after plastic stent placement (14% vs. 5.3%, $p = 0.22$). HJSs were significantly more frequent among AE cases (37.5% vs. 4.9%, $p = 0.031$). Median hospital stay was 6 days [2.5–14]. Twenty-eight stents (40.6%) were replaced, mainly (82.1% for a planned second approach), and 20 (28.9%) were removed, mostly (70%) for proved clinical success. To date, 21 original stents are still in place. During a median follow-up of 7 months [4.9–14.4], 11 recurrences (25%) occurred, with median time to recurrence of 8 months [3.5–16.5]. Recurrence tended to be lower among cases in which the stent was removed after resolution (18.2% vs. 50%, $p = 0.054$). Only one death (1.4%) was procedure-related.

Conclusions EUS-HGS/HJS demonstrated high feasibility, safety, and efficacy across various clinical scenarios, achieving 98.6% technical and 95.7% clinical success rates, with acceptable AEs and recurrence rates. Although retrospective and limited in size, these results confirm the robustness of EUS-guided intrahepatic drainage as a minimally invasive approach, both in malignant and benign settings. Notably, metal stenting without tract dilation did not compromise technical and clinical success, with reduced very early AEs rates, supporting the pivotal role of the dilatation-free technique in minimizing tissue trauma and subsequent complications, therefore optimizing outcomes. Future prospective studies are needed to confirm these findings, refine technical strategies, and clarify long-term outcomes and recurrence mechanisms. Within expert centers, EUS-HGS/HJS should be regarded as a cornerstone in the management of complex biliary drainage, providing durable, fully internal, and patient-centered palliation.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Van der Merwe SW, van Wanrooij RLJ, Bronswijk M, Everett S, Lakhtakia S, Rimbass M, Hucl T, Kunda R, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Perez-Miranda M, van Hooft JE. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2022; 54 (2): 185–205. doi:10.1055/a-1717-1391 Epub 2021 Dec 22 PMID: 34937098
- [2] van Wanrooij RLJ, Bronswijk M, Kunda R, Everett SM, Lakhtakia S, Rimbass M, Hucl T, Badaoui A, Law R, Arcidiacono PG, Larghi A, Giovannini M, Khashab MA, Binmoeller KF, Barthet M, Pérez-Miranda M, van Hooft JE, van der Merwe SW. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2022; 54 (3): 310–332. doi:10.1055/a-1738-6780 Epub 2022 Feb 3 PMID: 35114696
- [3] Binda C, Dajti E, Giuffrida P, Trebbi M, Coluccio C, Cucchetti A, Fugazza A, Perini B, Gibiino G, Anderloni A, Repici A, Fabbri C. Efficacy and safety of endoscopic ultrasound-guided hepaticogastrostomy: a meta-regression analysis. *Endoscopy*. 2024; 56 (9): 694–705. doi:10.1055/a-2282-3350 Epub 2024 Mar 6 38447958
- [4] Kadhodayan K, Irani S. EUS-guided hepaticogastrostomy: practical tips and tricks. *VideoGIE*. 2024; 9 (9): 417–424. doi:10.1016/j.vgie.2024.05.015 PMID: 39429912 PMID: PMC11489514
- [5] Giovannini M. EUS-guided hepaticogastrostomy. *Endosc Ultrasound*. 2019; 8: (Suppl 1): S35–S39. doi:10.4103/eus.eus_47_19 PMID: 31897377 PMID: PMC6896433

eP1254 Efficacy and Safety of a Novel Electrocautery-enhanced Lumen-apposing Metal Stent for Therapeutic Endoscopic Ultrasound: a Multicenter Experience

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DOI 10.1055/s-0046-1822581

Aims Therapeutic endoscopic ultrasound (EUS) has rapidly developed and become widespread in the last decade, and is currently applied to treat several challenging conditions, including drainage of peripancreatic fluid collections as a complication of acute pancreatitis, biliary drainage for malignant distal biliary obstruction, gallbladder drainage in frail patients with acute cholecystitis, and gastroenterostomy creation for malignant gastric outlet obstruction. Such an expansion has been made possible by the introduction of dedicated devices and stents, namely electrocautery-enhanced lumen-apposing metal stents (EC-LAMS). Three EC-LAMS are currently available on the market: Hot-Axios (Boston Scientific, USA), Niti-S Hot-Spaxus (Taewoong Medical, South Korea), and Hanarostent Hot Plumber Z-EUS IT (M.I. Tech, South Korea). While for the first two devices data on safety and efficacy are already available in the literature, for the latter only case reports are available to date. Our aim was therefore to assess the efficacy and safety of the Hanarostent Hot Plumber Z-EUS IT device in different therapeutic EUS indications.

Methods For this retrospective, multicenter study, all consecutive patients undergoing therapeutic EUS for different indications using the Hanarostent Hot Plumber Z-EUS IT at 11 referral centers between December 2021 and October 2025 were enrolled. The primary aim was the technical success of the procedures performed with the device, defined as successful placement of the stent through the wall of the gastrointestinal tract into the target organ or cavity. Secondary aims were safety, defined as the rate of procedure-related adverse events (AEs), and clinical success, defined differently according to the specific procedure and indication. AEs were also stratified according to timing and severity. Relevant procedure-related clinical and technical data were collected.

Results Seventy-eight patients were enrolled (mean age 69 years, 45 % female). Indications and procedures performed were as follows: 41 gallbladder (GB) drainages for acute cholecystitis; 30 pancreatic fluid collection (PFC) drainages; 4 choledochoduodenostomies for malignant biliary obstruction; 2 gastroenterostomies for malignant gastric outlet obstruction; and 2 drainages of intra-abdominal collections. The underlying condition was neoplastic in 33.3 %. Technical success was achieved in 96.2 % of cases. Among these, the clinical success rate was 100 %. The 3 cases of technical failure were due to stent misdeployment in 2 cases, and inability to get access to the target cavity in 1 case. Fifty-seven (73.1 %) procedures were performed under deep sedation or general anaesthesia, while the remaining 26.9 % were performed under conscious sedation. Fluoroscopic assistance was necessary in 43.6 % of cases. The most commonly used stent diameter was 10 mm (50 %), followed by 16 mm (32.1 %), 14 mm (12.8 %), and 12 mm (5.1 %). The 10-mm diameter stent was used in 78 % of EUS-guided GB drainage, while the 16-mm stent was mostly used for PFC drainage. The most common stent length was 20 mm (83.3 %). The access technique was free-hand in 87.2 %; proximal release was intrachannel in 93.6 %. Among GB drainages, 82.5 % were performed through duodenal access. PFC drainage was followed by endoscopic necrosectomy in 33.3 % of cases (90 % delayed). Coaxial double pigtail plastic stents were placed in 14.7 % of cases. Over a median follow-up time of 13 months, adverse events (AEs) occurred in 12.8 % of patients, all graded I to III according to the AGREE classification. Of these, 50 % occurred intraprocedurally (all misdeployments), 10 % were early (≤ 7 days), and 40 % were late. All AEs were treated conservatively or endoscopically, except one case of biliary peritonitis requiring surgery. No procedure-related deaths occurred.

Conclusions This is the first study to assess the efficacy and safety of the EC-LAMS Hanarostent Hot Plumber Z-EUS IT device. This device demonstrated high technical and clinical success in different therapeutic EUS indications, with an acceptable safety profile. Prospective studies are warranted to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1255 EUS-guided choledochoduodenostomy vs. hepaticogastrostomy in case of concomitant gastric outlet obstruction treated by EUS-guided gastroenterostomy: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1822582

Aims Biliary and gastric outlet obstruction (GOO) are common complications in patients with pancreatic cancer, often delaying essential cancer treatments. While endoscopic ultrasound-guided gastroenterostomy (EUS-GE) has been shown to be superior to duodenal self-expandable metal stents (dSEMS) for managing GOO, the optimal strategy for biliary drainage (BD) in this setting remains unclear. Specifically, there is no consensus on whether to prefer EUS-guided choledochoduodenostomy (EUS-CDS) or EUS-guided hepaticogastrostomy (EUS-HGS). We conducted a systematic review and meta-analysis to identify the optimal biliary drainage approach in patients undergoing EUS-GE for concomitant GOO and biliary obstruction.

Methods We searched Medline, Scopus, and EMBASE up to February 2025. Studies were included if they reported outcomes of EUS-CDS or EUS-HGS in patients with biliary obstruction and concomitant GOO treated by EUS-GE. Pooled outcomes included technical and clinical success, stent dysfunction, and adverse events, analyzed using a random-effects model. Results were reported as relative risks (RRs) with 95 % confidence intervals (CIs).

Results Five studies met inclusion criteria, comprising 128 patients (female = 45.5 %; mean age range 63.0–73.0 years), with 61 undergoing EUS-CDS and 67 undergoing EUS-HGS. Four studies were conducted in Europe and one in the United States; one study was prospective. Technical success rates were similar between groups (RR 0.96, 95 % CI 0.83–1.11; $I^2 = 0$ %; EUS-CDS 94.5 % vs EUS-HGS 96.4 %), as were clinical success rates (RR 1.04, 95 % CI 0.92–1.19; $I^2 = 0$ %; EUS-CDS 96.5 % vs EUS-HGS 89.1 %). However, the risk of stent dysfunction was significantly higher in the EUS-CDS group compared to EUS-HGS (RR 4.42, 95 % CI 1.71–11.43; $I^2 = 0$ %; EUS-CDS 45.1 % vs EUS-HGS 10.9 %). The incidence of procedure-related adverse events was comparable between the two approaches (RR 1.14, 95 % CI 0.24–5.50; $I^2 = 40.8$ %; EUS-CDS 10.7 % vs EUS-HGS 16.0 %).

Conclusions This meta-analysis suggests that both EUS-CDS and EUS-HGS are similarly safe and effective for managing malignant biliary obstruction in the setting of concomitant GOO. However, EUS-CDS is associated with a more than four-fold increase in the risk of stent dysfunction, which may result in delays to critical cancer treatments.

Conflicts of Interest Giuseppe Vanella is a consultant for Boston Scientific-Marco Spadaccini is a consultant for Boston Scientific and Olympus Corp Matteo Colombo is a consultant for Boston Scientific Yen-I Chen is a consultant for Boston Scientific and Cook Medical

ePoster Connect: Endoscopy service

15/05/2026, 17:05–17:25

ePoster Connect:
Station 2 (Level 0)**eP1256 Impact of Direct Oral Anticoagulants on Clinical Presentation and Outcomes in Acute Upper Gastrointestinal Bleeding: A Retrospective Study****Authors** Sidharthan A¹, Nishad N², Edward G³, Syrine BR⁴, Yi HT¹, Benjamin H¹, James H¹, Corbett G⁵, Thoufeeq M¹**Institutes** 1 Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom; 2 Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom; 3 University of Sheffield Medical School, Sheffield, United Kingdom; 4 Regional Hospital of Kef, El Kef, Tunisia; 5 Cambridge University Hospitals NHS Trust, Department of Gastroenterology and Hepatology, Cambridge, United Kingdom

DOI 10.1055/s-0046-1822583

Aims The increasing use of direct oral anticoagulants (DOACs) has resulted in more anticoagulated patients presenting with acute upper gastrointestinal bleeding (UGIB). This study aimed to compare clinical presentation, endoscopic findings, interventions, and outcomes between DOAC users and non-anticoagulated patients presenting with acute UGIB.**Methods** We conducted a retrospective review of all UGIB cases undergoing endoscopy at Sheffield Teaching Hospitals between January and December 2023. Patients were categorized into DOAC users and non-users. Data collected included demographics, presenting symptoms, endoscopic diagnoses, therapeutic interventions, length of hospital stay, and short-term mortality. Comparative analyses were performed to identify differences between the two groups.**Results** A total of 649 patients were included, of whom 98 (15.1 %) were taking DOACs (Apixaban n = 52, Edoxaban n = 27, Rivaroxaban n = 19) and 551 (84.9 %) were not. DOAC users were significantly older than non-DOAC patients, with a mean age of 75.0 years (95 % CI 72.4–77.6) compared with 55.9 years (95 % CI 54.3–57.5; $p < 0.001$). The principal indications for DOAC therapy were atrial fibrillation (n = 69, 70.4 %) and thrombotic disease (n = 29, 29.6 %). Melena at presentation was reported in 43/98 (43.9 %) of DOAC users compared with 198/551 (35.9 %) non-DOAC patients. Common endoscopic findings in DOAC versus non-DOAC patients included oesophagitis (17/98, 17.3 % vs 84/551, 15.2 %), gastric ulcers (11/98, 11.2 % vs 40/551, 7.3 %), duodenal ulcers (5/98, 5.1 % vs 43/551, 7.8 %), and varices (4/98, 4.1 % vs 66/551, 12.0 %); however, these differences did not reach statistical significance (all $p > 0.05$). Therapeutic endoscopic procedures were less commonly performed in DOAC users compared with non-DOAC patients (8/98, 8.2 % vs 61/551, 11.1 %). ($p = 0.48$). Interventions in the DOAC group included injection therapy (n = 3), clips (n = 2), EMR for a bleeding polyp (n = 1), Bentonite haemostatic agent (n = 1), and other modalities (n = 3), whereas the non-DOAC group underwent APC (n = 2), band ligation (n = 19), injection therapy (n = 19), clips (n = 22), EMR (n = 3), heater probe (n = 5), Bentonite haemostatic agent (n = 3), and other treatments (n = 7). Length of hospital stay was significantly longer among DOAC users (6.0 vs 3.6 days; $p = 0.009$). One death within 10 days of admission occurred in the DOAC group.**Conclusions** Patients presenting with UGIB while on DOAC therapy were older, underwent fewer therapeutic endoscopic interventions, and experienced longer hospital admissions compared with non-anticoagulated patients. Although endoscopic findings were similar, the extended hospital stay highlights the added complexity of managing anticoagulated patients. These findings emphasize the need for tailored management pathways and resource planning to optimize outcomes in this growing patient population.**Conflicts of Interest** Authors do not have any conflict of interest to disclose.**eP1257 Early versus Delayed Feeding after Upper Gastrointestinal Endoscopic Therapies: An Updated Systematic Review and Meta-Analysis of Randomized Controlled Trials****Authors** Alcántara GD¹, Aguila E¹**Institute** 1 St. Luke's Medical Center – Global City, Taguig, Philippines

DOI 10.1055/s-0046-1822584

Aims The timing of feeding after Upper Gastrointestinal (UGI) endoscopic therapies remains variable in the clinical setting. Delayed feeding is traditionally practiced to reduce perceived bleeding risk however may lead to unnecessary prolonged fasting, recovery and hospital stay. The most recent meta-analyses examined the timing of feeding after UGI endoscopic therapies; with one focusing on therapies done for UGI bleeding alone and the other focused on feeding after UGI endoscopic therapy in general. This meta-analysis aims to make an updated comparison of outcomes of early versus delayed feeding following UGI endoscopic procedures across variceal, non-variceal, and combined populations; including the latest randomized controlled trials available and excluding studies with no endoscopic therapy done [1–10].**Methods** A systematic literature search identified 10 randomized controlled trials (RCTs) comparing early and delayed feeding after UGI endoscopic therapy (e.g. Endoscopic Variceal Ligation, Endoscopic Submucosal Dissection, Sclerotherapy, Endoscopic Injection with Adrenaline, Argon Plasma Coagulation, Thermal coagulation). Early feeding was defined as introduction of standard diet within 24 hours after an UGI endoscopic therapy, while delayed feeding was after 24 hours. Outcomes included early and delayed rebleeding, total rebleeding, mortality, and duration of hospital stay. Using a Mantel–Haenszel random-effects model, pooled risk ratios (RR) were calculated for binary outcomes and standardized mean differences (SMD) for continuous outcomes. Heterogeneity was assessed using I^2 statistic and subgroup analyses were conducted for variceal and non-variceal procedures to explore differences of outcomes amongst different patient populations.**Results** Across the 10 RCTs, early feeding did not significantly increase total rebleeding compared with delayed feeding in the combined cohort (RR = 1.20; 95 % CI 0.74–1.93; $p = 0.47$), and showed no observed heterogeneity ($I^2 = 0 %$). Subgroup analyses showed no significant difference in total rebleeding for variceal (RR = 1.08; 95 % CI 0.53–2.22; $p = 0.83$) or non-variceal procedures (RR = 1.30; 95 % CI 0.68–2.48; $p = 0.43$), both with low heterogeneity. Mortality outcomes were similarly comparable between early and delayed feeding groups (RR = 0.73; 95 % CI 0.31–1.70; $p = 0.47$; $I^2 = 0 %$). Early feeding significantly reduced hospital stay (SMD = -0.76; 95 % CI -1.19 to -0.32; $p = 0.0006$) though heterogeneity was substantial ($I^2 = 88 %$).**Conclusions** Early feeding after UGI endoscopic therapy appears safe without increased risk of rebleeding or mortality and is associated with shorter hospitalization. These findings support reconsidering prolonged fasting protocols post-endoscopy while highlighting the need for standardized RCTs to refine optimal feeding timing.**Conflicts of Interest** Authors do not have any conflict of interest to disclose.**References**

- [1] De Lédinghen V, Beau P, Mannant PR, Ripault MP, Borderie C, Silvain C, Morichau-Beauchant M. Quand faut-il reprendre l'alimentation orale après hémorragie ulcéreuse gastro-duodénale? Etude contrôlée randomisée [When should patients with bleeding peptic ulcer resume oral intake? A randomized controlled study]. *Gastroenterol Clin Biol* 1998; 22 (3): 282–5. French PMID: 9762211
- [2] Sidhu SS, Goyal O, Singh S, Kishore H, Chhina RS, Sidhu SS. Early feeding after esophageal variceal band ligation in cirrhotics is safe: Randomized controlled trial. *Dig Endosc*. 2019; 31 (6): 646–652. doi:10.1111/den.13423 Epub 2019 May 24 PMID: 31038792
- [3] Lo GH, Lin CW, Hsu YC. A controlled trial of early versus delayed feeding following ligation in the control of acute esophageal variceal bleeding. *J Chin Med Assoc*. 2015; 78 (11): 642–7. doi:10.1016/j.jcma.2015.07.004 Epub 2015 Sep 2 PMID: 26341455

- [4] De Lédinghen V, Beau P, Mannant PR, Borderie C, Ripault MP, Silvain C, Beauchant M. Early feeding or enteral nutrition in patients with cirrhosis after bleeding from esophageal varices? A randomized controlled study. *Dig Dis Sci* 1997; 42 (3): 536–41. doi:10.1023/a:1018838808396 PMID: 9073135
- [5] Jatin Y, Sharma S, Singh N, Qamar S, Agarwal S, Gopi S, Gunjan D, Saraya A. An Open-label Randomized Controlled Trial of Early Initiation of Nasogastric Feeding After Endotherapy in Variceal Bleeding: A Proof-of-concept Study. *J Clin Exp Hepatol*. 2024; 14 (1): 101260. doi:10.1016/j.jceh.2023.07.413 Epub 2023 Jul 24 PMID: 38076376 PMID: PMC10709198
- [6] Goda T., Mokhtar A., Anwar R., Hazem H., Eleraki A. 2018; Effect of early versus delayed feeding following emergency endoscopic therapy for acute esophageal variceal bleeding on short-term outcomes. *The Egyptian Journal of Internal Medicine* 30 (3): 110–114. doi:10.4103/ejim.ejim_22_18
- [7] Oh KH, Lee SJ, Park JK. Optimal duration of fasting period after endoscopic submucosal dissection for gastric epithelial neoplasia: A prospective evaluation. *J Dig Dis* 2017; 18 (8): 445–452. doi: 10.1111/1751-2980.12501 PMID: 28644907
- [8] Kim S, Cheoi KS, Lee HJ, Shim CN, Chung HS, Lee H, Shin SK, Lee SK, Lee YC, Park JC. Safety and patient satisfaction of early diet after endoscopic submucosal dissection for gastric epithelial neoplasia: a prospective, randomized study. *Surg Endosc*. 2014; 28 (4): 1321–9. doi:10.1007/s00464-013-3336-2 Epub 2013 Dec 12 PMID: 24337884
- [9] Khoshbaten M, Ghaffarifar S, Jabbar Imani A, Shahnazi T. Effects of early oral feeding on relapse and symptoms of upper gastrointestinal bleeding in peptic ulcer disease. *Dig Endosc*. 2013; 25 (2): 125–9. doi:10.1111/j.1443-1661.2012.01347.x Epub 2012 Jul 10 PMID: 23362880
- [10] Gong EJ, Lee SJ, Jun BG, Seo HI, Park JK, Han KH, Kim YD, Jeong WJ, Cheon GJ, Park SY. Optimal Timing of Feeding After Endoscopic Hemostasis in Patients With Peptic Ulcer Bleeding: A Randomized, Noninferiority Trial (CRIS KCT0001019). *Am J Gastroenterol* 2020; 115 (4): 548–554. doi:10.14309/ajg.0000000000000584 PMID: 32205642

eP1258 Efficacy and Safety of Ultrathin Endoscopic Submucosal Dissection for Superficial Pharyngeal Cancer

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DOI 10.1055/s-0046-1822585

Aims Advances in endoscopic equipment and increased interest among endoscopists have led to higher detection rates of superficial pharyngeal cancer, with a concomitant rise in endoscopic treatments. Since early-stage treatment has been shown to improve overall survival, the current focus has shifted toward achieving safer therapeutic procedures. With recent improvements in image quality, ultrathin endoscopes are increasingly being utilized for therapeutic purposes. Based on our experience using ultrathin endoscopes for superficial pharyngeal cancer, we evaluated the efficacy and safety of this approach.

Methods We retrospectively analyzed 75 patients with 123 lesions who underwent endoscopic submucosal dissection (ESD) using an ultrathin endoscope for superficial pharyngeal cancer at our institution between June 2021 and October 2025. The control group consisted of 64 patients with 85 lesions treated with ESD using a standard-diameter endoscope during the same period. The ultrathin endoscope used was the GIF-1200N (Olympus), while the control group was treated using the GIF-260J or GIF-290T (Olympus). With the ultrathin endoscope, ESD was performed without the use of hemostatic forceps or a waterjet function. After tumor resection, the endoscope was exchanged for a standard one, and hemostatic forceps were used for hemostasis. Procedure time, en bloc resection rate, R0 resection rate, local injection volume, lesion size, resected specimen size, and postoperative complications were retrospectively compared between the two groups.

Results In the ultrathin and control groups, the mean age was 73 and 70 years, respectively; the proportion of male patients was 92 % vs 89 %; and the proportion with a history of prior esophageal cancer treatment was 85.3 % vs 87.5 %. Lesions were located in the hypopharynx (91 vs 53) and oropharynx (32 vs 32). The procedure time was 33.4 vs 32.8 minutes, lesion size was 15.7 vs 18.5 mm,

and resected specimen size was 28.8 vs 29.6 mm. The en bloc resection rate was 99.2 % vs 100 %, while the R0 resection rate was 83.7 % vs 77.6 %. The local injection volume was significantly lower in the ultrathin group (3.2 vs 6.4 mL). Postoperative complications included pneumonia and hemorrhage (pneumonia 4 cases and hemorrhage 1 case vs pneumonia 2 cases), all of which resolved with conservative management. Significant differences were observed in lesion size and local injection volume. In seven cases (6 %), the procedure was converted from an ultrathin to a standard endoscope due to difficulty in maintaining adequate visualization.

Conclusions Although this study has limitations, including potential selection bias, ESD using an ultrathin endoscope demonstrated therapeutic efficacy and safety comparable to those of standard endoscopes. A key advantage of the ultrathin endoscope is its ability to allow early entry into the submucosal layer, facilitating dissection. However, in 6 % of cases, conversion to a standard endoscope was necessary due to impaired visualization, highlighting the need for further technical improvements.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1259 Endoscopic Ultrasound-Guided Trans-Gastric Radiofrequency Ablation: An Effective and Safe Alternative Treatment for Left-sided Unilateral Aldosterone-Producing Adenoma

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DOI 10.1055/s-0046-1822586

Introduction: Unilateral aldosterone-producing adenoma (APA) represents a potentially curable cause of hypertension through laparoscopic adrenalectomy. However, surgical intervention may not be suitable for all patients, particularly those with significant comorbidities or a preference for less invasive management. Endoscopic ultrasound (US)-guided trans-gastric (TG) radiofrequency ablation (RFA) offers a minimally invasive alternative to treat left-sided APAs which are in closed proximity with the stomach. This new approach was successfully performed in our centre [1].

Case report: A 35-year-old woman with a history of familial adenomatous polyposis syndrome and previous total colectomy was referred for assessment of hypertension associated with severe hypokalaemia at 2.14 mmol/L. Biochemical evaluation confirmed primary aldosteronism with high plasma aldosterone (47.1 ng/dL; nl < 14), suppressed renin concentration (0.8 mU/L; nl > 4.0) and a high aldosterone-to-renin ratio of 58.9 (nl < 2.4). Abdominal CT-scan imaging showed bilateral adrenal nodules (left: 23 x 16 mm and right: 17 x 12 mm), both evoking benign adenomas. Adrenal vein sampling showed a clear lateralization ratio (10.0) of aldosterone secretion from the left side. As the patient expressed a clear desire for a minimally invasive curative treatment with preservation of left adrenal tissue, endoscopic US-TG-RFA was considered after informed consent. After a medical preparation with spironolactone 50 mg/day and an alpha-blocker (terazosin 2.5 mg twice daily for 2 weeks), the left adrenal nodule could be successfully ablated under light general anaesthesia, using a 10 mm STARMed needle (Taewoong Medical, Seoul, South Korea) and generator set at 30 W.

Follow-up: No immediate complication was noted after the procedure and blood pressure and heart rate remained normal. Complete clinical remission of hypertension was achieved within one week, allowing discontinuation of spironolactone. After five months, the patient's blood pressure remained consistently below 104/84 mmHg without medication, and CT scan imaging showed a reduction size of the left adrenal lesion with focal areas of necrosis but no evidence of delayed complication. Biochemical cure of APA was confirmed by normalization of potassium (3.82 mmol/L), aldosterone (8.2 ng/dL)

and renin serum concentrations (1.1mU/L), consistent with residual primary hyperaldosteronism.

Conclusion: Endoscopic ultrasound-guided trans-gastric RFA is an effective and safe, minimally invasive, adrenal-sparing alternative to surgery for patients with unilateral left-sided APA.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Argentesi G, Wu X, Ney A, Goodchild E, Laycock K, Lee YNet al. Endoscopic, ultrasound-guided, radiofrequency ablation of aldosterone producing adenomas (FABULAS): a UK, multicentre, prospective, proof of concept trial. *Lancet*. 2025; 405 (10479): 637–647. doi:10.1016/S0140-6736(24)02755 7

ePoster Connect: Esophagus

15/05/2026, 17:05–17:25

ePoster Connect:
Station 3 (Level 0)

eP1260V Stricture prophylaxis of post-esophageal ESD with autologous adipose-derived stromal cell injection

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DOI 10.1055/s-0046-1822587

Problem to solve Esophageal endoscopic submucosal dissection (ESD) involving > 75 % of the circumference is associated with refractory stricture in > 70–90 % of cases. Extensive circumferential resections progress to refractory strictures that are challenging to manage. This adverse event severely impairs quality of life and limits ESD indications for superficial squamous cell carcinoma. The prophylactic, topical, and oral administration of corticosteroids has partially addressed this problem. Several other prophylactic therapies have been proposed, and recently, autologous and allogenic adipose tissue-derived stromal cells (ADSC) injection has emerged from animal trials. The advantages of ADSC are their paracrine activity, promoting local immunomodulation, cell recruitment and neovascularization, their ability to differentiate into mesenchymal and non-mesenchymal lineage, and modulation of keratinocyte-fibroblast interaction, reducing excessive fibrosis development [1–8].

Innovation We report a novel prophylactic strategy using immediate injection of mechanically processed autologous adipose-derived stromal cells (ADSCs) directly into the post-ESD ulcer bed. A 71 male-patient, diagnosed with superficial esophageal squamous cell carcinoma (SCC), occupying 80 % of luminal circumference. He was referred to our center for treatment and underwent a 90 % of esophageal circumference, 8 cm-long ESD. Once ESD was finished, the plastic surgeon made a bilateral inguinal liposuction using two 10mL syringes. The content was decanted for ten minutes, and then the liquid part of the material was discarded. Afterwards, the fat was washed with fisiologic solution, transferred to 5mL syringes, coupled with a transfer connector, already coupled with and empty 5mL syringe. The material was transferred 10 times for adipose tissue progressive fractioning, until a final product was obtained. This product was then injected onto the ESD resection bed, as homogeneously as possible, through a 5Fr catheter. Oral prednisolone (30 mg/day with 8-week tapering) was also administered as an adjunct per institutional protocol.

Results Pathology revealed early squamous cell carcinoma, invading the lamina propria (pT1a – M2), without angiolymphatic or perineural invasion, with free margins. Serial endoscopies at 2, 3, 4, 5, 6, 8 and 12 weeks showed progressive healing with fibrin coverage and tissue retraction, but no luminal narrowing. At week 8, the ulcer was completely healed with only cicatricial retraction; a standard 9.8 mm gastroscope passed without resistance. The patient developed transitory dysphagia, that completely resolved six weeks afterwards, and needed diet adaptation throughout this period. In none of the endoscopies narrowing of the lumen was observed, and there was no need of endoscopic dilatation. A new endoscopy was performed twelve weeks after the procedure, revealing the same aspect described on the eighth week. The patient remains clinically well, without dysphagia or weight loss, until now, five months after the procedure.

Conclusions This first experience suggests the feasibility and promising efficacy of immediate autologous ADSC injection for preventing refractory stricture after high-risk oesophageal ESD, with rapid processing and no added adverse events. This strategy may improve extensive esophageal resections prognosis and consequently bring a new perspective for patient's quality of life. However, this is an initial pilot study, probably the pioneer of this therapy in humans, and further multicentre trials are essential to establish its role in extensive circumferential ESD.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/3488a9a6-98a8-40f5-a60c-02d6d337caf5/Uploads/19990_Final_version%20autologous%20cells%20injection.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Liu J, Jiang Y, Chen X, Wei X, Wang X, Yang Z, Yang J, Zhang J, Peng Y, Lin C, Chen Q, Yu G, Chen Y, Wei Q, Zheng X, Zheng S. Adipose stem cells prevent esophageal strictures after extensive endoscopic submucosal dissection: experimental research. *Int J Surg* 2025; 111 (Pt 2): 1836–1846. doi:10.1097/JIS9.0000000000002148
- [2] Ye S, Hu J, Zhang D, Zhao S, Shi X, Li W, Wang J, Guan W, Yan L. Strategies for Preventing Esophageal Stenosis After Endoscopic Submucosal Dissection and Progress in Stem Cell-Based Therapies. *Tissue Eng Part B Rev* 2024; 30 (5): 522–529. doi:10.1089/ten.TEB.2023.0316
- [3] Chen M, Dang Y, Ding C, Yang J, Si X, Zhang G. Lesion size and circumferential range identified as independent risk factors for esophageal stricture after endoscopic submucosal dissection. *Surg Endosc* 2020; 34 (9): 4065–4071. doi:10.1007/s00464-020-07368-z
- [4] Perrod G, Rahmi G, Pidial L, Camilleri S, Bellucci A, Casanova A, Viel T, Tavitian B, Cellier C, Clément O. Cell Sheet Transplantation for Esophageal Stricture Prevention after Endoscopic Submucosal Dissection in a Porcine Model. *PLoS One* 2016; 11 (3): e0148249. doi:10.1371/journal.pone.0148249
- [5] Tang J, Kong F, Li J, Liu F, Kong X, Li Z. Independent risk factors for esophageal refractory stricture after extensive endoscopic submucosal dissection. *Surg Endosc* 2021; 35 (8): 3618–3627. doi:10.1007/s00464-020-07840-w
- [6] Kitagawa Y, Ishihara R, Ishikawa H et al. Esophageal cancer practice guidelines 2022 edited by the Japan Esophageal Society: part 1. *Esophagus* 2023; 20 (3): 343–372. doi:10.1007/s10388-023-00993-2
- [7] Perrod G, Pidial L, Camilleri S, Bellucci A, Casanova A, Viel T, Tavitian B, Cellier C, Clément O, Rahmi G. ADSC-sheet transplantation to prevent stricture after extended esophageal endoscopic submucosal dissection. *J Vis Exp* 2017; 120: e55018. doi:10.3791/55018
- [8] Wang J, Zhao Y, Li P, Zhang S. Advances in the application of regenerative medicine in prevention of post-endoscopic submucosal dissection for esophageal stenosis. *J Transl Int Med* 2022; 10 (1): 28–35. doi:10.2478/jtim-2022-0011

eP1261V Successful endoscopic treatment (E-VAC) of complex anastomotic leak after total gastrectomy in elderly patient

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DOI 10.1055/s-0046-1822588

Abstract Text

An 84-year-old male, previously treated with subtotal gastrectomy for gastric adenocarcinoma, presented 10 years later with Siewert type II cardiac carcinoma detected on follow-up OGD. He underwent total gastrectomy with Roux-en-Y esophagojejunal mediastinal anastomosis. Postoperatively, septic shock, anastomotic leak, periesophageal collection, and pleural effusion occurred. Endoscopy confirmed leak communicating with mediastinal abscess and pleural cavity, demonstrated by methylene blue. Eight sessions of endoscopic VAC therapy were performed. During the first six, the sponge was placed intracavitary, achieving granulation and cavity reduction with clinical improvement. In the last two, it was positioned intraluminally adjacent to the leak. Endoscopic and radiological studies confirmed closure. The patient resumed oral intake and was discharged to a rehabilitation facility.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/bb322f1d-4bfb-4479-972e-277639f57ed8/Uploads/19978_VAC_video%20def%202.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1262 Etiological and Endoscopic Profile of Portal Hypertension: Experience of a University Hospital Department

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DOI 10.1055/s-0046-1822589

Aims Portal hypertension is defined as an increase in pressure within the portal venous system caused by an obstruction located at the suprahepatic, intrahepatic, or infrahepatic level. In our setting, intrahepatic portal hypertension is predominant, mainly due to post-viral cirrhosis. The objective was to determine whether intrahepatic block and cirrhosis remain the predominant causes of portal hypertension, or whether other etiologies should be considered, and to highlight the key role of endoscopy in the diagnosis and management of related complications.

Methods This is a monocentric retrospective and prospective study conducted over a 36-month period, from February 2022 to February 2025. All patients presenting with portal hypertension were included and underwent clinical evaluation, as well as biological, radiological, and endoscopic assessments.

Results Among the 192 patients included, the mean age was 60.2 years (range: 15–97 years). The study population consisted of 100 men (52 %) and 92 women (48 %), with a male-to-female ratio of 1.1. Clinically, upper gastrointestinal bleeding was the initial presenting symptom in 49.8 % of cases. Physical examination revealed an abnormal liver in 46 % of patients, ascites in 25.5 %, splenomegaly in 24.7 %, collateral venous circulation in 15.3 %, jaundice in 9.3 %, and hepatic encephalopathy in 6.8 %.

Endoscopic evaluation showed that 93 % of patients had portal hypertension-related lesions. Esophageal varices were grade III in 49 %, grade II in 29 %, and grade I in 14 %. Gastro-esophageal varices (GOV) were observed in 37 %, isolated gastric varices (IGV) in 10 %, ectopic varices in 3 %, and signs of portal hypertensive gastropathy in 52 %. Red wale signs were present in 45 % of patients.

Regarding therapeutic management, 56 % of patients underwent esophageal variceal ligation, with a mean of 2.6 sessions per patient. Biological glue injection was performed in 6 % of cases, and argon plasma coagulation in 3 %. Somatostatin was administered in 13 % of patients, and 82 % were treated with beta-blockers.

Among the etiologies of intrahepatic portal hypertension, hepatic cirrhosis accounted for 65.6 % (n = 126). The underlying causes were: hepatitis C virus-related cirrhosis in 20.8 % (n = 41), hepatitis B virus-related cirrhosis in 7.3 % (n = 14), cirrhosis of indeterminate origin in 29 % (n = 15), alcoholic cirrhosis in 8.9 % (n = 17), primary biliary cholangitis in 7.8 % (n = 15), primary sclerosing cholangitis in 2 % (n = 4), and autoimmune hepatitis in 3.6 % (n = 7). Non-cirrhotic intrahepatic causes included porto-sinusoidal vascular disorders (PSVD) in

17.7 % (n = 34) and portal system compressions in 2.6 % (n = 5), due to compressive metastases, hepatic cysts, or giant hepatic hemangioma. Portal vein thrombosis etiologies included thrombophilia (1.6 %), malignant hematologic disorders (1.6 %), tumoral invasion of the portal vein trunk (1 %), and idiopathic portal cavernoma (4.1 %). Etiologies of Budd–Chiari syndrome included celiac disease in 1 % (n = 2) and hyperhomocysteinemia in 0.5 % (n = 1). The cause remained unidentified in 2.6 % of cases (n = 5).

Conclusions Cirrhosis remains the leading cause of portal hypertension in our population, although non-cirrhotic etiologies such as PSVD, portal vein thrombosis, and Budd–Chiari syndrome are also significant. The high prevalence of endoscopic lesions confirms the central role of endoscopy in both diagnosis and management of complications. A systematic etiological assessment remains essential to guide appropriate care.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1263 D-POEM is the answer

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DOI 10.1055/s-0046-1822590

Aims Esophageal diverticulum is a rare condition, that is most commonly associated with esophageal motility disorders. The epiphrenic diverticulum typically originates in the distal esophagus, 4–8 cm above the cardia and develops in consequence of increased intraluminal pressure. Its estimated yearly incidence is 1:500,000. In the past a surgical treatment was used to remove the diverticulum, but it had 15 % morbidity and 3 % mortality rates. Nowadays, the endoscopic treatment does not remove the diverticular sac, but it copes with the symptoms and has nominal adverse events [1–4].

Methods We present five cases of esophageal diverticula in four patients aged 43 to 71. The procedures were performed from 2020 to 2025. All of the patients had symptoms of dysphagia, vomiting of unprocessed foods, chest pains and reduction in weight, with duration up to 2 years. The diverticula were diagnosed, either with endoscopy, or with upper gastrointestinal series with contrast. One of the patients had two epiphrenic diverticula one above the other. The median size of the diverticula was 5.19 cm (4–7 cm range) in height. Three of the four patients had achalasia as a concomitant disease.

The procedures were performed with the patients placed under general anesthesia in supine position. The endoscopes used had distal attachments placed. After the localization of the diverticula, a solution of Gelofusine and Indigo carmine was introduced in the submucosal space 2 to 3 cm superiorly to the proximal end of the diverticula. Initial mucosal incisions were created. Dissections of both sides of the distal end of the diverticula were performed. From that point to two centimeters distal of the gastroesophageal junction submucosal tunnels were created. The tunneling was done with utmost care as not to damage the mucosa or the adventitia. Myotomy of the distal septum and myotomy of the muscle layer in the esophagus and up to 2 cm below the gastroesophageal junction was performed. The initial incisions were closed using 3 to 5 hemostatic clips. Carbon dioxide insufflation was used during all of the procedures.

Results The diverticular peroral endoscopic myotomy (D-POEM) significantly relieved the symptoms of the patients and the quantity of the retained food and liquids in the diverticular sacs. The adverse events of the procedures were subcutaneous emphysema and retrosternal pain that faded within three days.

Conclusions D-POEM is a safe and effective procedure, that results in symptomatic improvement of the patients with epiphrenic diverticula, especially in those cases, where it is combined with achalasia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Basile P, Gonzalez JM, Le Mouel JP, Irrazaval R, Caillio L, Barthet M. Peroral endoscopic myotomy with septotomy for the treatment of distal esophageal diverticula (D-POEM). *Surg Endosc*. 2020; 34 (5): 2321–2325. doi:10.1007/s00464-019-07354-0 Epub 2020 Mar 6 PMID: 32144556
- [2] Zaninotto G, Portale G, Costantini M, Zanatta L, Salvador R, Ruol A. Therapeutic strategies for epiphrenic diverticula: systematic review. *World J Surg* 2011; 35 (7): 1447–53. doi:10.1007/s00268-011-1065-z PMID: 21541802
- [3] Sato H, Takeuchi M, Hashimoto S, Mizuno KI, Furukawa K, Sato A, Yokoyama J, Terai S. Esophageal diverticulum: New perspectives in the era of minimally invasive endoscopic treatment. *World J Gastroenterol*. 2019; 25 (12): 1457–1464. doi:10.3748/wjg.v25.i12.1457 PMID: 30948909 PMID: PMC6441918
- [4] Baker ME, Zuccaro G Jr, Achkar E, Rice TW. Esophageal diverticula: patient assessment. *Semin Thorac Cardiovasc Surg* 1999; 11 (4): 326–36. doi:10.1016/s1043-0679(99)70077-8 PMID: 10535374

ePoster Connect: Hepatopancreaticobiliary

15/05/2026, 17:05–17:25

ePoster Connect:
Station 4 (Level 0)

eP1264 MRI-Based Anatomical Predictors of Difficult ERCP Cannulation: A Multivariable Model for Pre-Procedural Risk Stratification

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DOI 10.1055/s-0046-1822591

Aims Difficult cannulation during endoscopic retrograde cholangiopancreatography (ERCP) is a major determinant of complications, creating a clinical need for accurate pre-procedural risk stratification. This study aimed to identify MRI-based anatomical predictors of difficult ERCP cannulation, develop a predictive model for procedural difficulty, and support tailored prophylactic strategies for each level of difficulty [1, 2].

Methods A total of 121 patients who underwent contrast-enhanced MRI followed by ERCP at Hôtel-Dieu de France, Beirut, Lebanon, were included. Difficult cannulation was defined according to the criteria recommended in the ESGE Clinical Guideline on papillary cannulation and sphincterotomy techniques, requiring ≥ 1 of the following: more than five contacts with the papilla, cannulation time > 5 minutes, or more than one unintended pancreatic duct cannulation or opacification. MRI-derived parameters included distal common bile duct (CBD) diameter, choledochoduodenal (CD) angle, and periampullary diverticulum (PAD) size. Variables and patients with excessive missingness were excluded, and multiple imputation was applied. Associations between anatomical features and ERCP difficulty were evaluated using univariable and multivariable logistic regression with LASSO regularization. ROC curves were used to determine optimal cutoff values.

Results A smaller distal CBD diameter was consistently associated with higher odds of difficult ERCP and remained an independent predictor across all models (OR = 0.872; 95% CI: 0.802–0.945; $p < 0.001$). A narrower CD angle was also significantly associated with difficult cannulation, mainly due to its strong association with unintended pancreatic duct cannulation or opacification (OR = 0.968; 95% CI: 0.950–0.985; $p < 0.001$). PAD size was not significantly associated ($p > 0.4$). ROC analysis identified a CBD diameter < 5.5 mm as the optimal cutoff for predicting overall difficulty (AUC = 0.61; sensitivity 66.7%,

specificity 52.2%). For predicting unintended pancreatic cannulations specifically, a CD angle $< 32.5^\circ$ showed high specificity (89.9%) with an AUC of 0.65.

Conclusions MRI-derived anatomical metrics, particularly distal CBD diameter and CD angle, serve as meaningful predictors of ERCP cannulation difficulty. These results align with previous findings by Lee et al., while highlighting the potential advantage of MRI's superior soft-tissue contrast for pre-procedural risk assessment. Integrating MRI-based predictors into clinical workflows may enhance risk stratification and support more individualized prophylactic strategies ahead of ERCP.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Lee SH, Lee JM, Han NY, Kim MJ, Park BJ, Sung DJ, Sim KC. Predicting cannulation difficulty in endoscopic retrograde cholangiopancreatography using CT image findings: a decision-tree analysis. *Acta Radiol*. 2020; 61 (11): 1484–1493. doi:10.1177/0284185120909334 Epub 2020 Mar 24 PMID: 32208743
- [2] Testoni PA, Mariani A, Aabakken L, Arvanitakis M, Bories E, Costamagna G et al. Papillary cannulation and sphincterotomy techniques at ERCP: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy* 2016; 48 (7): 657–683. doi:10.1055/s-0042-108641

eP1265 Large-balloon anchor and traction technique to access major papilla in a patient with giant hiatal hernia

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DOI 10.1055/s-0046-1822592

Abstract Text

The authors report the case of an 89-year-old male with several comorbidities, including an invasive periampullary adenocarcinoma and a large hiatal hernia. Due to obstructive jaundice the patient underwent ERCP with self-expandable metal stent (SEMS) placement for palliative biliary drainage. Eight months later, ERCP was repeated due to stent dysfunction and biliary drainage successfully re-established using a stent-in-stent approach to restore patency.

Ten months later the patient presented with acute cholangitis. CT imaging showed biliary stents *in situ* with dense endoluminal content and upstream biliary dilation without pneumobilia. Worsening of the hiatal hernia with complete intrathoracic gastric displacement with organo-axial volvulus was also noted. Antibiotics were started and a third ERCP was scheduled.

During the procedure, advancement of the duodenoscope was significantly hindered due to entrapment and looping within the herniated stomach. After multiple attempts, the scope could carefully progress into the duodenal bulb, but the second portion of the duodenum could not be reached. A 0.035" guide-wire was passed into the proximal jejunum and a 20mm through-the-scope balloon was introduced over-the-wire. The balloon was inflated in the lumen of the fourth duodenal portion, anchoring the scope. Pulling the balloon catheter with moderate traction, the duodenoscope was straightened and could advance reaching the major papilla in a stable short position. Biliary cannulation was performed and cholangiography confirmed two metal stents with tumoral ingrowth and upstream biliary dilation. Abundant biliary sludge was removed using an extraction balloon and an uncovered SEMS (100x10mm) was placed in a stent-in-stent position achieving effective drainage. The patient was later discharged asymptomatic.

Altered gastrointestinal anatomy causes significant technical challenges in ERCP, requiring tailored endoscopic strategies to achieve biliary access. This case highlights the efficacy and safety of a balloon anchor and traction technique in overcoming duodenoscope advancement difficulty posed by a large hiatal hernia.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1266 EUS-guided radiofrequency ablation in pancreatic neoplasms, a single-center observational study

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DOI 10.1055/s-0046-1822593

Aims Pancreatic well-differentiated non-metastatic neuroendocrine tumors (PanNET) are rare neoplasms and often detected incidentally. Parenchyma-sparing surgery may be considered as first-line therapeutic approach; however, morbidity and the potential survival benefit must be carefully weighed. EUS-guided Radio Frequency Ablation (EUS-RFA) is a promising organ preserving endoscopic technique that can be performed in an outpatient setting and has the potential to serve as an alternative to surgery. We aimed to evaluate the safety and efficacy of pancreatic EUS-RFA.

Methods We retrospectively reviewed all consecutive patients with solid pancreatic neoplasms who were scheduled to undergo EUS-RFA between 2020 and 2023 at a single tertiary center. Indications, procedural characteristics, adverse events and clinical outcomes were recorded. Safety outcomes were analyzed for all included patients. Clinical outcomes were assessed in all patients with somatostatin receptor-positive PanNETs, who completed one year of follow-up with both EUS/MRI and ⁶⁸Ga-Dotatate PET-CT. Serious adverse events were defined as those classified as AGREE grade ≥ 3 (requiring surgical, endoscopic or radiological intervention). Radiological response was evaluated by MRI and categorized as complete (no residual lesion), partial ($> 75\%$ volume reduction) or no response ($< 75\%$ reduction) at 9 months of follow-up. Nuclear imaging complete response rate was defined as the absence of ⁶⁸Ga-Dotatate uptake at 1-year of follow-up.

Results A total of 23 patients were scheduled for EUS-RFA; in 2 cases the procedure was deemed not feasible due to the lesion's close proximity (< 1 mm) to the pancreatic duct or a vessel. Adverse events consisted of one (5%) intraprocedural bleed that resolved spontaneously, and mild pancreatitis occurred in 5 patients (24%). No serious adverse events occurred. Sixteen patients had SSTR-positive PanNETs, of whom 14 completed full follow-up. Their median age was 67 years (IQR 64-77), and 9 patients (64%) were male. The median tumor diameter was 15 mm (IQR 11-18). Patients underwent a median of one RFA procedure (IQR 1-1) with a median of 3 ablations (IQR 3-4) per session. Radiological response was complete in 86% (12/14), partial in 7% (1/14) and absent in 7% (1/14). Patients with incomplete radiological response had PanNET located in uncinate process. A total of 8 patients (57%) demonstrated complete response on nuclear imaging.

Conclusions Pancreatic EUS-RFA demonstrated an acceptable safety profile. More than 8 out of 10 patients with SSTR-positive PanNETs achieved complete radiological response, while almost 6 out of 10 patients achieved complete response on nuclear imaging following a single EUS-RFA session. In selected patients, EUS-RFA represent a feasible therapeutic alternative to pancreatic surgery.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1267 Endoscopic ultrasound-guided tissue acquisition for pancreatic metastases: clinical features and diagnostic performance in a 12-year cohort

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DOI 10.1055/s-0046-1822594

Aims To describe the clinical characteristics, primary tumor sites, endosonographic features, and diagnostic performance of endoscopic ultrasound-guided tissue acquisition (EUS-TA) in patients with confirmed pancreatic metastases evaluated over a 12-year period in a tertiary oncology center in Brazil.

Methods Retrospective observational study including all consecutive patients with histologically or clinically confirmed pancreatic metastases who underwent EUS-guided fine-needle aspiration or biopsy between April 2013 and February 2025. Data collected from electronic medical records comprised demographics, primary tumor origin, lesion size and pancreatic location, and final histopathological/immunohistochemical diagnosis. Diagnostic accuracy was calculated using definitive histology of the pancreatic lesion or unequivocal clinical/imaging progression of known metastatic disease in other organs as the reference standard [1–4].

Results Among 433 patients who underwent 491 pancreatic EUS-TA procedures during the study period, 21 procedures (4.8%) in 20 patients were confirmed as pancreatic metastases. Patients were predominantly female (80%) with a median age of 65 years (IQR 60–70). Mean lesion size was 30.2 mm (range 8–76 mm; median 30 mm). Lesions were located in the pancreatic head in 47.6%, body 33.3%, tail 14.3%, uncinate process 4.8%, and neck 28.6% (some lesions involving more than one segment).

The most frequent primary tumors were colorectal adenocarcinoma (23.8%), breast carcinoma (23.8%), melanoma (14.3%), renal cell carcinoma (14.3%), ovarian carcinoma (9.5%), lung carcinoma (9.5%), and thyroid carcinoma (4.8%). EUS-TA yielded 18 true-positive diagnoses (85.7%) and 3 false-negative results (14.3%), with no false positives, resulting in an overall diagnostic accuracy of 85.7% (95% CI 64.9–95.4%). Immunohistochemical studies were crucial for lineage confirmation in all true-positive cases.

Conclusions Pancreatic metastases are uncommon (4.8% of all pancreatic EUS-TA procedures in a high-volume oncology center). Although the literature classically describes pancreatic metastases as predominantly originating from renal cell carcinoma and melanoma, in this 12-year Latin-American cohort colorectal and breast primaries were jointly the most frequent origins (each 23.8%), highlighting potential regional differences in referral patterns and oncological epidemiology. Lesions are typically solitary, average 3 cm in diameter, and predominate in the pancreatic head.

In this 12-year cohort, EUS-guided tissue acquisition achieved a diagnostic accuracy of 85.7%, driven largely by the systematic application of immunohistochemical panels that allowed precise diagnosis. Accurate distinction between primary pancreatic adenocarcinoma and metastatic disease carries major therapeutic and prognostic implications. Therefore, EUS-TA with adequate sampling and routine immunohistochemical work-up remains the cornerstone for correct diagnosis and appropriate oncological management in patients with suspected pancreatic metastases. These data reinforce the importance of maintaining a high index of suspicion for secondary pancreatic involvement in oncology patients and support EUS-TA as the diagnostic modality of choice in this setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Machado AA, Lenz L, Domingues RB, Lima GRA, Josino IR, Cordero MAC et al. Pancreatic metastasis from papillary thyroid carcinoma: a case report. *JOP. J Pancreas* (Online) 2020; 21 (6): 151–155
- [2] Almeida R, Bicudo L, Felipe L, Andrade de Paulo G, Maluf-Filho F, Lenz L. Pancreatic Metastasis From a Vulvar Melanoma Diagnosed by Endoscopic Ultrasound-Guided Fine-Needle Biopsy. *ACG Case Rep J.* 2025; 12 (8): e01784. doi:10.14309/crj.0000000000001784 PMID: 40851797 PMID: PMC12369837
- [3] Romanish M, Naous R. Metastatic tumors to the pancreas: An institutional experience. *Ann Diagn Pathol* 2025; 79: 152528. doi:10.1016/j.anndiagnpath.2025.152528 Epub 2025 Jul 8 PMID: 40638990
- [4] Konstantinidis IT, Dursun A, Zheng H, Wargo JA, Thayer SP, Fernandez-del Castillo C, Warshaw AL, Ferrone CR. Metastatic tumors in the pancreas in the modern era. *J Am Coll Surg.* 2010; 211 (6): 749–53. doi:10.1016/j.jamcollsurg.2010.08.017 PMID: 21109158 PMID: PMC3135384

ePoster Connect: Small intestine

16/05/2026, 09:35–09:55

ePoster Connect:
Station 1 (Level 0)**eP1268V Complete closure of a duodenal fistula after a tumor resection, with X-Tack suture system****Authors** Martinez Escapa V¹, Martí Romero L¹, Oviedo Bravo M¹, Pla Cortina C¹, Barbera Martinez T¹**Institute** 1 Hospital Arnau de Vilanova, València, Spain**DOI** 10.1055/s-0046-1822595**Abstract Text**

We present a case of a 69-year-old man with anemia and weight loss. The gastroscopy revealed a 20 mm Gastrointestinal Stromal Tumor (GIST) in the posterior duodenum, confirmed by computed tomography (CT). Resection of the third portion of the duodenum with latero-lateral anastomosis was performed. After septic shock, a CT scan showed free fluid and pneumoperitoneum, suggestive of suture failure. A radiological drainage was placed. A gastroscopy confirmed dehiscence in the staple suture line and a xtack suture was used for repairing the leak, checking the complete seal with contrast. One month later, follow-up CT and gastroscopy showed a decrease in the collection, with no extravasation or leakage, and the XTack correctly positioned. After the removal of the drainage, the patient was discharged, asymptomatic and with oral tolerance [1, 2].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/11747526-c0b1-478b-a327-a256f8913ce8/Uploads/19978_xtackgist_duodeno%20v3.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martí Romero L, Martínez Escapa V, Olcina Domínguez P, Alemany Pérez G, Boix Clemente C, Bardisa de la Iglesia B. Through-the-scope tack and suture system for closure of a large iatrogenic rectal perforation. *Endoscopy*. 2025; 57 (S 01): E145–E146
- [2] Mohapatra S, Fukami N. Follow-up outcomes of mucosal defect closures after endoscopic resection using a helix tacking system and endoclips. *VideogIE* 2022; 7 (7): 268–272

eP1269 Management approaches and clinical outcomes of capsule-diagnosed small-bowel angiodysplasias in the absence of device-assisted enteroscopy: a retrospective descriptive cohort study**Authors** Tsakou A¹, Lazaridis N¹, Arvanitakis K¹, Tsiamitros S¹, Germanidis G¹**Institute** 1 1st Department of Internal Medicine, Division of Gastroenterology, AHEPA University Hospital, Thessaloniki, Greece**DOI** 10.1055/s-0046-1822596

Aims Gastrointestinal angiodysplasias are acquired vascular malformations of the gastrointestinal mucosa and submucosa and constitute a major cause of suspected small-bowel bleeding (SSBB) and iron-deficiency anemia (IDA). Small-bowel capsule endoscopy (SBCE) is the primary diagnostic tool. Standard management includes iron replacement therapy (IRT), transfusion support, and optimization of anticoagulation or antiplatelet therapy. Device-assisted

enteroscopy (DAE), although recommended for endoscopic thermocoagulation, shows high rebleeding rates and is available only in a small number of referral centers in Greece, limiting its feasibility in routine care. Long-acting somatostatin analogues (SSA) represent an alternative therapeutic option for recurrent or refractory bleeding. The aim of this study was to evaluate the characteristics, management patterns, and 12-month clinical outcomes of patients with capsule-diagnosed small-bowel angiodysplasias in a real-world setting without readily accessible DAE [1].

Methods We conducted a retrospective descriptive cohort study including 26 patients with SBCE-confirmed small-bowel angiodysplasias. Demographic characteristics, comorbidities, medication history, indication for SBCE, duration of symptoms, prior treatments, SBCE findings, therapeutic interventions, and 12-month outcomes were recorded and analyzed descriptively.

Results The median age of the cohort was 69.5 years (IQR 63–79), and 50 % were male. IDA was the indication for SBCE in 14/26 patients, while 50 % underwent SBCE during hospitalization. Ischemic heart disease was the most common comorbidity, and 30.8 % were receiving single antiplatelet therapy. SBCE revealed active bleeding in 7/26 patients, multiple angiodysplasias in 57.7 %, and exclusive small-bowel involvement in 76.9 %. Patients with IDA were younger and predominantly outpatients. In this group, 42.9 % received IRT and 78.6 % were managed with supportive therapy. At 12-month follow-up, 28.6 % required no further treatment, while 42.9 % remained on IRT. Among patients with SSBB, 50 % received supportive therapy, 41.7 % were treated with long-acting SSA, and one required emergent transarterial embolization. At follow-up, 33.3 % required no additional therapy, 25 % remained on IRT, two patients received SSA as bridge therapy to valvular replacement, and two continued long-acting SSA long-term.

Conclusions In healthcare settings where device-assisted enteroscopy is not readily available, management of small-bowel angiodysplasias relies primarily on supportive measures, iron supplementation, transfusion support, optimization of antithrombotic therapy, and selective use of long-acting SSA. In this real-world single-center cohort, both IDA and SSBB patients demonstrated meaningful clinical improvement over 12 months, with a considerable proportion requiring no further intervention. Long-acting SSA appeared particularly beneficial in patients with recurrent bleeding and significant cardiovascular comorbidities, either as monotherapy or as bridging therapy until valvular replacement.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Becq A, Sidhu R, Goltstein L, Dray X. Recent advances in the treatment of refractory gastrointestinal angiodysplasia. *United European Gastroenterol J* 2024; 12 (8): 1128–35

eP1270 Patient characteristics and clinical outcomes of double-balloon enteroscopy at the largest tertiary centre in the UK**Authors** Kalopitas G¹, Maristany Bosch E¹, Athanasiadou E², Dell'Unto E¹, Cossa L¹, Rimondi A³, Murino A^{4,5}, Despott E³**Institutes** 1 The Royal Free Hospital and University College London Institute for Liver and Digestive Health, London, United Kingdom; 2 The

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DOI 10.1055/s-0046-1822597

Aims Double-balloon enteroscopy (DBE) is an essential modality for diagnosing and managing small-bowel disorders, offering advantages over other investigations through direct visualisation, targeted biopsy, endotherapy and marking of lesions in need of further management. With rising small-bowel referrals and increasing case complexity, understanding real-world DBE performance is key to optimising service delivery and guiding clinical pathways. This study aimed to describe patient characteristics, procedural indications, diagnostic findings and clinical outcomes of DBE performed within a large tertiary small-bowel unit [1, 2].

Methods All DBE procedures performed at the Royal Free Unit for Endoscopy between July 2023 and October 2025 were analyzed through a prospectively maintained consecutive database. Patient demographics, indications, procedural parameters, diagnostic findings and clinical outcomes were recorded. Descriptive statistics were used to summarize the cohort.

Results Across the study period, 359 DBE procedures were performed in 262 patients. Median age was 64-years (IQR 51–72); 148 patients were women (41.2%). The most common American Society of Anaesthesiologists (ASA) classification score was 2 (56.5%), followed by ASA 3 (19.2%); 80.5% of the procedures were performed under conscious sedation with median doses of midazolam and fentanyl 5mg and 100mcg, respectively. The main indications for DBE were small-bowel bleeding/iron-deficiency anemia (49.6%), small-bowel tumors or polyps (31.5%), suspected or established Crohn's disease (8.4%), stricture dilatation (5.6%), and foreign-body retrieval (2.8%). Over one-third of patients (34.8%) were on anticoagulant or antiplatelet therapy; surgically altered anatomy was present in 73 patients (20.3%). A preceding small-bowel investigation—CT/MR enterography or capsule endoscopy—had been performed in 90.6% of cases. Most referrals originated from other centers or out-patient specialty clinics (74.4%).

The insertion route was antegrade in 72.1% and retrograde in 27.9%. DBE was completed as intended in 95.8% cases, and a clinical impression explaining the patient's presentation was achieved in 96.4%. Small-bowel lesions were detected in 79.4% of procedures, and therapeutic intervention was required in 60.2%, with a high technical success rate (98.6%). Repeat DBE was required in 19.5% of cases. A total of 13.4% of patients required subsequent enteroscopy via the alternative route, and among these, pan-enteroscopy was achieved in 33.3%. Overall pan-enteroscopy was achieved in 9.2% of all procedures. The overall complication rate was 0.8% (3/359). Trainee involvement occurred in 92.8% of procedures.

Conclusions This two-year cohort demonstrates that DBE is employed across a broad clinical spectrum, with small-bowel bleeding and suspected neoplastic pathology representing the leading indications. Technical success and diagnostic yield was high, and the vast majority of procedures resulted in a clear clinical impression, underscoring the role of DBE as an effective problem-solving instrument, particularly following capsule endoscopy or cross-sectional imaging. Therapeutic intervention was frequently required and was highly successful, while complication rates remained low. These findings highlight the central role of DBE within a structured, multidisciplinary small-bowel service and its substantial contribution to both diagnosis and treatment in complex small-bowel disease.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Pennazio M, Venezia L, Cortegoso Valdivia P, Rondonotti E. Device-assisted enteroscopy: An update on techniques, clinical indications and safety. *Dig liver Dis Off J Ital Soc Gastroenterol Ital Assoc Study Liver*. 2019; 51 (7): 934–43

[2] Rondonotti E, Spada C, Adler S, May A, Despott EJ, Koulaouzidis A et al. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2018; 50 (4): 423–46

eP1271 Coexistence of Celiac Disease and Duodenal Crohn's Disease in an Adolescent: A Rare Case Report

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DOI 10.1055/s-0046-1822598

Abstract Text

Celiac disease and Crohn's disease are distinct chronic immune-mediated disorders that rarely coexist, especially with duodenal involvement. We report a 16-year-old girl with autoimmune hypothyroidism who presented with chronic epigastric pain, vomiting, weight loss, and iron deficiency anemia. Endoscopy, histology, and imaging revealed features of both celiac disease and Crohn's disease affecting the duodenum, with additional ileo-rectal inflammation. HLA typing confirmed genetic susceptibility to celiac disease. Management included a gluten-free diet, corticosteroids, nutritional support, and planned immunosuppressive/biologic therapy, leading to clinical improvement and mucosal healing.

This case highlights the importance of considering dual pathology in atypical or refractory presentations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Stomach and Duodenum

16/05/2026, 09:35–09:55

ePoster Connect:
Station 2 (Level 0)

eP1272 Efficacy of Endoscopic Mucosal Resection versus Endoscopic Submucosal Dissection for Superficial Duodenal Lesions: A Systematic Review and Meta-Analysis

Authors Nishimura T¹, Khalaf K¹, Yuan Y², Li H¹, Fujiyoshi Y³, Hu M⁴,

Bucheeeri MAGA¹, Youssef M¹, Teshima C¹, Mosko J¹, May G¹, Calo N¹

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DOI 10.1055/s-0046-1822599

Aims The optimal technique for superficial non-ampullary duodenal lesions (SDLs) is uncertain because potential gains in resection quality with ESD may trade off against safety. Thus, this study aimed to systematically review and synthesize the evidence comparing EMR and ESD techniques for efficacy and adverse events in this population (► Table 1).

Methods We searched MEDLINE and Embase (via Ovid) to July 14, 2025, for comparative studies. Two reviewers independently screened/extracted data assessed risk of bias and graded the level of certainty (GRADE). Random-effects models yielded risk ratios (RRs) and 95 %CIs. A prespecified subgroup analyzed studies where the EMR arm reported mean/median lesion diameter ≥ 20 mm.

► Table 1

Main analysis	Number of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	Number of lesions		Effect		Certainty
								ESD	EMR	Relative (95% CI)	Absolute (95% CI)	
Local recurrence	14	non-RCT	not serious	not serious	not serious	serious	None detected (Egger $p = .700$)	1457/4644 (31.4%)	3187/4644 (68.6%)	RR 0.62 (0.28 to 1.39)	261 fewer per 1,000 (from 494 fewer to 268 more)	⊕⊕○○Low
Surgical intervention for adverse events	17	non-RCT	not serious	not serious	not serious	not serious	None detected (Egger $p = .174$)	1806/5515 (32.7%)	3709/5515 (67.3%)	RR 9.13 (4.18 to 19.94)	1,000 more per 1,000 (from 1,000 more to 1,000 more)	⊕⊕⊕⊕High
Endoscopic reintervention for adverse events	14	non-RCT	not serious	not serious	not serious	not serious	None detected (Egger $p = .186$)	614/1577 (38.9%)	963/1577 (61.1%)	RR 1.71 (1.04 to 2.82)	434 more per 1,000 (from 24 more to 1,000 more)	⊕⊕⊕○Moderate

Results Twenty-four retrospective cohort studies (5,515 lesions: EMR 3,709; ESD 1,806) were included. ESD improved *en bloc* (RR 1.10, 95% CI 1.05–1.16) and R0 resection (RR 1.15, 95% CI 1.01–1.31); local recurrence did not differ (RR 0.62, 95% CI 0.28–1.39). Procedural risk was higher with ESD, including intraprocedural perforation (RR 9.34, 95% CI 6.03–14.45) and delayed perforation (RR 5.82, 95% CI 3.09–10.96); delayed bleeding and the need for surgery or endoscopic reintervention were also increased. In the ≥ 20 mm subgroup, differences diminished and only intraprocedural perforation remained higher (RR 3.76, 95% CI 1.04–13.58) with ESD. Certainty of evidence (GRADE) was low for efficacy (*en bloc*, R0) and local recurrence, high for perforations, delayed bleeding, and surgical intervention, moderate for endoscopic reintervention, and low for mortality.

Conclusions For SDLs, ESD achieves better resection quality but at greater significant procedural risks, particularly in smaller lesions. EMR is a reasonable default first-line strategy for most benign polyps, reserving ESD for lesions where *en bloc* histology would alter management and in expert centers. Clinical trials, particularly with size-stratification, are needed.

Conflicts of Interest Jeffrey D Mosko – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji Christopher W Teshima – Speaker for Medtronic and Boston Scientific, Consultant for Boston Scientific; Gary R May – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic All the authors (Tomoyuki Nishimura, Kareem Khalaf, Mohamed Abdulla Ghuloom Abdulla Bucheeri, Huaqi Li, Yuhong Yuan, Natalia Causada Calo) have no relevant financial disclosures or conflicts of interest to declare.

eP1273 Diagnostic Performance of Endoscopic Ultrasound for Gastric Cancer Staging: A Systematic Review and Meta-Analysis

Authors Zheng K¹, Khalaf K¹, Rizkala T², Alasmi Y¹, Bucheeri MAGA¹, Harb M¹, Hu M¹, Jayawardena R¹, Khan A¹, Li H¹, Na C¹, Mahamud O¹, Nishimura T¹, Slotin A¹, Youssef M¹, Yuan Y³, May G¹, Mosko J¹, Calo N¹
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DOI 10.1055/s-0046-1822600

Aims Accurate loco-regional staging is essential in the management of gastric cancer, guiding decisions regarding surgical resection, neoadjuvant therapy, and endoscopic interventions. Endoscopic ultrasound (EUS) is widely used for evaluating tumour depth (T stage) and regional lymph node involvement (N stage), but reported diagnostic performance varies across studies. This systematic review and meta-analysis aimed to synthesize evidence on the accuracy of EUS for staging gastric cancer.

Methods A comprehensive literature search was performed in MEDLINE, Embase and Cochrane Library until May 27, 2025. We identified primary studies reporting the diagnostic performance of conventional EUS (linear or radial) for gastric cancer staging compared with histopathology as the reference standard. We excluded studies using miniprobe or non-conventional EUS techniques, as well as patients who received neoadjuvant radiochemotherapy. Pooled sensitivity, specificity, PPV, NPV, accuracy, overstaging and understaging for T and N staging were calculated using a bivariate random-effects model. Heterogeneity was assessed with the I^2 statistic.

Results Nineteen studies comprising 2,982 patients were included for T-stage evaluation, and 15 studies comprising 1,272 patients for N-stage evaluation. Of the nine retrospective and ten prospective studies, most used a radial probe ($n = 16$) with only two using linear and one using both. The accuracy rate of EUS for overall T stage was 72% with 14% overstaging and 13% understaging. For early gastric cancer (T1), diagnostic performance showed high specificity (0.95; 95% CI 0.93–0.97) but modest sensitivity (0.76; 95% CI 0.66–0.85), with an accuracy of 0.89 (95% CI 0.86–0.92), with 24% overstaging. T2 lesions showed lower sensitivity (0.64; 95% CI 0.53–0.75) and specificity (0.89; 95% CI 0.85–0.92), respectively, with 25% overstaging and 8% understaging. T3 disease had the highest rate of accurate T staging at 81%, while T4 staging had the lowest at 57%. For nodal disease, diagnostic performance was moderate with accuracy of 0.73 (95% CI 0.67–0.78), sensitivity 0.69 (95% CI 0.59–0.78) and specificity 0.82 (95% CI 0.74–0.88), with overstaging and understaging of rates of 8% and 20%, respectively.

Conclusions Conventional EUS provides robust diagnostic performance for T staging in patients with gastric cancer. This is particularly useful to select patients with early gastric cancer who are candidates for endoscopic or surgical

resection. However, there remains a significant risk of overstaging, which would suggest the role of EUS as a tool within a multimodal staging strategy. Performance of nodal staging is moderate, with a modest risk of missing nodal disease. These highlight the potential value of adjunctive modalities, such as miniprobe or contrast-enhanced EUS, or techniques such as EUS-guided fine-needle biopsy to enhance diagnostic yield.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1274V Endoscopic band ligation without resection (Banding-SET) for small gastric GIST: long-term clinical success at 5-year follow-up

Authors Maisterra S^{1,2,3,4}, Bas-Cutrina F^{5,1,2,3}, Paules-Villar MJ⁶, Gornals JB^{2,3,4,1}

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DOI 10.1055/s-0046-1822601

Abstract Text

A 61-year-old woman, was found to have an incidental gastric subepithelial tumour (SET) on upper-GI endoscopy performed for anemia. EUS revealed a fusiform-shaped SET, measuring 8.2x5.7-mm, hypoechoic pattern, arising from the muscularis propria. Using a multi-band mucosectomy device, successful SET ligation was performed without resection. Deep tissue sampling was achieved via the SINK technique. Histopathology (DOG1+, CD117+, actin+) confirmed spindle-cell GIST. Serial EUS follow-up at 6-weeks, 12-months, 2 and 5 years demonstrated no residual or recurrent tumor. The Banding-SET technique combined with SINK for GISTs ≤ 10 mm is feasible and safe offering an alternative therapeutic management for small SETs with malignant potential, with a low recurrence risk over 5-year follow-up (BANDING-SET study: ClinicalTrials.gov NCT03247231) [1–3].

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/8b005ef8-f3cd-4965-ae95-569c99cb5396/Uploads/19978_V%3C%ADdeo_ESGE%20Days%202026.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gornals JB, Maisterra S, Bas-Cutrina F. Banding-and-SINK for small (≤ 10 -mm) gastrointestinal subepithelial tumours: A valid and effective alternative. *Gastroenterol Hepatol* 2025; 502539. English, Spanish. doi:10.1016/j.gastrohep.2025.502539 Epub ahead of print PMID: 40882890
- [2] Bas-Cutrina F, Casellas-Grau A, Videla S, Loras C, Andújar X, Gil FL, Galán M, Fernández-Aranda F, Carmezim J, Gornals JB. Half of the patients with subepithelial tumors present borderline or pathologic anxiety-distress and carcinophobia: a multicenter cohort study. *Rev Esp Enferm Dig* 2023; 115 (2): 80–84. doi:10.17235/reed.2022.8836/2022 PMID: 35607929
- [3] Bas-Cutrina F, Loras C, Pardo A, Ballester-Clau R, Huertas C, Guarner-Arteaga C, Colan-Hernandez J, Consiglieri CF, Andujar X, Vilanova-Serra M, González-Huix F, Pardo-Grau L, Maisterra S, Ruiz-Ramírez P, García-Sumalla A, Tebé C, Videla S, Gornals JB. Management of small subepithelial tumors by endoscopic banding without resection and single-incision needle-knife-assisted biopsy sampling: a prospective multicenter study. *Gastrointest Endosc*. 2023; 98 (6): 911–921.e8. doi:10.1016/j.gie.2023.05.057 Epub 2023 May 30 PMID: 37263361

eP1275V Endoscopic Salvage of a Complex Post-EMR Duodenal Perforation

Authors Paspatis G¹, Velegraki M¹, Flamourakis M¹, Goumenakis M¹, Kholcheva N¹, Vardas E¹, Christodoulakis M¹

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DOI 10.1055/s-0046-1822602

Abstract Text

We report a case of a 50-year-old woman with a non-ampullary duodenal adenoma treated with piecemeal EMR. She was discharged two hours after the procedure but returned ten hours afterward with severe upper gastrointestinal bleeding. Endoscopy showed active bleeding in the post-EMR defect. After hemostasis with a coagrasper, a limited muscularis propria injury was revealed which was clipped. The patient developed abdominal pain, and CT scan demonstrated retroperitoneal air. Persistent pain and melena led to a repeat endoscopy, which exposed a large perforation. Because of friable edges, an over-the-scope clip (OVESCO) was deployed to grasp deeper tissue layers. Follow-up CT scan showed no leak. On day ten, a retroperitoneal collection was successfully drained. One month later the patient was asymptomatic and six-month imaging was normal.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/7043502d-5574-4687-9937-737dc169de99/Uploads/19978_Endoscopic_Salvage%20of%20a%20Complex%20Post-EMR%20Duodenal%20Perforation.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

ePoster Connect: Colon and Rectum

16/05/2026, 09:35–09:55

ePoster Connect:
Station 3 (Level 0)

eP1276 Successful Endoscopic Treatment of a Complete Ileorectal Anastomotic Stenosis

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DOI 10.1055/s-0046-1822603

Abstract Text

A 39-year-old woman with Lynch syndrome and a previous diagnosis of sigmoid colon adenocarcinoma underwent total laparoscopic colectomy with ileorectal anastomosis and protective ileostomy. During planning for ileostomy reversal, colonoscopy revealed a complete stenosis of the ileorectal anastomosis, which was confirmed by contrast-enhanced computed tomography using rectal contrast. Given these findings, endoscopic management using a Rendez-vous technique was proposed. A gastroscope was introduced through the ileostomy, revealing a fixed angulation approximately 30 cm from the stoma, which prevented further advancement of the scope. At this site, a bulging area corresponding to the previous anastomosis was identified. A small central incision was made at the presumed location of the anastomotic lumen using a micro-knife. A guidewire was advanced through the incision, followed by contrast injection, which delineated the pre-anastomotic ileal loop under fluoroscopic guidance. A hydrostatic balloon was then advanced over the guidewire through the newly created orifice and dilation was performed up to 15 mm. After this initial dilation, both afferent and efferent ileal limbs—consistent with a side-to-end anastomosis—could be traversed endoscopically without complications. Two weeks later, a repeat colonoscopy performed via the anal route demonstrated a patent anastomosis with an approximate diameter of 7 mm. A second

balloon dilation was performed, achieving a diameter of 18 mm. With complete resolution of the stenosis confirmed endoscopically, the patient was subsequently referred for ileostomy closure. This case illustrates the efficacy and safety of endoscopic recanalization for complete anastomotic obstructions, even in complex postoperative anatomy such as that associated with total colectomy for hereditary colorectal cancer syndromes. The combined use of the Rendez-vous approach, micro-knife incision, fluoroscopic guidance, and sequential balloon dilations allowed successful restoration of bowel continuity while avoiding surgical reintervention [1, 2].

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ueda T, Kanesaka T, Ishihara R. Successful Endoscopic Recanalization of Complete Colorectal Anastomotic Obstruction using a Rendezvous Technique. *Clin Gastroenterol Hepatol*. 2025 S1542-3565(25)00575-0. doi:10.1016/j.cgh.2025.06.028 Epub ahead of print PMID: 40645393
- [2] Kwak JY, Yang KM, Seo HI. Treatment of a Total Obstructive Anastomosis Stricture Using a Transanal Laparoscopic Approach and Intraoperative Colonoscopic Balloon Dilatation. *Ann Coloproctol*. 2020; 36 (5): 353–356. doi:10.3393/ac.2020.02.27 Epub 2020 May 15 PMID: 32674554 PMID: PMC7714376

eP1277 Metachronous polyps in patients with clinically significant serrated polyps: Differences between microvesicular and goblet cell-rich hyperplastic polyps: A cohort study

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DOI 10.1055/s-0046-1822604

Aims The occurrence and detection of metachronous colorectal tumors are important for determining appropriate intervals of surveillance colonoscopy for polyps. Clinically significant serrated polyps (CSSPs) include sessile serrated lesions (SSLs), traditional serrated adenomas, hyperplastic polyps (HPs) $\geq$ 10 mm, and proximal HPs of 5–9 mm. CSSPs are associated with the metachronous large, serrated polyps, which are at risk for colorectal cancer. Meanwhile, HPs are subclassified in the WHO classification into microvesicular HPs (MVHPs) and goblet cell-rich HPs (GCHPs). MVHPs and GCHPs differ in molecular biological behavior, histology, and endoscopic findings, and MVHPs have been shown to resemble SSLs. To date, no studies have compared the metachronous tumors of SSLs, MVHPs, and GCHPs among CSSPs; thus, we investigated the metachronous polyps.

Methods This study was a single-center cohort study conducted at Toyoshima Endoscopy Clinic. We obtained data from the Toyoshima Endoscopy Clinic Database. This study was approved by the institutional review board of the Yoyogi Mental Clinic (approval no. RKK227). We evaluated patients who underwent their first (index) and second (surveillance) colonoscopy at the Toyoshima Endoscopy Clinic between April 2017 and August 2024. HPs that met the CSSP criteria (i.e., $\geq$ 10 mm or $\geq$ 5 mm at proximal colon) were enrolled in this study. We assessed the effect of detection rates of SSLs, MVHPs, and GCHPs at index colonoscopy on the time to detections of metachronous SSLs, MVHPs, GCHPs, and adenomas. Hazard ratios (HRs) were calculated to adjust for age and sex using Cox proportional hazards models.

Results A total of 3174 patients (male sex, 43.6%; mean age, 51.2 years; median surveillance period, 499 days) were enrolled. A family history of colorectal cancer was present in 7.56% of patients. Detection rates of SSLs, MVHPs, GCHPs, and conventional adenomas were 7.69%, 5.36%, 0.54%, and 56.76%, respectively. The detection rate of SSLs at index colonoscopy was associated with the detection of metachronous SSLs (HR 6.19, odds ratio [OR] 4.51–8.50, $P < 0.001$), MVHPs (HR 6.83, OR 4.74–9.85, $P < 0.001$), GCHPs (HR 4.25, OR 1.73–10.46, $P = 0.002$), and conventional adenomas (HR 1.38, OR 1.11–1.70, $P = 0.003$). The detection rate of MVHPs at index colonoscopy was associated with metachronous

SSLs (HR 5.13, OR 3.54–7.43, $P < 0.001$), MVHPs (HR 4.56, OR 2.92–7.12, $P < 0.001$), and conventional adenomas (HR 1.38, OR 1.10–1.75, $P = 0.006$). The detection rate of GCHPs at index colonoscopy was associated with the detection of metachronous GCHPs (HR 19.01, OR 4.45–81.18, $P < 0.001$).

Conclusions This cohort study investigated metachronous polyp detection in patients with CSSPs. Detection rates of index SSLs and MVHPs were associated with metachronous detection of both SSLs and MVHPs. Detection of index GCHPs was associated with metachronous detection of GCHPs. MVHPs and GCHPs were mutually exclusive in metachronous detection.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1278 Endoscopic Resection of Visible Dysplastic Lesions in Inflammatory Bowel Disease: A Retrospective Observational Cohort Study

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Aims Chronic inflammation predisposes patients with inflammatory bowel disease (IBD) to colorectal cancer. Visible dysplastic lesions without optical characteristics of deeply invasive cancer should be considered for endoscopic resection (ER). However, there is a lack of evidence regarding outcomes of ER in IBD-related dysplastic lesions. This study assesses the curative effectiveness and safety of ER for dysplastic lesions in IBD patients.

Methods This was a retrospective observational cohort of IBD patients referred to the St. Michael's Hospital, Toronto, Canada between 2012 and 2025 who underwent ER for management of sporadic polyps or IBD-related dysplasia. The primary outcome was to assess curative resection in this population, defined as; complete (R0) endoscopic removal of the lesion with no adverse histologic features (poor differentiation, lymphovascular invasion, or deep submucosal invasion) and no additional indications for colectomy based on background colitis.

Results Among 60 patients with colitis-associated neoplasia, the mean age was 61 years (range 38–97), and 66.7% were male. Most had ulcerative colitis (85.0%; Crohn's disease 15.0%), with a mean disease duration of 17.8 years (0–35); disease type was predominantly extensive colitis (75.0%), with smaller proportions of left-sided colitis (10.0%) and Crohn's colitis (15.0%). Patients were treated with 5-ASA (58.3%), systemic corticosteroids (5.0%), azathioprine (6.7%), infliximab (8.3%), vedolizumab (1.7%), adalimumab (1.7%), methotrexate (1.7%), or ustekinumab (1.7%), ($p = 0.016$). Neoplasia was most commonly right-sided (43.3%), followed by left-sided (31.7%), rectal (13.3%), and transverse colon lesions (11.7%). Lesions were frequently $\geq$ 30 mm (43.3% were 30–50 mm; 6.7% $>$ 50 mm), with 35.0% $<$ 20 mm and 15.0% 20–29 mm. Morphology were 0–IIa (50.0%), Is (11.7%), 0–IIb (15.0%), mixed IIa + Is (11.7%), pedunculated Ip (5.0%), subpedunculated Isp (3.3%), and IIa + Ic (3.3%); no 0–IIc or 0–III lesions and Paris classification subtype differed significantly between curative and non-curative cases ($p = 0.011$). Almost all lesions did not straddle a haustral fold (98.3%) and had no surrounding active inflammation (98.3%). EMR was selected in (81.7%) of patients, with (13.3%) requiring hybrid techniques and ESD (5.0%), without significant difference by curative status ($p = 0.295$). Overall technical success was 90.0% and was universal in the curative cohort (100%, $p < 0.0001$). En bloc resection and R0 resection were achieved in 25.0% and 26.7% of all lesions, respectively. Histopathology showed tubular adenoma (28.3%), sessile serrated lesions (20.0%), tubulovillous adenoma (23.3%), hyperplastic/inflammatory polyps (18.3%), and UC-associated neoplasia (10.0%), with a significant difference in histologic distribution between groups for curative resection ($p = 0.001$). By Vienna classification, 46.7% had low-grade dysplasia, 20.0% high-grade dysplasia, 11.7% indefinite dysplasia, 20.0% were negative for dysplasia, and 1.7% had submucosal invasive carcinoma; the distribution differed between curative and non-curative resections ($p = 0.024$). Intra-procedural bleeding requiring endoscopic intervention oc-

curred in 15.0% and perforation in 1.7%, with no delayed bleeding or perforation events. Four patients (6.7%) ultimately underwent colectomy, including 2 (3.8%) with prior curative resections ($p = 0.013$), at a median of 13.5 months (range 3–16) after index polypectomy. Surveillance colonoscopy was performed in 31 patients (55.4%), at a median of 13 months (4–108) from index resection; recurrence at the resection site was detected in 8 patients (14.3%).

Conclusions Endoscopic resection of colitis-associated neoplasia can be performed with high technical success, curative resection rates, and recurrence outcomes that are comparable to those reported for non-IBD lesions. Our data suggest that, in experienced hands, ER does not appear to be limited by the presence of colitis itself; rather, success is driven by lesion factors such as size, morphology, and histology. Clinically, this supports treating well-demarcated, endoscopically resectable lesions in IBD using standard advanced resection strategies, reserving colectomy for patients with high-risk histology, unresectable lesions, or diffuse colitis-associated dysplasia.

Conflicts of Interest JDM – Speaker: Boston Scientific, Pendopharm, Vantage, Medtronic. Medical Advisory Board: Pendopharm, Boston Scientific, Janssen, Pentax, Fuji; GRM – Consultant for Olympus. Speaker: Pentax, Fuji and Medtronic; All the authors have no relevant financial disclosures or conflicts of interest to declare.

eP1279 Performance of the Limoges Bleeding Score in Predicting Delayed Bleeding After Colorectal ESD: A Retrospective Study

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DOI 10.1055/s-0046-1822607

Aims To assess the performance of the Limoges Bleeding Score¹ (LBS) in predicting delayed bleeding after colorectal ESD. The LBS has been recently developed to stratify bleeding risk after colorectal ESD, but external validation on independent cohorts is limited [1].

Methods We retrospectively analyzed consecutive patients undergoing colorectal ESD at our tertiary referral center between November 2020 and November 2025. For each included patient, the LBS was calculated according to the original definition.

Delayed bleeding was defined as post-ESD bleeding event needing a prolongation of hospitalization, readmission, new endoscopy (or surgery or angiography), or a blood transfusion, and occurring at least 6 hours after, and within 30 days after the procedure.

We compared LBS values between patients with and without delayed bleeding using Mann-Whitney U test / t-test, and quantified the effect size, using rank-biserial correlation.

Results Three hundred twenty patients were retrospectively analyzed. Of these patients, thirty-nine were excluded due to missing data. A total of 281 colorectal ESD procedures were included. Delayed bleeding occurred in 19 (6.7%) of cases. LBS was slightly but significantly higher in the bleeding group (median 4 [IQR 3–4.5]) vs the non-bleeding group (3 [IQR 1–4]) ($p = 0.02$). The effect size indicated a moderate difference between groups (rank-biserial correlation = 0.31).

Conclusions In this external validation cohort, the Limoges Bleeding Score demonstrated a good ability to assess the risk of delayed bleeding after colorectal ESD. If confirmed in larger prospective studies, LBS may support standardized risk stratification and guide intra- and post-procedural therapeutic strategies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Albouys J. et al. Risk of delayed bleeding after colorectal endoscopic submucosal dissection: the Limoges Bleeding Score. *Endoscopy* 56: 110–118 2024

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eP1280V Double-Balloon Enteroscopy assisted by a magnetic balloon anchoring system: a novel triple-balloon approach

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DOI 10.1055/s-0046-1822607

Problem to solve Since its introduction in 2001, double-balloon enteroscopy has radically changed the approach to small bowel lesions, allowing endoscopic treatment and sampling without the need for a surgical approach [1, 2]. The most common indications for enteroscopy are small bowel bleeding, Crohn's Disease or tumors [2, 3]. Anyway, a complete small bowel exploration can be achieved in only less than a half cases [3], and mainly with a combined antero-grade and retrograde approach, due its noticeable length and loop configuration which often hinder deeper insertion [4]. As a result, the detection rate is limited, and patients frequently undergo multiple endoscopic procedures with considerable distress.

Innovation A possible improvement could be represented by a novel magnetic balloon anchoring system which consists of a permanent magnet and a through-the scope balloon catheter filled with a water-based iron powder dispersion. This system has already been approved for use during difficult colonoscopies, where it allows loop resolution and easier cecal intubation. This setup improves stability, allows easier loop resolution through retraction and straightening and minimize scope slippage. Upon loop formation, the magnetic balloon is inserted and inflated under fluoroscopic guidance and then magnetically anchored to the abdominal wall, in conjunction with overtube and scope balloons; at this point, loop resolution through retraction and straightening can be performed. After loop resolution, the magnetic balloon is deflated and removed, and the scope advanced using standard techniques. The sequence can be repeated multiple times.

Results We successfully employed this technique with a short enteroscope (155 cm length, 3.2 mm working channel) in two cases so far. In the first one, a 69-year-old woman with recurrent gastrointestinal bleeding underwent standard antero-grade double-balloon enteroscopy but loop formation prevented the reaching of the lesion. A second antero-grade approach was performed with the assistance of the magnetic anchoring system, allowing deeper penetration and treatment of a 2 mm Yano-Yamamoto type 2b non-bleeding lesion of the mid-small bowel.

In the second case, after a non-diagnostic standard antero-grade double-balloon antero-grade enteroscopy in a 71-year-old man with chronic iron-deficiency anaemia and a 15 mm ulcerative lesion of the proximal ileum at capsule endoscopy, this triple balloon approach allowed insertion approximately 100 cm deeper than in the previous standard procedure and biopsy of the lesion.

Conclusions The magnetic balloon anchoring system might be a useful on-demand device in enteroscopy when deeper penetration is needed. It may be particularly useful in combination with a short enteroscope, which allows better manoeuvrability and stability and requires fewer medical and nursing staff. This could lead to better patient outcomes, optimization of procedure time and overall cost reduction.

The main contraindication is the presence of permanently or semi-permanently implanted active medical devices (e.g., orthopaedic implants, cardiac pacemakers or defibrillators, drug pumps, neurostimulators, cochlear implants), ferromagnetic implanted medical devices (e.g. vascular stents, aneurysm clips) or foreign bodies; a limitation is severe obesity, due to the reduction of the transabdominal magnetic field caused by a thicker subcutaneous tissue.

Our positive experiences could pave the way for a new and innovative technique for diagnosis and treatment of small bowel diseases: the "Triple Balloon Enteroscopy". Anyway, more studies are needed to assess advantages and limitations of this new procedure.

Video http://data.process.y-congress.com/ScientificProcess/Data//106/660/1670/33ef5170-2dd1-46f2-be00-780548513d50/Uploads/19990_Video_ENDORAIL%20Def%20No%20audio.mov

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kita H, Yamamoto H. Double-balloon endoscopy for the diagnosis and treatment of small intestinal disease. *Best Pract Res Clin Gastroenterol* 2006; 20 (1): 179–194. doi:10.1016/j.bpg.2005.09.004
- [2] Xin L, Liao Z, Jiang YP, Li ZS. Indications, detectability, positive findings, total enteroscopy, and complications of diagnostic double-balloon endoscopy: a systematic review of data over the first decade of use. *Gastrointest Endosc* 2011; 74 (3): 563–570. doi:10.1016/j.gie.2011.03.1239
- [3] Yamamoto H, Despot EJ, González-Suárez B, Pennazio M, Mönkemüller K. The evolving role of device-assisted enteroscopy: The state of the art as of August 2023. *Best Pract Res Clin Gastroenterol* 2023; 64-65: 101858. doi:10.1016/j.bpg.2023.101858
- [4] Yamamoto H, Sekine Y, Sato Y et al. Total enteroscopy with a nonsurgical steerable double-balloon method. *Gastrointest Endosc* 2001; 53 (2): 216–220. doi:10.1067/mge.2001.112181

eP1281 Therapeutic impact of ERCP in Low Phospholipid-Associated Cholelithiasis (LPAC) syndrome: a retrospective single-center study

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DOI 10.1055/s-0046-1822608

Aims Low Phospholipid-Associated Cholelithiasis (LPAC) syndrome is a rare biliary disorder related to ABCB4 gene mutations, leading to impaired biliary phospholipid secretion and recurrent intrahepatic lithiasis in young adults. While ursodeoxycholic acid (UDCA) is the standard treatment, some patients experience persistent or complicated disease requiring endoscopic management. The therapeutic contribution of endoscopic retrograde cholangiopancreatography (ERCP) in LPAC remains poorly defined. This study aimed to assess the clinical outcomes and therapeutic role of ERCP in LPAC patients.

Methods A retrospective study was conducted at Ibn Sina University Hospital, Rabat, including all patients diagnosed with LPAC who underwent ERCP between 2022 and 2025. Data regarding demographics, clinical presentation, laboratory and imaging findings, ERCP indications, interventions, complications, and outcomes were analyzed. The primary endpoint was therapeutic efficacy, defined as symptom relief and biochemical improvement.

Results Among 16 patients followed for LPAC syndrome, ERCP was performed in 9 patients. The male-to-female ratio was 0.8, with a mean age of 40.4 years (range 26–54). Prior cholecystectomy had been performed in 55.5 % (5/9) of patients, and 44.4 % (4/9) had a family history of biliary lithiasis (including jaundice, pregnancy-related cholestasis, or cholecystectomy). All patients experienced recurrence of symptoms after cholecystectomy.

Clinically, 44.4 % (4/9) presented with pancreatic-type pain, 33.3 % (3/9) with hepatic colic, and 22.2 % (2/9) with isolated cholestatic jaundice. Diagnosis was confirmed by ultrasound, which demonstrated a "comet tail" appearance in all patients. Laboratory tests showed cytotoxicity and cholestasis in 66.6 % (6/9) of cases.

The indications for ERCP were cholangitis in 55.5 % (5/9), recurrent pancreatitis in 11.1 % (1/9), choledocholithiasis 33.3 % (3/9). ERCP was performed prior to starting medical therapy in 66.6 % (6/9) of patients. Endoscopic interventions included sphincterotomy in 88.8 % (8/9), Dilatation was performed in 22.2 % (2/9) patients

Clinical improvement was observed in 77.7 % (7/9) of patients, with normalization of laboratory tests was achieved in 44.4 % (4/9) of patients. Symptom recurrence occurred in 44.4 % (4/9) of cases; however, this mainly reflected repeated episodes in a single outpatient who required multiple additional ERCP procedures. Overall, the final outcome was favorable in 44.4 % (4/9) of patients, while intermittent hepatic colic persisted in 22.2 % (2/9). Three patients (33.3 %) were lost to follow-up.

Conclusions ERCP provides significant therapeutic benefit in LPAC patients, particularly for post-cholecystectomy recurrences and complications such as cholangitis or pancreatitis. It ensures effective biliary drainage with an acceptable safety profile. Despite occasional recurrences, ERCP should be considered an integral component of multidisciplinary LPAC management. Larger prospective studies are needed to define standardized endoscopic strategies for this rare condition.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1282 Development of a novel real time computer assisted colonoscopy diagnostic tool for colorectal polyps: Lesion diagnosis and personalised patient management

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DOI 10.1055/s-0046-1822609

Aims Accurate real-time optical characterisation of colorectal polyps during colonoscopy is essential for optimal management and colorectal cancer prevention. Reliable differentiation of histological subtypes guides treatment decisions, determines surveillance intervals, and reduces unnecessary surgical resections. Conventional optical diagnosis using chromoendoscopy or virtual imaging is limited by operator dependence, and steep learning. Current computer-aided diagnosis (CADx) systems assist endoscopists but currently limited to binary classification (neoplastic vs non-neoplastic).

Our aim is to develop a CADx algorithm capable of differentiating polyps into four clinically relevant categories with different options for treatment decisions and follow-up: hyperplastic polyps, sessile serrated lesions (SSLs), adenomas, and T1 cancers,

Methods Between May 2023 to June 2025, we assembled an image dataset comprising of 8,635 unique polyps in white light image (WLI) and / or Narrow band image (NBI) from 6 institutions across five countries (United Kingdom, Spain, Germany, Norway, and Japan). The dataset included 1,455 hyperplastic

polyps, 707 SSLs, 5,767 adenomas (low- and high-grade combined), and 706 T1 cancers. A two-stage classification framework using the ConvNext-Small convolutional neural network architecture was implemented. In stage one, a binary classifier distinguished serrated-type (hyperplastic and SSL) from adenomatous-type (adenoma and T1 cancer) lesions. In stage two, two separate binary models were trained: a *serrated model* (hyperplastic vs SSL) and a *depth model* (adenoma vs T1 cancer). Model performance was assessed using an independent test set of 231 images (11 hyperplastic, 41 SSL, 121 adenoma, and 58 T1 cancer).

Results The multiclass model achieved an overall four-class classification accuracy of 68.8 %. When grouped into serrated versus adenomatous lesions, diagnostic accuracy improved to 84.4 %, with a sensitivity of 93.9 % and specificity of 52.0 %. The *depth model* differentiating adenomas from T1 cancers achieved an accuracy of 79.8 %, and specificity of 80.6 %.

Conclusions This study demonstrates the feasibility of a four-class CADx algorithm for endoscopic differentiation of hyperplastic polyps, SSLs, adenomas, and T1 cancers, extending beyond conventional binary AI systems. This approach has the potential to support real-time therapeutic decision-making and improve patient-level risk stratification. By enabling tailored management strategies and reducing reliance on histopathology, multi-class CADx may contribute to more efficient, cost-effective, and patient-centred colorectal cancer prevention. Further validation using video-based datasets and multicentre prospective evaluation is warranted before clinical implementation.

Funding: This study is funded by the European Commission – Horizon Europe 101057099.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1283 Outcomes of Endoscopic Dilation with and Without Steroid Injection in Benign Oesophageal Strictures: A Retrospective Observational Comparative Study

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DOI 10.1055/s-0046-1822610

Aims Benign oesophageal strictures are primarily treated with endoscopic dilation; however, they may recur or fail to respond to treatment, requiring several additional intervention. Corticosteroid injection is a possible adjunctive therapy to decrease stricture formation. However, current literature remains inconsistent on this topic, highlighting the need for further evidence [1, 2]. This study investigates the efficacy and safety of adding intralesional corticosteroid injection to dilation in patients with benign oesophageal strictures.

Methods This is a retrospective observational comparative study over the last 15 years. Patients (> 18 years of age) with benign oesophageal strictures, regardless of aetiology, treated with TTS balloon dilation with or without peri-procedural administration of 2 mg betamethasone per quadrant, were included. Exclusion criteria included achalasia, ongoing oesophageal inflammation, non-adherence to the dilation scheme, patients lost to follow-up, and patients treated with other types of dilations such as Savary-Gilliard or pneumatic dilators. The number of sessions needed to achieve sufficient dilation (SUFD), defined as dilation up to 14 mm, the total number of dilations required (ND), sustained clinical improvement (SCI) defined as sufficient dilation + absence of dysphagia at 6 months, and the periodic dilation index (PDI), defined as the number of sessions needed over the total follow-up time, were assessed. Refractoriness was defined as the inability to achieve a 14 mm diameter after five sessions, and recurrent stenosis was defined as the inability to maintain a satisfactory luminal diameter for 4 weeks after reaching the 14 mm target diameter. To assess treatment safety, all complications resulting from dilation and/or intralesional corticosteroid injections were recorded.

Results Forty-five patients with benign oesophageal strictures were identified: caustic (12), radiation (12), peptic (11), anastomotic (7), eosinophilic esophagi-

tis (2), and oesophageal rings (1). Of these patients, 7 were treated with dilation + corticosteroid injection (4 caustic, 1 eosinophilic esophagitis, 1 peptic, and 1 radiation), and the remainder were treated with dilation alone. A significantly lower ND was required for the corticosteroid compared to the non-corticosteroid group (2.86 ± 0.69 vs. 6.76 ± 3.82 , $p < 0.001$) and fewer SUFD were needed (1.14 ± 0.38 vs. 3.63 ± 2.48 , $p = 0.002$). SCI was observed in 100% of the corticosteroid group vs. 50% in the non-corticosteroid group ($p = 0.016$). No statistically significant relationship with the incidence of complications was found, with only two major complications occurring in the non-corticosteroid group (perforation and fistulisation). Subgroup analysis by stricture type showed a trend toward better outcomes with corticosteroids (fewer ND, SUFD, no complications or refractoriness), but no statistical significance was observed in the eosinophilic, peptic, and radiation subgroups due to their small size. In caustic strictures, the use of corticosteroids was associated with significantly lower ND and SUFD ($p = 0.015$ and 0.017 , respectively). All patients treated with corticosteroids achieved SCI, although without statistical significance ($p = 0.208$).

Conclusions Intralesional corticosteroid injection as an adjunct to endoscopic dilation was associated with a significant reduction in the number of dilation sessions, faster achievement of target luminal diameter, and a marked improvement in sustained clinical outcomes, without an increase in complications. These benefits were particularly pronounced in caustic strictures, likely due to their predominantly fibro-inflammatory pathophysiology, characterized by intense inflammation and fibroblast activation with excessive collagen deposition—pathways directly inhibited by intralesional corticosteroids. In contrast, peptic, anastomotic, and radiation-induced strictures are dominated by more mature, avascular fibrosis, which may explain their lower responsiveness.

Our findings support corticosteroid injection as a safe, effective, and resource-sparing adjunctive therapy in selected patients with benign oesophageal strictures. Despite the retrospective design and limited subgroup sizes, this study provides robust real-world evidence of its clinical benefit. Prospective, adequately powered studies are warranted to further clarify its role across different stricture aetiologies.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Henskens N, Wauters L, Vanuytsel T. Intralesional steroid injections in addition to endoscopic dilation in benign refractory esophageal strictures : a systematic review. *Acta Gastroenterol Belg* 2020; 83 (3): 432–440 PMID: 33094591
- [2] Zhang YW, Wei FX, Qi XP, Liu Z, Xu XD, Zhang YC. Efficacy and Safety of Endoscopic Intralesional Triamcinolone Injection for Benign Esophageal Strictures. *Gastroenterol Res Pract* 2018; 2018:7619298. doi:10.1155/2018/7619298 PMID: 30158968 PMID: PMC6109539

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eP1284 Impact of Trainee Involvement on Colorectal Endoscopic Submucosal Dissection Outcomes: A Prospective Study from a Western Training Center

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DOI 10.1055/s-0046-1822611

Aims Colorectal endoscopic submucosal dissection (C-ESD) is a technically demanding procedure with a steep learning curve, especially in Western centers with limited access to foundational training. To fill training gaps, supervised trainee involvement has been suggested; however, there is still a dearth of data from Western institutions. This study aimed to evaluate the impact of supervised trainee involvement on C-ESD key outcomes [1–3].

Methods This prospective, single-center study with an independent observer was conducted at Bordeaux University Hospital, France, and included 96 patients undergoing C-ESD between May 2024 and June 2025. Procedures were performed by two trainees under direct supervision (sESD group, $n = 67$) or by an expert endoscopist (eESD group, $n = 29$). Before starting supervised human cases, both trainees had completed preclinical training following the European Society of Gastrointestinal Endoscopy (ESGE) ESD curriculum. The rate of en bloc resection and clinically significant adverse events were the main outcomes. R0 resection, curative resection, procedure time, and dissection speed were evaluated as secondary outcomes. Subgroup analyses examined trainee involvement levels and procedural difficulty.

Results En bloc resection was accomplished in 100% of cases in both groups, despite the sESD group having considerably longer procedure times (75 vs. 43 minutes, $p < 0.001$) and slower dissection speeds (16 vs. 32 mm²/min, $p = 0.003$). The rates of curative resection and R0 resection were both high (95.5% vs. 96.6% and 97.0% vs. 100%, respectively; both $p > 0.999$). Although not statistically significant ($p = 0.11$), muscle injury rates were higher in the sESD group (25.4% vs. 10.3%). No perforations occurred in either group. Delayed bleeding was rare (2.1%) and equally distributed between groups. Shorter procedure times and easier cases were linked to higher trainee involvement.

Conclusions Supervised trainee involvement in C-ESD is feasible and safe within a structured training program. Incorporating hands-on mentorship models into Western endoscopy training is supported by comparable resection quality and low complication rates.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Sun J, Xie X, Liu Y, Hao X, Yang G, Zhang D et al. Complications after endoscopic submucosal dissection for early colorectal cancer (Review). *Oncol Lett* 2023; 25 (6): 264
- [2] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. 2022; 54 (6): 591–622
- [3] Pimentel-Nunes P, Pioche M, Albéniz E, Berr F, Deprez P, Ebigbo A et al. Curriculum for endoscopic submucosal dissection training in Europe: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2019; 51 (10): 980–92

eP1285 Current Practices and Opinions on Video Capsule Endoscopy in Germany (2025): A Survey among Gastroenterologists

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DOI 10.1055/s-0046-1822612

Aims Video capsule endoscopy (VCE) is an established approach for small bowel examination. In 2022, the European Society of Gastrointestinal Endoscopy (ESGE) published an updated guideline on VCE use. However, little is known about the implementation of these guidelines in daily clinical practice in Germany.

Methods Between June and August 2025 we conducted a nationwide online-based survey on the use of VCE in Germany. An online questionnaire was distributed via a web link to members of “The German Society for Gastroenterology, Digestive and Metabolic Disease” (DGVS), the “Association of Practicing Gastroenterologists” (BNG) and senior physicians working in gastroenterology departments at academic teaching hospitals in Germany. A total of 234 accessed the survey of which 171 were included in the final analysis. The survey included topics related to the performance of capsule endoscopy, the implementation of ESGE guidelines and reimbursement.

Results The most common indications for VCE were suspected small bowel bleeding (91.2%) and iron deficiency anaemia (86.2%). VCE was rarely used for visualisation of the colon (5.0%). In 2024, most clinicians (48.2%) performed 10 to 30 VCE procedures. The PillCam system (88.2%) was by far the most common used VCE system.

99.4% of the asked clinicians performed bowel preparation before VCE use and reported good to very good (93.7%) mucosal visualisation in the majority of their patients. The interpretation of VCE studies was described as time-intensive with generally requiring 31 to 45 minutes per case (34.8%). 34.2% spent 46 to 60 minutes or longer for analysing the examination. The implementation of validated scoring systems such as the Lewis Score for Crohn's disease (9.7%) and the Saurin classification for bleeding lesions (5.1%) was infrequent.

51.9% of the participants are not familiar with the ESGE guideline from 2022. In patients with suspected small bowel bleeding VCE is performed within 48 hours after onset by 63.2% of the participants.

The reported capsule retention rate was high: 24.5% (39/159) had at least one retention in 2024. Patency capsules were infrequently used in patients with suspected or known Crohn's disease.

Overall, participants regarded VCE as a valuable diagnostic tool; however, reimbursement was widely perceived as inadequate.

Conclusions This first nationwide study evaluated the use of VCE in Germany, revealing that VCE is a valuable and specialised diagnostic tool, with most procedures for suspected small-bowel bleeding conducted within 48 hours of bleeding onset.

Interpretation remains time-consuming and reimbursement is widely viewed as inadequate. Among specialised gastroenterologists who routinely perform VCE, knowledge of the ESGE VCE guideline is limited.

Conflicts of Interest Paul Zeisler: Travel sponsoring Medtronic GmbH

eP1286V Cardiac septal occluder device for Malignant Gastro-colonic Fistula Closure

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DOI 10.1055/s-0046-1822613

Problem to solve To close a large (more than 3cm diameter) malignant gastro-colonic fistula in a case of advanced pancreatic malignancy with previous attempts of closure using through the scope clips and over the scope (OTSC) clips unsuccessful. Moreover, comorbidities, advanced age and metastatic disease made surgical closure options very high risk in this case

Innovation After multidisciplinary discussion, a cardiac septal occluder device was chosen, typically used by interventional cardiologist for atrial septal defect (ASD) closure, as a salvage endoscopic procedure. A 36mm ASD occluder device – the largest size commercially available was selected. To ensure accurate orientation and optimal device positioning, simultaneous dual-endoscope technique was employed. A gastroscope was introduced through the stomach, and the colonoscope was advanced up to the defect at splenic flexure. This allowed both luminal openings to be visualized simultaneously. Under bidirectional endoscopic visualization and fluoroscopic guidance, the delivery system of 36mm ASD occluder device was advanced across the fistula tract through the gastric side into the colonic lumen. The distal (colonic) disc was first deployed, followed by gentle retraction to appose it against the colonic wall. Subsequently, the proximal (gastric) disc was released ensuring complete coverage of the fistulous orifice. The device was carefully observed to secure the site with good approximation and no immediate bleeding or leak was seen. Post-procedure fluoroscopy and barium study confirmed no contrast leak across the closure site. The patient tolerated the procedure well without any immediate complications [1–2]

Results Over subsequent weeks, patient showed a marked clinical improvement with cessation of feculent vomiting, resolution of diarrhea, and gradual improvement in appetite. During 8 weeks of follow-up, patient maintained stable body weight, resumed normal oral nutrition, and remained asymptomatic. A repeat imaging at 8 weeks confirmed persistent closure of fistula with the device in situ with no evidence of leak or migration. Patient continued to receive supportive oncological care and nutritional supplementation

Conclusions This case demonstrates that endoscopic deployment of a large (36mm) atrial septal occluder device can achieve closure even in malignant gastro-colonic fistulas where conventional approaches fail. It exemplifies the expanding frontier of interventional endoscopy through creative adaptation of cardiovascular technologies for complex gastroenterology pathologies. For patients unfit for the surgery, this approach offers an effective, safe, and minimally invasive palliative solution that can restore nutrition, and further improve quality of life. Continued innovation and structure clinical evaluation will define the precise role of these devices in future gastrointestinal oncology practice

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/cad58ff5-9da9-4921-963b-d27f6d41f27a/Uploads/19990_esge26CSO.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Le, Bryant MD1, *; Masroor, Momin MD2; El Hage Chehade, Nabil MD1; Tavangar, Amirali MD2; Kwon, Joshua MD1; Nguyen, Peter H. MD2; Samarasena, Jason MD2; Lee, John G. MD2; Dang, Frances MD2 S4102 Closing Paths: ASD Occluder Innovation in Gastropleural Fistula Closure. The American Journal of Gastroenterology 119 (10S): p S2652 2024. doi:10.14309/01.ajg.0001045776.87819.b9
- [2] Hourneaux de Moura DT, Jirapinyo P, Hathorn KE, Thompson CC. Use of a cardiac septal occluder in the treatment of a chronic GI fistula: What should we know before off-label use in the GI tract? VideoGIE 2018; 4: 114–117. doi:10.1016/j.vgie.2018.10.011. PMID: 30899887 PMID: PMC6408700

eP1287 Mapping the Causes of Rectal Bleeding: A Colonoscopy Audit by Age Group

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DOI 10.1055/s-0046-1822614

Aims The goal of this study was to define the whole etiological spectrum of bleeding per rectum (PR) as detected by colonoscopy and to examine its age-related distribution. The major goal was to test the hypothesis that the fundamental causes of PR differ considerably among age groups. The purpose of this study was to investigate this issue in order to provide a strong framework for enhanced clinical evaluation, risk stratification, and age-appropriate diagnostic techniques for patients with PR [1–5].

Methods We conducted a retrospective audit of patients presenting with PR who underwent colonoscopy at our institution. A total of 752 colonoscopies performed for PR between January 2024 and mid-September 2025 were analyzed. Patients were stratified into four age groups: Children (2–16 years), Young Adults (17–40 years), Middle Age (41–60 years), and Old Age (61–85 years). All collected data were compiled and analyzed statistically using SPSS version 26 (► Table 1).

► **Table 1** Etiologies of Bleeding PR on Colonoscopy (Total Cases: 752)

1. Internal hemorrhoids

- Total Cases: 294
- Children (2–16 yr): 6 (M:5/F:1)
- Young Adult (17–40 yr): 159 (M:129/F:30)
- Middle Age (41–60 yr): 98 (M:76/F:22)
- Old Age (61–85 yr): 31 (M:24/F:7)

► **Table 1** Etiologies of Bleeding PR on Colonoscopy (Total Cases: 752)

- Involved Colon Part:
2. Colorectal
- Total Cases: 116
- Children (2–16 yr): 3 (M:2/F:1)
- Young Adult (17–40 yr): 34 (M:27/F:7)
- Middle Age (41–60 yr): 72 (M:52/F:20)
- Old Age (61–85 yr): 7 (M:4/F:3)
- Involved Colon Part: R 45, RS 35, S 20, D 15, A 14, TI 1
3. Polyp
- Total Cases: 82
- Children (2–16 yr): 38 (M:26/F:12)
- Young Adult (17–40 yr): 34 (M:20/F:14)
- Middle Age (41–60 yr): 9 (M:7/F:2)
- Old Age (61–85 yr): 1 (M:1/F:0)
- Involved Colon Part: R 20, RS 5, S 8, D 5, A 0, TOC 3, colon & S 1
4. Non specific colitis
- Total Cases: 75
- Children (2–16 yr):
- Young Adult (17–40 yr):
- Middle Age (41–60 yr):
- Old Age (61–85 yr):
- Involved Colon Part:
5. Ulcerative colitis
- Total Cases: 54
- Children (2–16 yr):
- Young Adult (17–40 yr): 18 (M:11/F:7)
- Middle Age (41–60 yr): 23 (M:14/F:9)
- Old Age (61–85 yr): 13 (M:7/F:6)
- Involved Colon Part:
6. Ulcer
- Total Cases: 39
- Children (2–16 yr): 5 (M:2/F:3)
- Young Adult (17–40 yr): 22 (M:19/F:3)
- Middle Age (41–60 yr): 12 (M:10/F:2)
- Old Age (61–85 yr): 0
- Involved Colon Part: SRUS 26, RS 4, S 1, D 4, A/T 1, C 3, TI 24
7. Worms
- Total Cases: 25
- Children (2–16 yr):
- Young Adult (17–40 yr): 9 (M:7/F:2)
- Middle Age (41–60 yr): 9 (M:8/F:1)
- Old Age (61–85 yr): 7 (M:4/F:3)
- Involved Colon Part:
8. Fissure
- Total Cases: 21
- Children (2–16 yr):
- Young Adult (17–40 yr):
- Middle Age (41–60 yr):
- Old Age (61–85 yr):
- Involved Colon Part:

► **Table 1** Etiologies of Bleeding PR on Colonoscopy (Total Cases: 752)**9. TB**

- Total Cases: 19
- Children (2-16 yr):
- Young Adult (17-40 yr): 8 (M:5/F:3)
- Middle Age (41-60 yr): 6 (M:4/F:2)
- Old Age (61-85 yr): 5 (M:4/F:1)
- Involved Colon Part:

10. Diverticular disease

- Total Cases: 8
- Children (2-16 yr):
- Young Adult (17-40 yr):
- Middle Age (41-60 yr): 2 (M:2/F:0)
- Old Age (61-85 yr): 6 (M:6/F:0)
- Involved Colon Part:

11. Rectal varices

- Total Cases: 7
- Children (2-16 yr):
- Young Adult (17-40 yr):
- Middle Age (41-60 yr): 5 (M:5/F:0)
- Old Age (61-85 yr): 2 (M:2/F:0)
- Involved Colon Part: R

12. Ischemic colitis

- Total Cases: 5
- Children (2-16 yr):
- Young Adult (17-40 yr):
- Middle Age (41-60 yr): 5 (M:4/F:1)
- Old Age (61-85 yr):
- Involved Colon Part:

13. Rectal prolapse

- Total Cases: 5
- Children (2-16 yr): 5 (M:3/F:2)
- Young Adult (17-40 yr):
- Middle Age (41-60 yr):
- Old Age (61-85 yr):
- Involved Colon Part: R

14. Fistula

- Total Cases: 2
- Children (2-16 yr):
- Young Adult (17-40 yr):
- Middle Age (41-60 yr): 2 (M:1/F:1)
- Old Age (61-85 yr):
- Involved Colon Part:

Short Forms Key (from the image): – M: Male, F: Female, R: Rectum, RS: Rectosigmoid colon, S: Sigmoid colon, D: Descending colon, T: Transverse colon, A: Ascending colon, C: Caecum, TI: Terminal ileum, TOC: Throughout the colon, SRUS: Solitary Rectal Ulcer Disease.

Results The most common etiology overall was internal hemorrhoids (n = 294, 39.1 %), with its peak prevalence in Young Adults. Colorectal cancer (n = 116, 15.4 %) was the second most frequent finding, showing a marked increase in Middle-Aged patients. Inflammatory conditions were also prominent; Ulcera-

tive Colitis was diagnosed in 54 patients (7.2 %), primarily in Young Adults and Middle-Aged groups, while non-specific colitis accounted for 75 cases (10.0 %). A notable age-dependent shift in pathology was observed: polyps were the leading finding in Children, while diverticular disease was exclusively found in Middle-Aged and Old Age patients.

Conclusions The causes of rectal bleeding demonstrate a distinct and significant variation across age groups. These findings underscore the critical importance of age-stratified risk assessment and diagnostic evaluation for patients presenting with PR, which can lead to more targeted and effective clinical management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Longstreth G.F. 1997; Am J Gastroenterol. 92: 419–424
- [2] Zuberi B.F. et al. 2000; J Pak Med Assoc. 50: 265–267
- [3] Rockey D.C. 2010; Gastrointest Endosc. 71: 366–370
- [4] Niikura R. et al. 2017; PLoS One. 12:e0179715
- [5] Sengupta N., Cifu A.S. 2018; Clin Gastroenterol Hepatol. 16: 501–509

ePoster Connect: Hepatopancreaticobiliary

16/05/2026, 11:05–11:25

ePoster Connect:
Station 2 (Level 0)

eP1288 Endoscopic Ultrasound, Imaging and Biomarker Clues for Early Chronic Pancreatitis: Moving from Suspicion to Detection — A Retrospective Study from France

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DOI 10.1055/s-0046-1822615

Aims Recurrent acute pancreatitis (RAP) is a key turning point toward irreversible pancreatic damage. Early chronic pancreatitis (ECP) represents a potentially reversible phase, yet its recognition remains limited in European clinical practice. This study aimed to assess the prevalence of MRI-defined ECP, based on the 2019 Japanese Pancreas Society (JPS) imaging criterion, among patients with alcohol-related RAP, and to identify clinical predictors associated with structural progression [1, 2].

Methods This retrospective single-center study included consecutive adults hospitalized for alcohol-related RAP between January 2023 and December 2024 at Perpignan General Hospital, France. All patients underwent high-resolution magnetic resonance imaging (MRI) including MR cholangiopancreatography (MRCP) 4–8 weeks after discharge. The MRI-ECP positive criterion was defined as the presence of more than three dilated side branches of the main pancreatic duct, in accordance with the 2019 JPS imaging definition. Patients were categorized as MRI-ECP positive or negative. Demographic, clinical, biochemical, and imaging parameters were systematically compared between groups using non-parametric tests and multivariate logistic regression to identify independent predictors of MRI positivity.

Results Among 26 eligible patients (92 % male, mean age 51.5 ± 9.3 years), nine (34.6 %) exhibited MRI features consistent with ECP. Patients with MRI-defined ECP experienced significantly more RAP episodes (mean 3.9 vs. 2.2, p = 0.021). No significant differences were observed regarding CT severity scores, inflammatory markers, or comorbidities. In multivariate logistic regression, the number of prior RAP episodes remained the only variable associated

with ECP (OR 4.00, 95 % CI 0.79–20.3). Age showed a borderline association ($p = 0.07$).

Conclusions MRI-based evaluation during the inter-critical phase identified early structural pancreatic changes in over one-third of alcohol-related RAP patients. A threshold of three or more acute episodes emerged as a consistent risk marker for early chronic remodeling. To our knowledge, this is the first European study systematically applying the 2019 JPS imaging criterion to alcohol-related RAP. Routine post-discharge MRI surveillance could enable timely recognition of high-risk patients and open a preventive window against chronic progression.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Masamune A., Nabeshima T., Kikuta K., Hamada S., Nakano E., Kume K. et al. Prospective Study of Early Chronic Pancreatitis Diagnosed Based on the Japanese Diagnostic Criteria. *J. Gastroenterol* 2019; 54 (10): 928–935. doi:10.1007/s00535-019-01602-9

[2] Gagyi E.B., Teutsch B., Veres D.S., Pálkás D., Vörhendi N., Ocskay K., Márta K., Hegyi P.J., Hegyi P., Erőss B. Incidence of Recurrent and Chronic Pancreatitis after Acute Pancreatitis: A Systematic Review and Meta-Analysis. *Therapeutic Advances in Gastroenterology* 2024; 17:17562848241255303. doi:10.1177/17562848241255303

eP1289 EUS shear-wave elastography for diagnosis of chronic pancreatitis in a Western population: preliminary results from the SWEG study

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DOI 10.1055/s-0046-1822616

Aims Chronic pancreatitis (CP) is a progressive fibro-inflammatory disease whose early diagnosis remains challenging. Conventional cross-sectional imaging often fails to detect early parenchymal and ductal changes, while endoscopic ultrasound (EUS) with Rosemont criteria (RC) is operator-dependent and may not reliably differentiate early CP from minimal pancreatic changes. Endoscopic ultrasound-based shear wave elastography (EUS-SWE) has emerged as a promising quantitative tool to assess pancreatic stiffness. [1] This prospective study evaluated the feasibility, reproducibility, and diagnostic performance of EUS-SWE for CP in a Western cohort and explored its correlation with RC and the number of EUS features.

Methods All consecutive adult patients undergoing biliopancreatic or upper GI EUS between April and September 2025 at our tertiary center were evaluated. Exclusion criteria included known or suspected pancreatic adenocarcinoma, previous pancreatic or gastric surgery, lack of informed consent, or disagreement between two expert endosonographers regarding RC classification. For each patient, demographic and clinical data were collected, RC were independently assessed by two endoscopists, and five SWE measurements were obtained in the pancreatic body. Only measurements with VsN > 50 % were considered reliable. According to RC, patients were classified as CP (“consistent” or “suggestive” RC) or non-CP (“indeterminate” or “normal” RC). Technical feasibility of EUS-SWE was assessed. Statistical analyses evaluated the association between SWE values and RC (RC class and number of RC features), while diagnostic performance was assessed via ROC analysis.

Results Of 298 screened patients, 82 were included. The mean age was 63 years, and most participants were Caucasian. Based on RC, 18 patients (22 %) were classified as CP and 64 (78 %) as non-CP. EUS-SWE proved feasible in 96.5 % of cases, with a mean acquisition time of 65 seconds. Reproducibility was acceptable, with a mean IQR/median of 21.2 % and no significant differences between CP and non-CP groups. Mean shear wave velocity (Vs) values increased progressively across RC classes: 1.88 m/s in normal pancreas, 2.13 m/s in indeterminate cases, 2.62 m/s in suggestive CP, and 2.86 m/s in consistent CP. Mean Vs was significantly higher in CP compared with non-CP (2.67 vs 1.97 m/s,

$p < 0.001$). SWE values correlated positively with both the number of RC features ($rs = 0.32$, $p = 0.006$) and RC class ($rs = 0.39$, $p < 0.001$). ROC analysis yielded an AUC of 0.74, indicating moderate diagnostic accuracy. The optimal cut-off for CP diagnosis was 2.28 m/s, with 72 % sensitivity, 75 % specificity, and a likelihood ratio of 2.89 (► **Table 1**).

► **Table 1**

	TOT (n = 82)	CP (n = 18)	
Variable		Consistent (n = 4)	Suggestive (n = 14)
EUS-SWE Vs (m/s, DS)	2,13 (0,8)	2,67 (0,81)	
		2,86 (0,87)	2,62 (0,81)
IQR/med (% , DS)	21,2 (14)	19,4 (14,7)	
		18,5 (8,4)	19,6 (16,3)

Conclusions In this prospective cohort, EUS-SWE was highly feasible, rapid, and reproducible. SWE values correlated with RC and differentiated CP from non-CP with moderate accuracy, supporting its potential as a complementary, objective tool for CP assessment. The lower diagnostic performance compared with previous Asian studies may reflect the lower prevalence of advanced CP, with a predominance of early or preclinical disease in our cohort. Larger multicenter studies are needed to validate SWE cut-offs in diverse populations, clarify potential confounders, and assess whether longitudinal SWE monitoring can predict disease progression, pancreatic insufficiency, or pancreatic cancer risk.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Yamashita Y, Tanioka K, Kawaji Y et al. Utility of elastography with endoscopic ultrasonography shear-wave measurement for diagnosing chronic pancreatitis. *Gut Liver*. 2020; 14 (5): 659–664

eP1290 Impact of Asymptomatic Duodenal Invasion on EUS-guided Biliary Drainage Dysfunction in Patients with Distal Malignant Biliary Obstruction: a Single-Center Retrospective Study

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DOI 10.1055/s-0046-1822617

Aims EUS-guided biliary drainage (BD) is highly effective in patients with distal malignant biliary obstruction (DMBO). However, the concomitant presence of duodenal invasion (DI) may negatively affect the outcome of EUS-BD. We aimed to investigate the effect of duodenal invasion on the outcomes of EUS-BD.

Methods This retrospective single-center study included patients who underwent EUS-BD for DMBO at our institution from August 2023 to October 2025. EUS-BD outcomes, the presence of DI, as well as associated symptoms and treatments performed were evaluated. Categorical variables were compared using the chi-square test [1–6].

Results During the study period, 38 patients underwent EUS-BD for DMBO (18 males, 57.9 %; median age 73, range 50–96; 15 choledochoduodenostomies, 13 gallbladder drainages, 10 hepaticogastrostomies). In 21/38 (55.3 %) a co-axial double pigtail plastic stent was placed. Twenty-six patients (26/38; 68.4 %) presented endoscopic signs of DI. Among these, 14/26 (53.8 %) were treated for gastric outlet obstruction symptoms (9 EUS-guided gastroenterostomies, 5 duodenal SEMs). The technical and clinical success rates of EUS-BD were

38/38 (100 %) and 36/38 (94.7 %), respectively. Six patients (6/36, 16.7 %; 3 choledochoduodenostomies; 3 gallbladder drainages) experienced EUS-BD dysfunction after a median of 63 days (range 21–90). Despite a trend indicating an increased risk of dysfunction in presence of DI, no significant differences were found between patients with and without DI (6/26, 23.1 % vs 0/12, 0 %, $p = 0.15$). However, patients with asymptomatic DI had a significantly higher dysfunction rate compared to symptomatic treated patients (5/12, 41.7 % vs 1/14, 7.1 %; $p = 0.037$).

Conclusions Asymptomatic DI is associated with a higher risk of EUS-BD dysfunction. If confirmed in larger cohorts, these findings suggest that specific management strategies may be needed for these patients to improve EUS-BD outcomes.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Vanella G, Leone R, Frigo F, Bronswijk M, van Wanrooij RJ, Tamburrino D et al. Endoscopic ultrasound-guided choledochoduodenostomy versus hepaticogastrostomy combined with gastroenterostomy in malignant double obstruction (CABRIOLET_Pro): A prospective comparative study. *DEN Open* 2025; 5 (1): e70024
- [2] Vanella G, Bronswijk M, van Wanrooij RL, Dell'Anna G, Laleman W, van Malenstein H et al. Combined endoscopic management of Biliary and gastric OutLET obstruction (CABRIOLET Study): A multicenter retrospective analysis. *DEN Open* 2023; 3 (1): e132
- [3] Vanella G, Bronswijk M, Dell'Anna G, Voermans RP, Laleman W, Petrone MC et al. Classification, risk factors, and management of lumen apposing metal stent dysfunction during follow-up of endoscopic ultrasound-guided choledochoduodenostomy: Multicenter evaluation from the Leuven-Amsterdam-Milan Study Group. *Dig Endosc* 2023; 35 (3): 377–88
- [4] Geyl S, Redelsperger B, Yzet C, Napoleon B, Legros R, Dahan M et al. Risk factors for stent dysfunction during long-term follow-up after EUS-guided biliary drainage using lumen-apposing metal stents: A prospective study. *Endosc Ultrasound* 2023; 12 (2): 237–44
- [5] Fritzsche JA, Fockens P, Besselink MG, Busch OR, Daams F, Wielenga MCB et al. Optimizing EUS-guided choledochoduodenostomy with lumen-apposing metal stents for primary drainage of malignant distal biliary obstruction (SCORPION-IIp): a prospective pilot study. *Gastrointest Endosc* 2025; 101 (5): 1009–16
- [6] van Wanrooij RJ, Bronswijk M, Kunda R, Everett SM, Lakhtakia S, Rimbas M et al. Therapeutic endoscopic ultrasound: European Society of Gastrointestinal Endoscopy (ESGE) Technical Review. *Endoscopy*. 2022; 54 (3): 310–32

eP1291 Acute Pancreatitis-Related Splanchnic Venous Thrombosis Hungarian Single Center Retrospective Data Analysis

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DOI 10.1055/s-0046-1822618

Aims Acute Pancreatitis (AP) is a common gastrointestinal disease with an incidence of 34 per 100,000 and mortality of up to 30 % in its severe form. Frequently, AP is complicated locally and systemically. Splanchnic Venous Thrombosis (SVT) is a well-known local vascular complication of AP involving the portal vein (PV), the splenic vein (SV), and the superior mesenteric vein (SMV) in combination or alone. [1]

Splanchnic vein thrombosis occurs in approximately 16.6–22.6 % of patients with acute pancreatitis. It often presents with non-specific chronic abdominal pain and can lead to significant complications due to portal hypertension. These include variceal bleeding, splenomegaly, and, in more severe cases, bowel ischemia resulting from impaired venous drainage. Early recognition and appropriate management are crucial to prevent long-term morbidity. [2]

Methods The aim is to study and analyze pancreatitis-related Splanchnic Venous Thrombosis patients' epidemiological data, anticoagulant therapy and characteristics at the Institute of Pancreatic Diseases, Semmelweis University.

Results At the Institute, we analysed 1,141 patients with AP admitted between January 2022, and February 2024. We identified 45 cases of pancreatitis-related thrombosis, and 26 cases were included for detailed analysis.

Out of 1,141 patients, 26 were diagnosed with pancreatitis-related SVT. Among these, 19 (73 %) were male and 7 (27 %) were female and 19 patients experienced moderate acute pancreatitis (AP), while 7 had severe AP. Mean age of the patient population was 48.3 years (SD 13.5), with male patients 44.7 years (SD 10.2) and female patients 58 years (SD 16.2). Average length of hospitalization was 14.5 days (SD 10.4). The splenic vein (SpV) was the most affected vessel, involved in 11 patients, followed by Superior Mesenteric Vein (SMV) in 3 patients, portal vein (PV) in 2 patients and 10 patients with two or more vessel involved of SpV, SMV, and PV. In 26 patients, 24 received low molecular weight heparin (LMWH), while 2 received direct oral anticoagulants (DOAC) during hospitalization. After discharge, 7 patients continued with LMWH, and 18 received DOAC. Of the 26 patients, 17 (65 %) showed recanalization after receiving LMWH (4) and DOAC (13) therapy after discharge.

Conclusions Our data on anticoagulant therapy has a better outcome in patients with acute pancreatitis related SVT. Therefore, dynamic changes of SVT should be closely monitored, and anticoagulant therapy should be rapidly initiated to prevent the further extension of thrombosis and subsequent complications. Unfortunately, major guidelines on the management of AP are silent on this aspect. Further prospective randomised studies needed to validate the data on different anticoagulant therapies

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Kawata et al. *Thrombosis Research*. 2021;
- [2] Lee et al. *Nature*. 2019;

ePoster Connect: Stomach and Duodenum

16/05/2026, 11:05–11:25

ePoster Connect:
Station 3 (Level 0)

eP1292 Dyspepsia in autoimmune atrophic gastritis: an underrecognized manifestation?

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DOI 10.1055/s-0046-1822619

Aims The relationship between autoimmune atrophic gastritis (AIG) and dyspepsia is known, but the evidence is scarce. The aim of this study was to evaluate the prevalence of dyspepsia and its subclasses and to evaluate correlations between clinical and biochemical parameters in a cohort of patients with AIG at a tertiary referral center.

Methods All consecutive patients with histologically confirmed AIG referring to our Center from May 2022 to November 2025 were included and retrospectively analyzed. Clinical, biochemical, and histological variables were extracted from a dedicated database. Associations between dyspepsia subclasses and risk factors (i.e., smoking, Body Mass Index (BMI), gastrin, chromogranin levels) were tested using chi-square, Spearman and Mann-Whitney tests, with bootstrap-derived confidence intervals for effect sizes.

Results A total of 160 patients were included, 115 females (71,8 %) and 45 males (29,2 %) with a median age at the diagnosis of 56 years old (range 17-88 years old). Dyspeptic symptoms were reported by 55 patients (34,4 %) at diagnosis, 45 females (81,8 %) and 10 males (10,2 %) with a median age at the diagnosis of 58,4 years old (range 27-88 years old). Postprandial Distress Syndrome (PDS) was the most frequent subtype (20 %), followed by Epigastric Pain Syndrome (EPS, 9,4 %), reflux-like symptoms (8,8 %), and nausea/vomiting (6,2 %). EPS showed a significant association with elevated chromogranin levels ($p=0.007$, Cramér's $V=0.435$), whereas PDS was inversely correlated with BMI ($\rho=-0.195$, $p=0.036$). No significant correlations were found between dyspeptic symptoms and gastrin, smoking or alcohol consumption. Of note, smoking emerged as a significant risk factor for body-fundus atrophy ($p=0.023$). 14 patients (25,45 %) were prescribed proton pump inhibitors (PPI) by their general practitioner with total benefit in 3 cases (21,4 %), partial in 2 (14,3 %) and no benefit in the remaining 9 patients (64,3 %). 20 patients (36,4 %) were given mucosal protective agents with full benefit in 15 patients (75 %), partial benefit in 4 (20 %) and no benefit in 1 patient only (5 %). 18 patients (32,7 %) were prescribed prokinetics agents with full benefit in 9 patients (50 %), partial benefit in 5 patients (27,8 %) and no benefit in 4 patients (22 %). *Helicobacter Pylori* was found in 12 patients (7,5 %); once eradicated, 6 patients and 5 patients reported full/partial symptom improvement respectively, one patient only experienced no improvement.

Conclusions Dyspepsia—mainly PDS and EPS—is a frequent manifestation of AIG, our data being in line with available literature. Elevated chromogranin levels correlate with EPS, suggesting a potential link with neuroendocrine hyperplasia, while lower BMI is associated with PDS, indicating possible nutritional impairment in symptomatic patients. The management of dyspepsia in the setting of AIG is challenging. In current cohort, only few patients were prescribed PPIs with poor outcomes, and, in fact, PPI are generally discouraged in this subset of patients who are hypochlorhydric. The use of prokinetic and mucosal protective agents appear promising, but further data are warranted to better standardize their use.

Conflicts of Interest Cesare Hassan: Fujifilm Co. (consultancy); Medtronic Co. (consultancy). Alessandro Repici has served as a consultant for Boston Scientific, ERBE, Q3 Medical, Fujifilm, Odin, and Olympus.

eP1293 Endoscopic Gastric Mega-plication (MEGA) for the Primary Treatment of Obesity: European Multicenter Retrospective Cohort, 6 Month Outcomes

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DOI 10.1055/s-0046-1822620

Aims Introduction: Obesity is a chronic, highly prevalent disease. Although bariatric surgery is the most effective treatment, access remains limited to a small proportion of eligible patients. Endoscopic bariatric techniques have emerged as minimally invasive alternatives. MEGA (Endoscopic Gastric Mega-plication) is a variant of POSE 2.0 that employs two G-LIX, a 33 mm G-PROX, and a reduced suture pattern (average: six) to achieve double gastric plication, aiming to improve procedural efficiency and sustainability [1–3].

Primary objective: To evaluate the technical reproducibility, clinical efficacy, and safety of the MEGA technique at 6 months in a multicenter cohort of patients with obesity.

Secondary objectives: To analyze inter-center variability in weight loss outcomes and explore correlations between technical and clinical variables.

Methods Retrospective cohort study including 54 patients with BMI > 27 and comorbidities or BMI > 30, treated with MEGA at six European centers experienced in bariatric endoscopy. Procedures were performed by local endoscopists after standardized training delivered by a single instructor. Technical (number of sutures, procedure time) and clinical variables (%TBWL, %EBWL) were collected. Comparative and correlational analyses were performed.

Results At 6 months, mean %TBWL was 14.75 ± 6.24 % and mean %EBWL was 56.17 ± 14.91 %, with no significant differences among centers ($p=0.406$). A total of 81.48 % of patients achieved > 10 % TBWL (44/54). No adverse events were reported. The mean number of sutures was 6.36 ± 0.76 , and the mean procedure time was 31.4 ± 11.30 minutes. No significant correlation was found between number of sutures and %TBWL ($\rho=0.20$; $p=0.747$). A moderate, negative Pearson correlation was observed between baseline BMI and %EBWL ($r=-0.542$), indicating that patients with a higher baseline BMI tended to exhibit a lower percentage of excess body weight loss, likely due to greater baseline excess weight.

Conclusions MEGA proved to be an effective, safe, and reproducible endoscopic technique. Its consistent outcomes across centers support its implementation as a sustainable option for the endoscopic management of obesity. Further prospective studies with larger sample sizes are warranted to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Turro R., Ortega Sabater A et al. The Endoscopic Mega Plication Technique. A New Approach of Use the IOP Platform Doubling the Size of the Bites and Reducing the Number of Sutures Over 40 % and the Cost of the Procedure. Endoscopy. 2023;
- [2] Al Khatry M, Abu Dayyeh BK The Primary Obesity Surgery Endoluminal 2.0 Enfolding Technique (POSE2.0et): Modification to Enhance Efficiency and Increase Restriction. Obesity Surgery 2023. doi:10.1007/s11695-023-06569-4
- [3] Alshamali Y, Alwahhabi F, Ortega A, Galvao M, Turro R. Mega-plication is a novel gastric remodeling procedure for weight loss. VideoGIE 2023; 8 (11): 475–8

eP1294 Cold Snare Polypectomy: A Safe Alternative to Hot Snare Polypectomy for Small Gastric Polyps

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DOI 10.1055/s-0046-1822621

Aims Polypectomy is a common endoscopic procedure with cold snare and hot snare techniques being widely used. Hot snare polypectomy involves cautery, which may increase the risk of thermal injury and related complications. Although cold snare polypectomy has a well-established safety and efficacy profile for small colonic polyps, comparative data on the clinical outcomes of these two methods for gastric polyps remains limited.

Methods A retrospective analysis was conducted on 161 consecutive gastric polypectomies for polyps under 10mm, including 41 patients that underwent cold snare polypectomy and 120 patients that underwent hot polypectomy over a period of 5 years.

Results The mean polyp size differed significantly between groups, being smaller in the cold snare group (5.20 ± 1.18 mm vs 6.34 ± 1.49 mm; $p<0.001$). The average Charlson Comorbidity Index was 3, with no significant differences between the groups regarding the use of anticoagulant or antiplatelet therapy. Statistically significant differences were observed in both the location and histological type of the polyps between the two techniques ($p=0.003$; $p<0.001$).

Cold snare polypectomy was more frequently used for polyps located in the fundus and for fundic gland polyps, whereas hot snare polypectomy was more commonly utilized for polyps located in the cardia and antrum. Submucosal injection with gelofusine and adrenaline was more frequently associated with the hot snare technique ($p = 0.001$). Regarding clinical outcomes, intra-procedural bleeding occurred in 16.1 % of cases and was successfully managed endoscopically in all instances, mainly with clips. No cases of delayed bleeding or perforation were observed. There were no significant differences between the groups concerning complete histological resection or polyp recurrence.

Conclusions Cold snare polypectomy demonstrated comparable safety and efficacy to hot snare polypectomy in the resection of small gastric polyps, possibly representing a preferable approach to avoid thermal injury.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1295 Efficacy and Safety of Endoscopic Submucosal Dissection in the Treatment of Superficial Gastric Neoplasia: Interim Analysis of a Prospective Multicenter National Registry (SIED)

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DOI 10.1055/s-0046-1822622

Aims Endoscopic Submucosal Dissection (ESD) is considered the standard treatment for early gastric neoplastic lesions according to Japanese and ESGE guidelines. However, evidence from Western populations remains limited. This study reports the interim results of a single and high-volume Western referral center from a prospective multicenter national registry endorsed by the SIED, evaluating ESD efficacy, safety, and the diagnostic accuracy of biopsies pre-ESD in a real-world Western cohort [1–4].

Methods We analyzed 105 consecutive patients who underwent gastric ESD between January 2021 and June 2025 at a tertiary referral center. Demographics, lesion characteristics, procedural outcomes, adverse events, and follow-up findings were assessed. Primary endpoints were en bloc, R0 and curative resection rates, and procedure-related adverse events. Secondary endpoints included recurrence, metachronous lesions, predictors of treatment failure, and diagnostic accuracy of biopsies pre-ESD.

Results En bloc resection were achieved in 92.4 %, R0 resection in 90.5 %, and curative resection in 85.7 % of cases, respectively. Procedure-related perforation and delayed bleeding occurred in 4.8 % of cases each. Median procedure time was 60 minutes and median hospital stay was 3 days. No local recurrence was observed during follow-up, while metachronous lesions occurred in 9.5 % of patients. Lesions located in the cardia were significantly associated with lower en bloc resection rates ($p = 0.0013$). Concordance between pre-ESD biopsy and final ESD histology was limited ($\kappa = 0.24$), with a biopsy sensitivity of 50 % and specificity of 96.9 % for early gastric cancer.

Conclusions In this large Western prospective cohort, ESD demonstrated high efficacy and a favorable safety profile, fully comparable to the outcomes from Asian referral centers. The absence of local recurrence confirms its oncological reliability. The high rate of biopsy underdiagnosis underscores the importance of ESD for accurate staging and definitive treatment, particularly for lesions that appear to exhibit low or intermediate dysplasia. These results support the broader adoption of ESD in Western clinical practice in the future.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Pimentel-Nunes P, Libânio D, Bastiaansen BAJ, Bhandari P, Bisschops R, Bourke MJ et al. Endoscopic submucosal dissection for superficial gastrointestinal lesions: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2022. *Endoscopy*. giugno 2022; 54: 591–622
- [2] Japanese Gastric Cancer Association Japanese Gastric Cancer Treatment Guidelines 2021 (6th edition). *Gastric Cancer*. gennaio 2023; 26: 1–25
- [3] Gotoda T, Yanagisawa A, Sasako M, Ono H, Nakanishi Y, Shimoda T et al. Incidence of lymph node metastasis from early gastric cancer: estimation with a large number of cases at two large centers. *Gastric Cancer*. dicembre 2000; 3 (4): 219–25
- [4] Gotoda T, Ho KY, Soetikno R, Kaltenbach T, Draganov P. Gastric ESD. *Gastrointestinal Endoscopy Clinics of North America*. aprile 2014; 24 (2): 213–33

ePoster Connect: Colon and Rectum

16/05/2026, 11:05–11:25

ePoster Connect:
Station 4 (Level 0)

eP1296V EUS-guided Coil Embolization of Peristomal Ectopic Varices: a Rare Complication of Portal Hypertension

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DOI 10.1055/s-0046-1822623

Abstract Text

An 85-year-old patient with multiple comorbidities, including a permanent colostomy after abdominoperineal resection for rectal adenocarcinoma and MASLD-related decompensated cirrhosis on primary prophylaxis with carvedilol, presented with four transfusion-requiring episodes of peristomal bleeding over six months. CT imaging demonstrated peristomal variceal collaterals. Due to comorbidities, an endoscopic therapeutic approach was selected. Transstomal EUS enabled identification of the ectopic varices and their feeding vessel. Combined coil-and-cyanoacrylate embolization was performed using two coil sets (6 × 14 mm and 8 × 14 mm, respectively), achieving immediate flow cessation. The patient was discharged 24 hours post-procedure with stable hemoglobin and no recurrent gastrointestinal hemorrhage during follow-up.

Video http://data.process.y-congress.com/ScientificProcess/Data/106/660/1670/2cfde5d5-8a11-4990-8e50-e6d1483ba7d3/Uploads/19978_EUS-guided_coil%20embolization%20of%20peristomal%20ectopic%20varices.mp4

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1297 Reliability and validity of Linked Color Imaging (LCI) in assessing mucosal inflammation in Ulcerative Colitis

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DOI 10.1055/s-0046-1822624

Aims Accurate endoscopic assessment of mucosal inflammation is critical in managing Ulcerative Colitis (UC). Mayo endoscopic score (MES) and Ulcerative

Colitis Endoscopic Index of Severity (UCEIS) have significant interobserver variability. The role of Linked Color Imaging (LCI) in assessing inflammation is uncertain. We aimed to assess the reliability of LCI in UC.

Methods A multi-centre international survey-based study was designed with 20 sets of high-definition white light (HDWLE) images or videos matched with LCI. Each set had varying severities of inflammation as determined by Nancy and Picasso histopathology scores. The MES and UCEIS were rated along with confidence level (high vs low). To assess interobserver variability, we used percentage agreement and Kappa score with 95 % confidence intervals stratified by imaging modality and scoring system. A mixed logistic regression model was constructed to assess accuracy.

Results 43 gastroenterologists from 4 centres were included. 26 (59.1 %) were experts and 11 (25.6 %) had prior LCI experience. Interobserver variability was moderate overall with percentage agreement between 62–70 % and Kappa scores between 0.48–0.56. There was no difference in interobserver variability between HDWLE and LCI. Agreement was slightly higher for UCEIS than MES (► **Table 1**). 73 % reported high confidence prediction with confidence decreasing with increase in histological severity. Participants rated severity accurately 66 % of the time using MES with accuracy decreasing with increase in histological severity. Accuracy was higher for participants with prior LCI experience. Results for UCEIS were inferior with accuracy at 58 % overall. There was no evidence of a difference in accuracy between the two imaging modalities irrespective of the index used for scoring.

► **Table 1** Interobserver variability results

Imaging modality	Mayo	UCEIS
HDWLE	Percent agreement = 62 %	Percent agreement = 69 %
	Kappa = 0.49 (0.38, 0.59) *	Kappa = 0.55 (0.41, 0.68) *
LCI	Percent agreement = 62 %	Percent agreement = 70 %
	Kappa = 0.48 (0.38, 0.58) *	Kappa = 0.56 (0.43, 0.69) *
*95 % confidence interval		

Conclusions Interobserver variability remains a challenge in accurately assessing inflammation in UC despite advances in technology and validated scoring systems. Our study suggests that LCI achieves moderate interobserver agreement with accuracy of 66 % and is not superior to HDWLE.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1298 Exploring the driving forces for surgery for non-malignant colorectal polyps within a NSW hospital network

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DOI 10.1055/s-0046-1822625

Aims Non-malignant colorectal polyps (NMCP) are effectively managed by advanced endoscopic resection techniques, however rates of surgery remain high. We sought to understand the reasons for this.

Methods A retrospective review was performed across our network to identify all elective surgery for NMCP between January 2011 and December 2024. Colectomy for polyposis syndromes were excluded. Electronic patient records were reviewed. Results were stratified as pre-2018 and post-2018, the latter reflecting a period where involvement of a tissue resection expert (TRE) for the management of large NMCP was recommended in major societal guidelines.

Results 116 elective resections for NMCP occurred (116/1951, 5.9 % of colorectal neoplasia surgery). Mean age 67.3 years, 51 % male. Mean ASA 2.46. 49.1 % of surgery occurred in a tertiary facility (57/116). Mean length of stay was 9.12 days (Range 1.08 – 143 days, SD 14). 85.3 % were laparoscopic. Major adverse events occurred in 30.2 % of cases (35/116). Gastroenterologists accounted for 57.1 % of referrals. 85 % of cases had a preoperative biopsy. Lesion location was right colon 76.9 %, left colon 13.8 % and 10.3 % rectum. Mean lesion size was 30.5mm (Range 1.5 – 85mm, SD 18.3). Suspected cancer was the most common indication for surgery (59/116, 50.9 %), followed by appendix involvement (11/116, 9.5 %) (► **Table 1**). TRE were involved in just 20 % of cases but more likely in a tertiary facility (p = 0.049). After 2018 there was a significant decrease in surgery for NMCP across both tertiary and non-tertiary facilities (77/1039, 7.4 % of colorectal neoplasia surgery pre-2018 and 39/912, 4.3 % post-2018, p = 0.0035). TRE involvement improved post-2018 (15.9 % vs 27.8 % p = 0.008).

► **Table 1** A comparison of the reasons given for surgery for non-malignant colorectal polyps pre-2018 and post-2018

Reason for Surgery	Pre 2018(%)	Post 2018(%)
Suspected Cancer	36(46.8%)	23(59%)
Appendiceal	4(5.2%)	7(17.9%)
Failed EMR – Technical reasons	5(6.5%)	1(2.6%)
Failed EMR – ICV	2(2.6%)	2(5.1%)
Failed EMR – Non Lifting	3(3.9%)	0
Size	4(5.2%)	1(2.6%)
Recurrence	4(5.2%)	1(2.6%)
Suspected Serrated Polyposis	4(5.2%)	1(2.6%)
Suspected Polyposis	3(3.9%)	0
Involving ICV – Not attempted	2(2.6%)	1(2.6%)
Patient Election	0	1(2.6%)
Suspected Fibrosis	1(1.3%)	0
Not Recorded	9(11.7%)	1(2.6%)
Total	77(100%)	39(100%)

Conclusions Surgery rates for NMCPs have fallen. Despite this, unacceptable rates of surgery for NMCP continue to occur without adequate TRE involvement. All cases with benign histology on biopsy should be discussed with a TRE prior to surgery in a multidisciplinary team format.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1299 Low diagnostic yield for routine biopsy in endoscopically normal post-EMR scars: a longitudinal real-world analysis

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DOI 10.1055/s-0046-1822626

LBA ePosters

eP1300 Patient Preferences Regarding Bleeding Versus Thromboembolic Risk After DOAC Interruption for High-Risk Endoscopic Procedures: An International Survey Informing the Design of the RESUME Trial

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DOI 10.1055/s-0046-1822908

Aims Patients with atrial fibrillation (AF) undergoing high-risk endoscopic procedures face competing risks of delayed postprocedural bleeding and stroke, yet no randomized evidence guides the optimal timing of direct oral anticoagulant (DOAC) resumption. Major society guidelines have explicitly acknowledged this evidence gap, and current recommendations rely entirely on expert opinion. Although clinician equipoise regarding DOAC resumption timing has been described, patient perspectives on this clinical tradeoff have never been assessed in the endoscopy literature. Patient-reported outcome priorities frequently diverge from clinician assumptions in procedural medicine, yet this well-documented discordance remains largely unexamined in gastrointestinal endoscopy. We aimed to characterize patient awareness of evidence gaps and preferences regarding bleeding versus stroke risk to inform the design of the RESUME trial, a proposed, large multicenter randomized trial currently seeking funding in the US and Canada.

Methods We conducted a cross-sectional survey of patients with AF, distributed electronically from 19 January through 2 February, 2026 through two international patient advocacy organizations (Arrhythmia Alliance and StopAFib.org). The survey assessed awareness of existing evidence, outcome prioritization via both a forced-choice question (major bleeding versus disabling stroke) and a five-point ordinal scale, and demographic and clinical characteristics. Subgroup analyses evaluated the influence of prior stroke/TIA, prior major bleeding, age, sex, and geographic region on preferences using Wilcoxon rank-sum and Kruskal-Wallis tests.

Results 477 patients were included (92.5 % currently taking a DOAC; 50.3 % aged ≥ 75 ; 57 % female). Respondents resided in North America (70 %) and Europe (27.5 %). Paradoxically, 54.6 % reported confidence that clear guidance on DOAC resumption timing exists, despite the absence of randomized evidence. Patient preferences regarding bleeding versus stroke were heterogeneous and symmetrically distributed: 28.7 % feared bleeding more, 38.1 % expressed equal concern, and 33.3 % feared stroke more. Critically, outcome preferences did not differ by prior stroke or TIA ($p = 0.3$), prior major bleeding ($p = 0.72$), age, sex, or geographic region — demonstrating that this uncertainty is genuinely population-wide.

Conclusions This is the first study to characterize patient perspectives on the bleeding-versus-stroke tradeoff after DOAC interruption for high-risk endoscopy. Patient preferences are heterogeneous, symmetrically distributed, and independent of clinical history and demographics — findings that mirror the wide practice variability observed among endoscopists. Over half of patients incorrectly believe evidence-based guidance already exists, underscoring the urgency of generating definitive data. These results provide the patient-centered ethical justification for randomization in the RESUME trial and demonstrate international generalizability across North American and European populations.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1301 Diagnostic performance of the immunochemical fecal occult blood test (FIT) as an interval test in Lynch Syndrome: a systematic review and meta-analysis

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DOI 10.1055/s-0046-1822909

Aims To describe participation rates and the diagnostic performance of FOBT for detecting adenoma, advanced adenoma (AA), and colorectal cancer (CRC) in patients with Lynch Syndrome (LS) during the interval between surveillance colonoscopies [1–5].

Methods A systematic review and meta-analysis were conducted following a literature search in PubMed, Embase, and Scopus from inception to October 2025 for articles reporting participation rates and diagnostic performance in LS patients in the interval between colonoscopies. Results were obtained for different immunochemical FOBT (iFOBT/FIT) models using cut-offs of 2, 4, and 10 μg Hb/g of stool. For each cut-off, true positives, true negatives, false positives, and false negatives were extracted to calculate sensitivity (Se), specificity (Sp), and diagnostic odds ratio (DOR) for adenoma, AA, and CRC through a diagnostic test meta-analysis. The pooled participation rate and its 95 % confidence interval (CI) were also calculated.

Results The initial search retrieved 283 studies, of which 4 were ultimately included, comprising a total of 886 LS patients (29.4 % with MLH1 mutations, 31.7 % MSH2, 24.2 % MSH6, 11.51 % PMS2, and 3.2 % EPCAM). Mean age was 51.6 (41.7–61.5) years and 56 % were women. The time from FIT to colonoscopy ranged from 7 to 77 days. The pooled participation rate was 71.8 % (95 % CI 60.5–83.1).

For adenoma, Se was 22 %, 20 %, and 22 %; Sp was 88 %, 91 %, and 92 %; and the DOR was 2.24, 2.44, and 4.51 for cut-offs of 2, 4, and 10 μg Hb/g, respectively. For advanced adenoma, Se was 78 %, 78 %, and 44 %; Sp was 87 %, 91 %, and 87 %; and the DOR was 21.82, 36.19, and 6.49 for cut-offs of 2, 4, and 10 μg Hb/g, respectively. For CRC, Se was 79 %, 79 %, and 56 %; Sp was 85 %, 90 %, and 85 %; and the DOR was 19.48, 35.31, and 6.78 for cut-offs of 2, 4, and 10 μg Hb/g, respectively.

Conclusions FIT shows excellent diagnostic performance for advanced neoplastic lesions (AA and CRC) in patients with Lynch syndrome, particularly at low cut-offs ($< 4 \mu\text{g}$ Hb/g). These findings support its use as an interval tool to prioritize colonoscopies in settings of healthcare overload and to personalize surveillance periodicity (annual vs biennial) in routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Gerrard AD, Maeda Y, Strachan J, Speake D, Dunlop MG, Din FVN. Diagnostic Performance of Faecal Immunochemical Testing (FIT) in Patients with Lynch Syndrome Scheduled for Colonoscopic Surveillance. *Diagnostics (Basel)* 2024; 14 (21): 2431. doi:10.3390/diagnostics14212431
- [2] Gerrard AD, Maeda Y, Strachan J, Speake D, Dunlop MG, Din FVN. Diagnostic Performance of Faecal Immunochemical Testing (FIT) in Patients with Lynch Syndrome Scheduled for Colonoscopic Surveillance. *Diagnostics (Basel)* 2024; 14 (21): 2431. doi:10.3390/diagnostics14212431
- [3] Digby J, Cleary S, Gray L, Datt P, Goudie DR, Steele RJC et al. Faecal haemoglobin can define risk of colorectal neoplasia at surveillance colonoscopy in patients at increased risk of colorectal cancer. *United European Gastroenterol J.* 2020; 8 (5): 559–566. doi:10.1177/2050640620913674
- [4] van Lier ELSA, de Boer NKH, van Leerdam ME, Dekker E, Jacobs MAJM, Koornstra JJ et al. Faecal Immunochemical Test to Detect Colorectal Neoplasia in Lynch Syndrome: A Prospective Multicenter Study. *Am J Gastroenterol* 2025; 120 (3): 632–641. doi:10.14309/ajg.0000000000003043
- [5] Lincoln AG, Benton SC, Piggott C, Sheikh SR, Beggs AD, Buckley L et al. Risk-stratified faecal immunochemical testing (FIT) for urgent colonoscopy in Lynch syndrome during the COVID-19 pandemic. *BJs Open* 2023; 7:zrad079. doi:10.1093/bjsopen/zrad079

eP1302 The Efficacy of a Novel Vibrating Elevator Cleaning Brush in the Reprocessing of Linear Echoendoscopes

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DOI 10.1055/s-0046-1822910

Aims The elevator mechanism of linear echoendoscopes is difficult to reprocess, posing an infection risk. We developed a novel cleaning brush for this area and aimed to determine its optimal use parameters and clinical efficacy [1].

Methods The study included three phases. Phase I identified optimal parameters using ATP testing and microorganism culture on artificially contaminated echoendoscopes. In phase II, six echoendoscopes were randomized to cleaning with the novel or conventional brush for 12 months, with monthly expert image quality assessment. Phase III randomly assigned 204 clinically used linear echoendoscope to the novel or conventional brush group, followed by ATP testing and microorganism culture.

Results The optimal parameters were a vibration frequency of 500 kHz for 20 seconds. After 12 months, the mixed linear model results showed no significant differences in expert scores between groups. Furthermore, the novel brush group demonstrated significantly lower rates of overall (18.6% vs. 36.3%; $P = 0.005$) and elevator area (15.7% vs. 30.4%; $P = 0.013$) manual cleaning failure. After high-level disinfection, the microorganism contamination rate (1.0% vs. 7.8%; $P = 0.017$) and positive culture rate (8.8% vs. 20.6%; $P = 0.018$) at the elevator area were also significantly lower.

Conclusions The novel elevator cleaning brush, used at the optimal parameter of 500 kHz for 20 seconds, did not compromise imaging quality compared to conventional brush. In clinical practice, it significantly improved the manual cleaning quality of the elevator area and reduced the microorganism contamination risk after reprocessing compared to the conventional brush.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Beilenhoff U, Bieriing H, Blum R et al. Reprocessing of flexible endoscopes and endoscopic accessories used in gastrointestinal endoscopy: Position Statement of the European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology Nurses and Associates (ESGENA) – Update 2018 [J]. *Endoscopy* 2018; 50 (12): 1205–1234

eP1303 Diagnostic Yield and Clinical Impact of Small-Bowel Capsule Endoscopy in Chronic Diarrhea: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1822911

Aims Small bowel capsule endoscopy (SBCE) is established as a first-line investigation for suspected small bowel bleeding and Crohn's disease according to current ESGE guidelines. However, its diagnostic utility in patients with chronic diarrhoea remains unclear, and no systematic review has evaluated SBCE diagnostic yield in this population. We therefore aimed to estimate SBCE diagnostic yield (DY) in chronic diarrhoea and evaluate yield across clinically relevant subgroups, including patients without suspected organic disease and those investigated for suspected coeliac disease or suspected inflammatory bowel disease (IBD).

Methods A systematic review and meta-analysis were conducted in accordance with PRISMA guidelines. MEDLINE, Embase, PubMed, and the Cochrane Library were searched from 1 November 2000 to 1 November 2025. Studies reporting the diagnostic yield of SBCE in adults referred for chronic diarrhoea were included. Only English-language full-text publications were considered. Two reviewers independently performed study selection and data extraction.

Random-effects meta-analysis and meta-regression were used to estimate the pooled DY and to identify factors associated with increased DY of SBCE.

Results A total of 49 studies comprising 3,977 participants were included. The pooled DY of SBCE in chronic diarrhoea including all suspected pathologies was 36% (95% CI 30–43%; $I^2 = 89\%$). In patients with chronic diarrhoea of unknown origin, the DY was 34% (95% CI, 25–44%; $I^2 = 73\%$). Use of prior small-bowel radiological imaging as a pre-test filter increased DY to 47% (95% CI 32–61%; $I^2 = 0\%$). In suspected IBD, subgroup stratification by faecal calprotectin demonstrated a stepwise increase in DY with higher thresholds: 16% (95% CI 7–32%; $I^2 = 71\%$) for $< 50 \mu\text{g/g}$, 39% (95% CI 28–50%; $I^2 = 90\%$) for $> 50 \mu\text{g/g}$, and 46% (95% CI 24–69%; $I^2 = 92\%$) for $> 100 \mu\text{g/g}$. Meta-regression revealed no significant moderators. Overall, SBCE led to a change in clinical management in 46% of patients (95% CI, 36–57%; $I^2 = 61\%$).

Conclusions SBCE demonstrates a moderate DY and is associated with changes in subsequent management in one in two patients with chronic diarrhoea. These findings also support a biomarker-informed, calprotectin-guided approach to patient selection. Future prospective studies should formally evaluate the role of early capsule endoscopy within diagnostic pathways, alongside or following colonoscopic assessment, in appropriately selected patients.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1304 Real world outcomes from endoscopic ultrasound guided gastrojejunostomy for malignant gastric outlet obstruction

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DOI 10.1055/s-0046-1822912

Aims Endoscopic ultrasound guided gastrojejunostomy (EUS GJ) has recently been shown to be superior to enteral stenting and surgery for management of gastric outlet obstruction (GOO). Outcomes outside of randomised trials is limited. We aimed to assess the outcomes from EUS gastrojejunostomy for management of gastric outlet obstruction in 13 UK centres.

Methods Retrospective analysis of patients undergoing EUS GJ was conducted and information was collected including demographics, indication, sedation, pre- and post- GOOS score, stent size, technique used, technical success rate, number of days to commencing diet, length of stay, adverse events, re-intervention rate, other interventions required, and survival at 30 days. Univariate analysis was performed to assess pre- and post-procedure GOOS scores and factors associated with adverse events. Multivariable analysis using age, sex, disease type, stent size and technique was performed for adverse events.

Results 293 patients were included with median age 69 years and 146 males from 13 UK centres. Pancreaticobiliary cancer was the most common indication (73.4%, $n = 215$) with other indications being gastric, metastatic deposits or

chronic benign strictures. 169 (57.7%) procedures were performed under anaesthesia and 226 (77.1%) used the WEST technique vs 67 (22.9%) needle lift technique. 20x10mm was the most common stent size (91.5%, n = 268) followed by 15x10 (7.5%, n = 22) and 10x10 (1%, n = 3). Technical success was achieved in 279/293 (95.2%) with a significant improvement in GOOS score from 0 pre-procedure to 3 post procedure ($p < 0.0001$) and a median of 1 day to full diet. Overall adverse event rate was 33/293 (11.3%) with a procedure related adverse event rate of 19/293 (6.5%). Stent maldeployments (n = 12, 4.1%) were rescued endoscopically in 50% (n = 6) with 5 patients undergoing surgical intervention and one patient treated conservatively. Median length of stay post procedure was 4 days and 30-day mortality rate was 37/293 (12.6%) with only 2/293 (0.68%) being directly related to the procedure. Overall adverse events were associated with younger age (63 vs 69, $p < 0.001$) but not sex, stent size, technique or disease type. No independent risk factors were identified on multivariable analysis.

Conclusions EUS GJ is an effective intervention for malignant gastric outlet obstruction showing significant improvement in GOOS scores and early return to full diet. Adverse event rates are low and do not appear to have any independent risk factors. This represents the largest study of EUS GJ and shows good outcomes in high volume UK centres.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1305 Endoscopic ultrasound-directed transgastric interventions. Real world data from 9 tertiary centres in the UK

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DOI 10.1055/s-0046-1822913

Aims Endoscopic ultrasound-directed transgastric ERCP (EDGE) has emerged as an important modality for biliary access in patients with altered upper gastrointestinal anatomy, but data from real-world multicentre practice remains limited. This study reports outcomes of EDGE performed in 9 tertiary centres in the UK.

Methods A retrospective analysis was conducted of consecutive EDGE procedures performed over 2024 – 2025. Data collected included demographics, indication, anaesthesia type, stent characteristics, anastomosis type, single or multiple stage, use of stent fixation, completion of the intended therapeutic outcome, subsequent fistula management and adverse events. Analysis was performed around outcomes comparing single vs multiple stage procedures.

Results One hundred and three patients (median age 59 years; 18 males) were included. The indications were common bile duct stones (n = 83), biliary mass/stricture (n = 8), papillary stenosis (n = 4), PEG insertion (n = 3), bile leak (n = 2), drainage procedure (n = 2) and other (n = 1). Sixty-one procedures were performed under general anaesthesia and 42 under conscious sedation. Technical success was achieved in 101/103 (98.1%) procedures with anastomoses being gastro-gastrostomy (89) and enterogastrostomy (12). Axios stents sized 15 × 10 mm and 20 × 10 mm were used in 5 and 96 procedures respectively. Thirty procedures were completed as single-stage (all under general anaesthesia), while 68 with available data were two-stage with a median interval of 14 days

between the stages. 31 of the two-stage procedures were performed under general anaesthesia. Stent fixation clips were used in 36 procedures including 6 two-stage cases (24 OTSC and 11 standard clips), whereas 65 procedures were performed without clip fixation (all two-stage). Overall, the intended therapeutic outcome was achieved in 96/98 (97.95%) procedures. During single stage there were 5/30 adverse events of which 4 were stent dislodgement (3 managed endoscopically) and 1 pancreatitis. During two-stage there were 7 adverse events of which 5 were stent dislodgement (4 were clinically relevant), 1 failed cannulation and 1 pancreatitis. Fistula follow up showed 56 closed spontaneously or had no closure (35 had a barium or endoscopy), 32 were not assessed, 13 had endoscopic closure and 2 were closed at surgically.

Conclusions In this multicentre series, EDGE demonstrated a high rate of technical and clinical success with acceptable adverse event rates. Most adverse events can be managed endoscopically and no difference was seen comparing number of stages or use of sedation/anaesthesia. The findings support EDGE as an effective modality for biliary and related interventions in patients with altered anatomy. More data concerning fistula follow up is needed.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1307 A feature-driven synthetic image framework for interpretable diagnosis of early gastric cancer without real cancer samples: a multi-center study

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DOI 10.1055/s-0046-1822915

Aims This article is expected to improve detection of early gastric cancer's efficiency and accuracy, addresses the scarcity of real medical data and offering a novel solution to address diagnostic challenges for other rare lesions [1–5]

Methods 7,650 endoscopy images retrospectively collected from Renmin Hospital of Wuhan University between January 1, 2017, and September 16, 2025, and videos from 22,039 patients undergoing gastroscopy in a prospective multicenter clinical trial, were used to construct EndoPainter, a generative diagnostic system for early gastric cancer (EGC) that does not rely on real EGC images. A multimodal large language model was used to extract lesion features automatically, and a diffusion model was trained to generate EGC images from non-EGC images and feature texts. The generated images were evaluated by nine endoscopists. EndoPainter performance was tested in internal image and multicenter video test sets and compared with sole deep learning (DL) models trained on datasets of different scales and with different strategies.

Results The feature extraction model based on non-EGC images achieved an overall accuracy of 90.50% (95% CI: 89.40–91.49%). The overall specificity of endoscopists in classifying generated images was 36.39% (95% CI: 33.57–39.30%). In the image test set, the accuracy of EndoPainter for diagnosing EGC (90.24%, 95% CI: 86.84–92.84%) was significantly higher than that of the sole DL models (82.85%, $p = 0.002$). In the multicenter video test set, its accuracy (90.64%, 95% CI: 90.25–91.02%) also significantly outperformed the DL model trained on a large-scale real-image dataset (89.08%, $p < 0.0001$).

Conclusions EndoPainter addresses the scarcity of real medical data by generating large-scale lesion images through feature deconstruction and recombination, while integrating human diagnostic logic to achieve interpretable decision-making. The system is expected to improve diagnostic efficiency and accuracy in clinical practice, offering a novel solution to address diagnostic challenges for other rare lesions.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Vincze A. Endoscopic diagnosis and treatment in gastric cancer: Current evidence and new perspectives. *Front Surg* 10: PMID: 1122454. doi:10.3389/fsurg.2023.1122454 2023

- [2] Kurumi H. et al. Fundamentals, Diagnostic Capabilities and Perspective of Narrow Band Imaging for Early Gastric Cancer. *J Clin Med* 10:.. doi:10.3390/jcm10132918 2021
- [3] Katai H. et al. Five-year survival analysis of surgically resected gastric cancer cases in Japan: a retrospective analysis of more than 100,000 patients from the nationwide registry of the Japanese Gastric Cancer Association (2001-2007). *Gastric Cancer* 21: 144–154. doi:10.1007/s10120-017-0716-7 2018
- [4] Imagawa A. et al. Endoscopic submucosal dissection for early gastric cancer: results and degrees of technical difficulty as well as success. *Endoscopy* 38: 987–990. doi:10.1055/s-2006-944716 2006
- [5] Hellmann E.E. et al. Importance of Early Diagnosis of Gastrointestinal Tumors: A Brief Review. *Journal of Cancer Research Reviews & Reports* 2025; 1–2. doi:10.47363/jcrr/2025(7)219 2025

eP1308 Use of the Self-Assembling Peptide PuraStat for the Management and Prevention of ERCP-Related Bleeding: A multicenter prospective cohort study

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DOI 10.1055/s-0046-1822916

Aims Endoscopic retrograde cholangiopancreatography (ERCP) remains a cornerstone therapeutic intervention for pancreatobiliary disease but is associated with clinically relevant adverse events, including bleeding. Bleeding related to endoscopic sphincterotomy or peri-ampullary manipulation may be difficult to control because of anatomic constraints and the consequences of conventional heat related haemostatic methods. PuraStat is a transparent self-assembling peptide hydrogel that promotes hemostasis through the formation of a mechanical barrier and extracellular matrix scaffold leading to formation of a stable clot. It has been extensively used in the treatment of EMR and ESD related bleeds. Data specific to ERCP-related bleeding remains limited [1–4].

Methods We performed a multicenter, prospective, observational study including consecutive ERCP procedures between January 2022 and December 2025 in which PuraStat was used to treat ERCP-related bleeding (intraprocedural bleeding (IPB) or delayed bleeding) and prophylactic application for prevention of delayed bleeding after sphincterotomy. The primary outcome was immediate hemostasis, and secondary outcomes included technical success, 30-day rebleeding, and adverse events related to use of Purastat.

Results A total of 138 patients were included. PuratStat was predominantly used to treat IPB (82.6%) but was also used for treating delayed bleeding (10.9%) and prophylactically (6.5%). The severity of bleeding was mild in 68.2%, while the remainder had moderate bleeding. Technical success was achieved in all patients. PuraStat achieved immediate hemostasis in 97.7% of patients with active bleeding. 30-day rebleeding occurred in 7 patients (5.1%), while adverse events occurred in 5 patients (3.6%), all of whom had post-ERCP pancreatitis, with no reported procedure-related mortality. Subgroup analysis revealed equal efficacy when PuraStat was used as a primary or secondary (rescue) therapy but significantly higher hemostasis rate (100% vs. 92.7%, $p = 0.01$) and lower 30-day rebleeding (1.1% vs. 12.2%, $p = 0.005$) when used for mild oozing bleeding compared to moderately severe bleeding, respectively.

Conclusions Our data demonstrates the technical feasibility, efficacy and safety of using Purastat in the management of sphincterotomy related bleeds.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Ogura T, Ueno S, Okuda A et al. Step-Up Strategy for Endoscopic Hemostasis Using PuraStat After Endoscopic Sphincterotomy Bleeding (STOP Trial). *Techniques and Innovations in Gastrointestinal Endoscopy* 2024/01/01/ 2024 26: 224–229

- [2] Uba Y, Ogura T, Ueno S et al. Comparison of Endoscopic Hemostasis for Endoscopic Sphincterotomy Bleeding between a Novel Self-Assembling Peptide and Conventional Technique. *J Clin Med* 2022; 12 (1):.. doi:10.3390/jcm12010079

- [3] Alali AA, Moosavi S, Martel M, Almadi M, Barkun AN. Topical hemostatic agents in the management of upper gastrointestinal bleeding: a meta-analysis. *Endosc Int Open* 2023; 11 (4): E368–e385. doi:10.1055/a-1984-6895

- [4] Gralnek IM, Bhandari P, Alkandari A et al. Topical hemostatic agents in endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Technical and Technology Review. *Endoscopy* 2025; 57 (10): 1150–1173. doi:10.1055/a-2646-7556

eP1309 Development and validation of an automatic reporting and diagnostic system for gastric magnifying image enhanced endoscopy based on a multimodal large language model

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DOI 10.1055/s-0046-1822917

Aims Reporting for gastric magnifying image enhanced endoscopy (M-IEE) reporting is time-consuming and skill-dependent, leading to several issues, especially in resource-limited settings or among less experienced endoscopists. Multimodal large language models (MLLMs) hold significant potential for automating M-IEE report generation [1–9].

Methods 2,037 images and 100 videos of gastric M-IEE were retrospectively collected at Renmin Hospital of Wuhan University (RHWU). The images were randomly assigned to the training and internal test sets in a 7:3 ratio. 625 images were collected from three external hospitals for external validation. Image-text pairs, annotated by experts, were used to construct the M-IEE report system (named ME-Report Angel) based on a MLLM. Six endoscopists were invited to participate in a report-writing trial based on videos with or without the assistance of ME-Report Angel. Reporting time, report quality and diagnosis performance were evaluated.

Results The use of ME-Report Angel significantly reduced reporting time (20.00s, IQR [10.00-39.75] vs. 60.00s, IQR [38.00-113.00], $p < 0.001$). With ME-Report Angel assistance, diagnostic accuracy (77.33% vs. 70.33%, $p < 0.001$), sensitivity (73.67% vs. 58.00%, $p < 0.001$) and negative predictive value (75.50% vs. 66.96%, $p < 0.01$) were significantly improved. Furthermore, ME-Report Angel significantly improved the completeness, correctness and quality of reports.

Conclusions ME-Report Angel is an efficient and clinically valuable reporting system. It significantly reduced the workload of endoscopists while ensuring high report quality and diagnostic performance, thereby optimizing the M-IEE examination workflow.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Muto M, Yao K, Kaise M et al. Magnifying endoscopy simple diagnostic algorithm for early gastric cancer (MESDA-G). *Dig Endosc* 2016; 28 (4): 379–93
- [2] Li J, Zhu Y, Dong Z et al. Development and validation of a feature extraction-based logical anthropomorphic diagnostic system for early gastric cancer: A case-control study. *EClinicalMedicine* 2022; 46: 101366
- [3] Hong EK, Ham J, Roh B et al. Diagnostic Accuracy and Clinical Value of a Domain-specific Multimodal Generative AI Model for Chest Radiograph Report Generation. *Radiology* 2025; 314 (3): PMID: e241476
- [4] Zhang Y, Liu M, Zhang L et al. Comparison of Chest Radiograph Captions Based on Natural Language Processing vs Completed by Radiologists. *JAMA Netw Open* 2023; 6 (2): PMID: e2255113
- [5] Beddiar D-R, Oussalah M, Seppänen T. Automatic captioning for medical imaging (MIC): a rapid review of literature. *Artif Intell Rev* 2022; 56 (5): 4019–76
- [6] Reale-Nosei G, Amador-Domínguez E, Serrano E. From vision to text: A comprehensive review of natural image captioning in medical diagnosis and radiology report generation. *Med Image Anal* 2024; 97: 103264

- [7] Seah JCY, Tang JSN, Tran A. Drafting the Future: The Dawn of AI Report Generation in Radiology. *Radiology* 2025; 316 (1): PMID: e243378
- [8] Noh C-K, Lee E, Lee GH et al. Association of Intensive Endoscopic Screening Burden With Gastric Cancer Detection. *JAMA Netw Open* 2021; 4 (1): PMID: e2032542
- [9] Yao K, Anagnostopoulos GK, Ragunath K. Magnifying endoscopy for diagnosing and delineating early gastric cancer. *Endoscopy* 2009; 41 (5): 462–7

eP1310 Diagnostic Utility of Bedside Cyst Fluid Glucose for Identifying Mucinous Pancreatic Cysts: A Prospective Study

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DOI 10.1055/s-0046-1822918

Aims To evaluate the diagnostic accuracy of bedside cyst fluid glucose for identifying mucinous pancreatic cysts and to assess its agreement with laboratory glucose measurements.

Methods In this prospective study, consecutive patients undergoing endoscopic ultrasound-guided cyst fluid aspiration for pancreatic cystic lesions during the study period (February 2022 – January 2026) were enrolled. Cyst fluid glucose was measured at the bedside using a glucometer and compared with laboratory glucose measurements. The reference diagnosis was established using cytology, biopsy, surgical histopathology, and clinical follow-up. Receiver operating characteristic (ROC) analysis was performed to determine the diagnostic performance and optimal cutoff value of cyst fluid glucose for identifying mucinous cysts. Agreement between bedside and laboratory glucose measurements was evaluated using correlation and Bland–Altman analysis.

Results A total of 56 patients with pancreatic cystic lesions were included. Bedside cyst fluid glucose demonstrated good diagnostic accuracy for identifying mucinous cysts with an area under the ROC curve of 0.76. The optimal cutoff value was 67 mg/dL, which yielded a sensitivity of 85 % and specificity of 68 % for differentiating mucinous from non-mucinous cysts. Bedside and laboratory glucose measurements showed excellent correlation ($r = 0.96$). Bland–Altman analysis demonstrated good agreement between the two methods with minimal bias.

Conclusions Bedside cyst fluid glucose measurement is a rapid, inexpensive, and reliable method for distinguishing mucinous from non-mucinous pancreatic cysts. Its strong agreement with laboratory glucose measurements supports its use as a practical point-of-care diagnostic tool in the evaluation of pancreatic cystic lesions. (NCT05962723)

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1311 Colonoscopy-Delivered Fecal Microbiota Transplantation Versus Standard Antibiotic Therapy in Recurrent *Clostridioides difficile* Infection: A Prospective Comparative Study

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DOI 10.1055/s-0046-1822919

Aims Recurrent *Clostridioides difficile* infection (rCDI) remains a major clinical challenge, with recurrence rates exceeding 30 % after repeated antibiotic therapy. Fecal microbiota transplantation (FMT) has emerged as an effective microbiome-restoring therapy; however, comparative real-world data versus standard antibiotic treatment remain limited. This study aimed to evaluate the clinical efficacy and safety of colonoscopy-delivered FMT compared with guideline-recommended antibiotic therapy in patients with rCDI [1, 2].

Methods We conducted a prospective comparative study including 85 adult patients with recurrent CDI treated at a tertiary referral center between January 2022 and December 2025. rCDI was defined as ≥ 2 documented episodes following adequate antibiotic therapy. Patients received either colonoscopy-de-

livered FMT ($n = 43$) or standard antibiotic therapy (oral vancomycin or fidaxomicin; $n = 42$) according to clinical decision and patient preference. Donor stool was obtained from rigorously screened healthy donors and infused into the cecum or terminal ileum during colonoscopy following bowel preparation. The primary endpoint was clinical cure, defined as resolution of diarrhea without recurrence within 8 weeks. Secondary endpoints included recurrence at 6 months and treatment-related adverse events. Statistical comparisons were performed using χ^2 or Fisher's exact test.

Results Baseline characteristics were comparable between groups (mean age 64.1 ± 13.7 years, 57.6 % female). Clinical cure at 8 weeks was achieved in 39/43 patients (90.7 %) in the FMT group compared with 26/42 patients (61.9 %) in the antibiotic therapy group ($p = 0.003$).

At 6-month follow-up, recurrence occurred in 3 patients (7.0 %) in the FMT group versus 14 patients (33.3 %) in the control group ($p < 0.001$).

FMT was well tolerated, with only mild transient adverse events (abdominal discomfort or bloating) reported in 11.6 % of patients. No severe procedure-related complications were observed.

Conclusions Colonoscopy-delivered fecal microbiota transplantation demonstrated significantly higher cure rates and markedly lower recurrence compared with standard antibiotic therapy for recurrent CDI. These findings support the integration of endoscopically delivered FMT as an effective therapeutic strategy for rCDI in routine clinical practice.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Burdette RA, Whitt CC, Behm BW, Warren CA. Avoiding Premature Antibiotic Use in Recurrent *Clostridioides difficile* Infection After Fecal Microbiota Transplant. *ACG Case Rep J*. 2025; 12: e01660. doi:10.14309/crj.0000000000001660 PMID: 40182189 PMID: PMC11968022
- [2] Ray R, Hack SA, Vij AK, Gbenla KI, Khatri S, Aravind Rongali D, Khalid A, Anjum A, Fancy RS, Mirza MSS. Efficacy of Fecal Microbiota Transplantation (FMT) Versus Standard Antibiotic Therapy in Recurrent *Clostridioides difficile* (CDI/rCDI) Infection: A Systematic Review and Meta-Analysis. *Cureus*. 2025; 17: e90614. doi:10.7759/cureus.90614. PMID: 40978956 PMID: PMC12449039

eP1312 Adjunctive Terlipressin Therapy After Endoscopic Variceal Ligation Reduces Early Rebleeding in Acute Esophageal Variceal Hemorrhage: A Prospective Comparative Cohort Study

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DOI 10.1055/s-0046-1822920

Aims Acute esophageal variceal bleeding is a life-threatening complication of portal hypertension, with early rebleeding remaining a major determinant of morbidity and mortality despite successful endoscopic hemostasis. Vasoactive agents such as Terlipressin are recommended during the acute bleeding episode; however, the benefit of continuing vasoactive therapy after successful endoscopic variceal ligation (EVL) in routine clinical practice remains incompletely defined. This study aimed to evaluate the impact of adjunctive terlipressin therapy on early rebleeding following successful EVL [1].

Methods We conducted a prospective comparative cohort study including 110 consecutive adult patients with cirrhosis presenting with acute esophageal variceal bleeding who underwent successful EVL at a tertiary referral center between February 2021 and January 2026. Acute variceal bleeding was confirmed endoscopically, and hemostasis was achieved by EVL in all cases. Following endoscopic therapy, patients received either adjunctive terlipressin therapy (2 mg every 4 hours for 72 hours; $n = 50$) in addition to standard care, or standard care alone without vasoactive therapy (control group; $n = 60$), according to treating physician decision.

Baseline demographic and clinical data were recorded, including etiology of cirrhosis, Child–Pugh class, and Model for End-Stage Liver Disease (MELD) score.

The primary endpoint was early rebleeding within 5 days after index endoscopy. Secondary endpoints included rebleeding within 6 weeks, requirement for rescue therapy, length of hospitalization, and treatment-related adverse events. Categorical variables were compared using χ^2 or Fisher's exact test, and continuous variables using Student's t-test. Statistical significance was defined as $p < 0.05$.

Results Baseline characteristics were comparable between groups (mean age 59.9 ± 11.2 years; 64% male; mean MELD 14.6 ± 4.5 ; Child–Pugh B/C 72% vs 71.7%, $p = 0.97$). Early rebleeding occurred in 4/50 patients (8.0%) receiving terlipressin compared with 14/60 (23.3%) in the control group ($p = 0.033$). At 6 weeks, recurrent bleeding was observed in 7/50 (14.0%) versus 19/60 (31.7%), respectively ($p = 0.029$). Rescue therapy was required in 3/50 (6.0%) versus 10/60 (16.7%) ($p = 0.088$). Hospital stay was shorter in the terlipressin group (5.9 ± 2.1 vs 7.2 ± 2.6 days; $p = 0.006$). No serious terlipressin-related adverse events were recorded.

Conclusions Adjunctive terlipressin therapy following successful EVL was associated with significantly lower early and 6-week rebleeding rates compared with EVL alone, supporting continued vasoactive therapy after endoscopic hemostasis in acute esophageal variceal bleeding.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Rehman H., Rehman S.T., Zulfiqar S. et al. Real-world comparison of terlipressin vs. octreotide as an adjuvant treatment in the management of variceal bleeding. *Sci Rep* 14: 6692 2024. doi:10.1038/s41598-024-56873-x

eP1313 The limits of optical diagnosis in advanced colorectal polyps: a systematic review and meta-analysis of the intermediate-risk optical categories of endoscopic classifications

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DOI 10.1055/s-0046-1822921

Aims Optical Diagnosis (OD) allows a reliable distinction between adenomatous and non-adenomatous lesions [1, 2]; however it becomes less effective when differentiating low grade dysplasia (LGD), high grade dysplasia (HGD), superficial and deep submucosal invasion (s-SMIC and d-SMIC) in advanced adenomas. The ability to obtain an accurate optical endoscopic diagnosis is essential to adopt the most appropriate polyp management, particularly in those colorectal lesions which are suspicious for submucosal invasion, such as those classified as Kudo Vi/JNET 2B [3]. Such classes constitute intermediate-risk optical categories (IOC) in the most known widespread endoscopic OD classification. Due to the limited evidence in this context, we conducted a systematic review and meta-analysis.

Methods Our search was conducted in EMBASE, MEDLINE, and the Cochrane Central Register of Controlled Trials from 2010 to 26 July 2025. Only English-language publications were included. Animal studies, reviews, correspondences, expert opinions, conference abstracts, and editorials were excluded. The IOC was identified according to widely accepted classifications (e.g. JNET 2B, Kudo Vi, Hiroshima C1/C2, Sano 2). In studies using ad hoc or locally developed classification systems, the category with the highest proportion of final histological outcomes corresponding to HGD and s-SMIC was considered IOC. The primary outcomes were defined as follows: appropriate diagnosis, when the advanced adenoma corresponded to HGD or s-SMIC; overdiagnosis, when it

corresponded to LGD; and underdiagnosis, when it corresponded to d-SMIC. Pooled proportions for these outcomes were calculated using random-effects models. PROSPERO database (CRD420251039043).

Results Of 1,975 studies identified, 138 underwent full-text assessment and 37 were included (29 Eastern, 8 Western). Most were retrospective academic cross-sectional studies (75.7%), mainly involving expert endoscopists. All studies used virtual chromoendoscopy, and most used optical magnification (86.4%). The pooled mean polyp size was 25.9 mm (95%CI 18.0–33.1; $I^2 = 99.5\%$). Overall, 39 IOC from 37 studies were analysed. When an IOC was assigned at OD, HGD or s-SMIC was confirmed histologically in 51.3% of cases (95%CI 41.1–61.4%; $I^2 = 95.4\%$). Underdiagnosis occurred in 12.9% (95%CI 9.8–16.7%; $I^2 = 90.0\%$) and overdiagnosis in 23.0% (95%CI 14.8–34.0%; $I^2 = 96.9\%$). Sensitivity analyses did not reduce heterogeneity. Western studies showed a lower proportion of d-SMIC within the IOC than Eastern studies (8.5% vs 14.0%; $p = 0.02$).

Conclusions High heterogeneity and overall moderate performance of OD in discriminating HGD and s-SMIC in IOC was found. This data would favour en-bloc resection when an IOC is assigned to a lesion. Reproducibility of OD in advanced adenomas in less experienced setting is uncertain. Clear indications, further real-life studies and are warranted to better ascertain the performance of OD in this setting.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Sano Y, Tanaka S Narrow-band imaging (NBI) magnifying endoscopic classification of colorectal tumors proposed by the Japan NBI Expert Team. *Dig Endosc* 2016; 28 (5): 526–33. doi: 10.1111/den.12644.

[2] Pohl H, Bensen SP et al. Quality of optical diagnosis of diminutive polyps and associated factors. *Endoscopy* 2016; 48: 817–22. doi:10.1055/s-0042-108432. Epub 2016 Jun 8 PMID: 27275860

[3] van den Broek FJ, van Soest EJ et al. Combining autofluorescence imaging and narrow-band imaging for the differentiation of adenomas from non-neoplastic colonic polyps among experienced and non-experienced endoscopists. *Am J Gastroenterol* 2009; 104 (6): 1498–507. doi:10.1038/ajg.2009.161.

eP1314 Visual intuition for colorectal cancer: BLINK feature recognition in observers without endoscopy experience

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DOI 10.1055/s-0046-1822922

Aims Six reproducible gross morphological "Blink" features — spontaneous bleeding, depression, fold deformation, extra redness, ulceration, and chicken-skin mucosa — are validated markers of deep submucosal invasion (SMI) in large (≥ 20 mm) non-pedunculated colorectal polyps (LNPCPs). Prior study demonstrated that brief training in these features reduced cancer miss-rates in a pre-post survey of general endoscopists [1]. However, no study has established whether LNCPs containing cancer carry inherent visual cues recognizable by individuals without endoscopy experience. We evaluated whether the six Blink features carry sufficient visual salience to be recognized by completely naïve observers, and whether a brief introduction can prime pattern recognition before any endoscopic experience.

Methods In this prospective interventional study, 65 participants (40 non-gastroenterology trainees, 25 medical students) none with prior endoscopy training evaluated 20 LNCP images (8 with histologically confirmed deep SMI $\geq 1000\mu\text{m}$, 12 benign). Participants assessed the same images before and after a 2-minute educational video introducing six Blink features; image order

was randomized between phases. Primary outcome was change in cancer miss-rate (histopathology reference standard).

Results At baseline, sensitivity for cancer detection was 67.5 % (95 %CI 63.4–71.4) and specificity 46.0 % (95 %CI 42.5–49.5), with sensitivity significantly exceeding the 40 % cancer prevalence ($p < 0.001$). Post-intervention, sensitivity increased to 91.3 % (95 %CI 88.6–93.5), a 3.7-fold reduction in miss-rate from 32.5 % to 8.7 %. Specificity decreased to 27.6 % (95 %CI 24.5–30.9), with the false alarm rate increasing from 54.0 % to 72.4 %. Notably, the sensitivity gain was not solely due to increased cancer-calling; participants also demonstrated improved ability to discriminate cancer from benign polyps ($p = 0.025$).

Conclusions Medically trained individuals without endoscopy experience demonstrate an inherent ability to detect cancer within LNCPs at rates exceeding chance. A 2-minute introduction to the six Blink features significantly enhances this capacity, achieving sensitivity (91.3 %) comparable to that of general endoscopists (94.3 %) reported in a prior study [1]. These findings suggest that structured visual training can improve cancer detection at any stage of medical education — potentially before trainees ever perform endoscopy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Debels LK, Tornai T, Anderson J, Argenziano ME, Desomer L, Hoorens A, Lala V, Poortmans PJ, Valori R, Tate DJ. Teaching Six 'Blink' Features Reduces General Endoscopists' Cancer Miss-Rate in Image-Based Assessment of Large Colorectal Polyps. Research Square [Preprint] Posted February 17 2026. doi:10.21203/rs.3.rs-8553404/v1

eP1315 10mm x 10mm Hot Axios stents are safe and effective for EUS guided choledochoduodenostomy in distal malignant biliary obstruction: A comparative analysis with 6mm x 8mm and 8mm x 8mm Hot Axios stents across 3 UK tertiary centres

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DOI 10.1055/s-0046-1822923

Aims The electrocautery-enhanced Hot Axios stent (Boston Scientific) is licensed for EUS choledochoduodenostomy (EUS CDD) and is recognised as an effective modality in biliary drainage in distal malignant biliary obstruction (DMBO). The 6mm x 8mm (6mm) and 8mm x 8mm (8mm) diameter stents are most commonly used for this purpose. On 20th December 2025, an urgent recall of the 6mm and 8mm Hot Axios stents was issued due to reports of stent deployment and expansion issues, creating an urgent need for an evidence-based effective alternative.

This study presents the first direct comparison of the 10mm x 10mm (10mm) Hot Axios stents with the 6mm and 8mm (6/8mm) Hot Axios stents in EUS CDD for DMBO.

Methods A retrospective review was conducted of EUS CDD for DMBO performed in 3 UK tertiary pancreas units from May 2024 to December 2025 using Hot Axios stents. One centre exclusively used 10mm Hot Axios stents for EUS CDD, while the other centres used 6mm and 8mm stents. Technical success, clinical success and adverse event rates were analysed. Technical success was defined as successful Hot Axios stent deployment for EUS CDD. Clinical success was defined as a 50 % drop in bilirubin in 2 weeks post EUS CDD.

Results 76 patients underwent EUS CDD for DMBO (10 mm group n = 28; 6/8 mm group n = 46). Procedural technique differed significantly between groups; most procedures in the 10 mm group were performed freehand with a guide-wire preloaded (27/28), whilst in the 6/8mm group, 38/46 were performed freehand. Coaxial plastic stents were inserted through 24/25 successfully deployed 10 mm stents, versus 6/41 in the 6/8 mm group ($p < 0.05$).

When comparing the 10mm and 6/8mm groups, there was no statistically significant difference in median target duct size on EUS (18.0mm vs 17.5mm, $p = 0.06$).

Technical success (89.3 % (25/28) vs 89.1 % (41/46), $p = 1.00$), post-procedural adverse events (10.7 % (3/28) vs 10.9 % (5/46), $p = 1.00$) and 30-day mortality (10.7 % (3/28) vs 8.7 % (4/46), $p = 1.00$) were comparable between the 2 groups. After exclusion of technically unsuccessful cases, biliary re-intervention rates were similar (4.0 % (1/25) vs 2.4 % (1/41), $p = 1.00$). Following further exclusion of cases without follow-up biochemistry, clinical success did not differ significantly between groups (91.3 % (21/23) vs 97.1 % (34/35), $p = 0.56$).

Conclusions The 10mm x 10mm Hot Axios stent demonstrates comparable efficacy and safety to 6mm x 8mm and 8mm x 8mm stents for EUS CDD in DMBO and represents a viable alternative following the recall of smaller diameter devices.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1316 Outcomes and safety of different endoscopic mucosal resection techniques for the management of superficial non-ampullary duodenal epithelial tumours: a network meta-analysis

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DOI 10.1055/s-0046-1822924

Aims Superficial non-ampullary duodenal epithelial tumours (SNADETs) are pre-malignant lesions for which the optimal endoscopic management remains uncertain. This study aims to systematically compare the efficacy and safety of different endoscopic mucosal resection techniques, namely conventional (C-EMR), underwater (U-EMR), and cold-snare (CS-EMR), through a network meta-analysis.

Methods A systematic search of MEDLINE, Scopus and Web of Science databases was performed. Randomised controlled trials and comparative observational studies including adults with SNADETs treated with aforementioned techniques were eligible. Risk of bias was assessed and random-effects network meta-analysis models were used to compare outcomes across techniques.

Results Twenty studies were included, most of which were retrospective observational studies with serious risk of bias. Compared with C-EMR, U-EMR was associated with numerically higher en bloc resection (RR 1.04, 95 % CI 0.95–1.14), higher complete resection (RR 1.04, 95 % CI 0.87–1.25), and lower recurrence (RR 0.53, 95 % CI 0.22–1.29), although none reached statistical significance. CS-EMR was associated with significantly lower intraprocedural bleeding (RR 0.23, 95 % CI 0.06–0.89) and delayed bleeding (RR 0.17, 95 % CI 0.07–0.43) than C-EMR. Post-procedural perforation was numerically lower with both U-EMR (RR 0.71, 95 % CI 0.20–2.53) and CS-EMR (RR 0.48, 95 % CI 0.09–2.66). P-score ranking favored U-EMR for en bloc and complete resection and recurrence, whereas CS-EMR ranked highest for bleeding outcomes.

Conclusions The choice of resection techniques for SNADETs should be individualized: U-EMR may offer favorable efficacy outcomes, whereas CS-EMR appears to provide superior bleeding safety. However, the available evidence is largely observational, and prospective comparative studies are needed to confirm these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1318 A Swin Transformer-based AI system for real-time diagnosis of ampullary adenoma

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DOI 10.1055/s-0046-1822926

Aims Endoscopic examination is essential for the identification and diagnosis of ampullary adenoma. However, performance varies significantly due to operator experience and non-specific lesion features. This study aimed to develop an artificial intelligence (AI) model to improve the diagnostic accuracy of ampullary adenoma [1–12].

Methods To ensure the diagnostic system's usability, we developed two Swin Transformer-based models: one for identifying qualified papillae and another for diagnosing ampullary adenoma. A total of 2096 cases (34096 images), comprising 200 adenoma and 1896 non-adenoma cases, were used to develop and validate the models. External validation was performed on an independent multicentric dataset of 72 adenoma and 430 non-adenoma cases. Model performance was evaluated using five-fold cross-validation, random-seed allocation, subgroup analyses, and human-machine competition. Interpretability was visualized via gradient-weighted class activation mapping (Grad-CAM). Finally, we prospectively enrolled 126 patients with suspected ampullary lesions on esophagogastroduodenoscopy (EGD) from January to June 2024. AI-assisted EGD examination was performed prior to endoscopic ultrasonography or duodenoscopy to evaluate the adjunctive value of AI in improving the diagnostic accuracy of EGD for ampullary adenoma.

Results The qualified papilla identification model achieved an AUC of 0.994. The diagnostic model showed outstanding diagnostic accuracy with AUCs of 0.998 on the internal testing dataset and 0.972–0.996 on external testing datasets. Consistent high performance was maintained across all subgroups stratified by gender (AUC: 0.997–0.998), age (AUC: 0.996–0.999), and endoscopic equipment (AUC: 0.994–0.999). The AI model significantly outperformed endoscopists in diagnostic capability (accuracy: 0.970 vs 0.810–0.920). Notably, in the prospective validation dataset, the accuracy of AI on EGD images was comparable to that of endoscopists on oblique/side-viewing endoscopic images in identifying ampullary adenomas (0.913 vs 0.873, $p=0.308$).

Conclusions This Swin Transformer-based AI system achieved superior real-time diagnostic capability for ampullary adenoma across multiple endoscopic modalities, significantly outperforming endoscopists and particularly enhancing diagnostic accuracy under EGD.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Jong MR, Kusters CHJ, van Bokhorst QNE, Jukema JB, van Eijck van Heslinga RAH, Fockens KN et al. Impact of standard enhancement settings of endoscopy systems on performance of endoscopic artificial intelligence systems. *Endoscopy*. 2025;
- [2] Zhang X, Tang D, Zhou J-D, Ni M, Yan P, Zhang Z et al. A real-time interpretable artificial intelligence model for the cholangioscopic diagnosis of malignant biliary stricture (with videos). *Gastrointest Endosc* 2023; 98 (2): 199–210 e10
- [3] Selvaraju RR, Cogswell M, Das A, Vedantam R, Parikh D, Batra D. Grad-CAM: Visual Explanations from Deep Networks via Gradient-based Localization. *International Journal of Computer Vision* 2020; 128 (2): 336–59
- [4] Liu Z, Lin Y, Cao Y, Hu H, Wei Y, Zhang Z et al. Swin Transformer: Hierarchical Vision Transformer using Shifted Windows. 2021;

- [5] Yoon D, Chang SH, Paik WH, Kim CH, Kim BS, Kim YG et al. AI-powered hierarchical classification of ampullary neoplasms: a deep learning approach using white-light and narrow-band imaging. *Surg Endosc*. 2026;
- [6] Messmann H, Bisschops R, Antonelli G, Libânio G, Sinonquel P, Abdelrahim M et al. Expected value of artificial intelligence in gastrointestinal endoscopy: European Society of Gastrointestinal Endoscopy (ESGE) Position Statement. *Endoscopy*. 2022; 54 (12): 1211–31
- [7] Lee HS, Jang JS, Lee S, Yeon MH, Kim KB, Park JG et al. Diagnostic Accuracy of the Initial Endoscopy for Ampullary Tumors. *Clin Endosc* 2015; 48 (3): 239–46
- [8] Pongpornsup S, Pawanant P, Teerasamit W. Diagnostic Performance of Multidetector Computed Tomography (MDCT) to Differentiate Malignant from Benign Ampullary Lesions Causing Distal Common Bile Duct Obstruction. *J Med Assoc Thai* 2016; 99 (8): 940–8
- [9] Chiorean EG, Chiaro MD, Tempero MA, Malafa MP, Benson AB, Cardin DB et al. Ampullary Adenocarcinoma, Version 1.2023, NCCN Clinical Practice Guidelines in Oncology. *J Natl Compr Canc Netw* 2023; 21 (7): 753–82
- [10] Ramai D, Ofosu A, Singh J, John F, Reddy M, Adler DG. Demographics, tumor characteristics, treatment, and clinical outcomes of patients with ampullary cancer: a Surveillance, Epidemiology, and End Results (SEER) cohort study. *Minerva Gastroenterol Dietol* 2019; 65 (2): 85–90
- [11] Vanbiervliet G, Strijker M, Arvanitakis M, Aelvoet A, Arnelo U, Beyna T et al. Endoscopic management of ampullary tumors: European Society of Gastrointestinal Endoscopy (ESGE) Guideline. *Endoscopy*. 2021; 53 (4): 429–48
- [12] Hautefeuille V, Williet N, Turpin A, Napoleon B, Dupre A, Huguet F et al. Ampullary tumors: French Intergroup Clinical Practice Guidelines for diagnosis, treatments and follow-up (TNCD, SNFGE, FFCU, UNICANCER, GERCOR, SFCD, SFED, ACHBT, AFC, SFRO, RENAPE, SNFCP, AFEF, SFP, SFR). *Dig Liver Dis* 2024; 56 (9): 1452–60

eP1319 Environmental and clinical safety of reusing polyp traps in colonoscopy: a prospective multicenter study

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DOI 10.1055/s-0046-1822927

Aims The polyp trap, designed for single use, is one of the many disposable items generated in an endoscopy unit. No studies have evaluated the safety or impact of its reuse. The aim of this study was to evaluate whether the reuse of polyp traps during colonoscopy is safe and efficient. Our hypothesis was that reusing polyp traps is non-inferior to discarding them with respect to infectious complications, while also assessing potential benefits in cost and environmental impact.

Methods We conducted a prospective, multicenter, observational non-inferiority study including patients undergoing colonoscopy with polyp trap use between February 2025 and March 2026. Patients were assigned to the Discard Group (DG) or a Reuse Group (RG) according to the usual practice of each

participating Center. Data collection included demographics, adverse events (infections, fever, delayed bleeding, perforation), pathology findings, and the number and types of polyp traps used. The primary endpoint was the rate of post-procedure related infection, with a non-inferiority margin (δ) of 0.4 %. Secondary outcomes included discordance between endoscopic and pathology findings, device consumption, associated costs, and CO₂-equivalent emissions.

Results A total of 3194 patients were included (1697 in DG; 1497 in RG), 57.2 % male, with a mean age of 64 ± 11 years and no baseline differences between groups. Delayed bleeding occurred in 62 patients (2 %) and perforation in 3 (<0.001 %), with no differences between groups. No confirmed post-colonoscopy related infections were identified. Self-limited fever or other potentially infectious events (such as diarrhea, gastroenteritis or viral symptoms) occurred respectively in 14 (0.8 %) and 35 (2.1 %) patients in DG, and 12 (0.8 %) and 20 (1.3 %) in RG (RR 1.03, 95 %CI 0.48–2.22, $p = 0.94$; and RR 1.54, 95 %CI 0.90–2.66, $p = 0.12$). None of these events were attributed to polyp trap reuse.

Pathological/endoscopic discordance occurred in 17/1373 (0.01 %) samples in DG and 19/1338 (0.01 %) in RG (OR 0.87, 95 %CI 0.46–1.67, $p = 0.81$), mostly reflecting non-detection of a polyp; no clinically relevant discrepancies were observed.

Device use and environmental impact differed markedly between groups. DG used 1729 traps, corresponding to a cost of 3244€/1000 patients and 314.78 kg CO₂eq/1000 patients, whereas RG used 96 traps, corresponding to 519 €/1,000 patients and 24.26 kg CO₂eq/1000 patients, representing an 84 % cost reduction and a 70 % decrease in CO₂eq emissions.

Conclusions Reuse of polyp traps during colonoscopy was shown to be safe and non-inferior to discarding them, with no increase in infectious or other adverse events. The strategy resulted in substantial reductions in device consumption, cost, and CO₂-equivalent emissions. These findings have potential implications for broader waste-reduction strategies in endoscopy units.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1320 Optical diagnosis with resect and discard for diminutive colorectal polyps: is quality maintained in practice?

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DOI 10.1055/s-0046-1822928

Aims A resect-and-discard (R&D) strategy for diminutive colorectal polyps has now been implemented in the English Bowel cancer screening programme (BCSP) with significant reductions in histopathology costs. This study aimed to evaluate the accuracy and quality of high-confidence (HC) optical diagnoses (OD) of diminutive colorectal polyps performed by accredited endoscopists.

Methods This prospective, single-centre study analysed photodocumentation from nine JAG-accredited endoscopists trained in optical diagnosis and the resect-and-discard process. Between 1st October and 17th November 2025, all diminutive polyps (≤ 5 mm) assessed with high-confidence optical diagnosis and managed with R&D as per NHS BCSP guidance were included. Recorded white-light & NBI polyp image pairs were independently reviewed by two experts for polyp size, Paris classification, confidence level, and photo quality (3C criteria) [1]. Discrepancies were resolved by consensus, and interobserver agreement was assessed using Cohen's kappa. Sensitivity analyses were based on consensus HC optical-diagnosis by the experts. All analyses were performed in Stata 18.5.

Results A total of 316 diminutive polyps were identified by nine accredited endoscopists; 276 (87 %) were managed with high-confidence optical diagnosis using an R&D strategy, while 40 (13 %) were sent for histology. Of the 276, 232 (84 %) were adenomas and 44 (16 %) serrated. Of the 40 polyps sent for

histological assessment, 37 (92.5 %) were due to low-confidence OD, 2 (5 %) were classified as JNET 2B, and 1 (2.5 %) was due to suspected polyp recurrence. Agreement on OD between the expert panel and the original endoscopists was 81 % (223/276) for high-confidence optical diagnosis and 87 % (241/276) overall when diagnoses of any confidence by the expert panel were considered. In 13 % (37/276) of cases, the expert panel considered a low-confidence classification more appropriate.

High-confidence diagnoses by the endoscopists showed a sensitivity of 99 % (187/188; 95 %CI 97–99 %) for adenomas and 70 % (36/51; 95 %CI 56–82 %) for serrated polyps, compared with the expert panel. In cases of low-confidence OD (37/316, 12 %) where polyps were sent for histological assessment, agreement between histology and the endoscopist diagnosis was 54 % (20/37). Photodocumentation was adequate in 273/276 (99 %) of discarded polyps, with a mean 3C score of 5.88.

Conclusions Prospective expert review of photodocumented OD at a single bowel cancer screening centre showed high agreement, supporting the effectiveness and reproducibility of OD with a resect-and-discard policy in routine screening practice. Low-confidence OD were incorrect in around half of cases, reinforcing the importance of confidence thresholds. Overall, high-confidence OD accuracy was high, and photodocumentation was excellent. Adenomas were diagnosed more accurately than serrated polyps. Multicentre studies are required to further validate these findings.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

[1] Ahmad A, Saunders BP. Photodocumentation in colonoscopy: the need to do better? *Frontline Gastroenterology* 2021; 13 (4): 337–341

eP1321 AI-associated deskilling or learning? Results from 114 colonoscopists in NAIAD, a UK nationwide real-world study of CAde in colonoscopy

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DOI 10.1055/s-0046-1822929

Aims Computer-aided detection (CAde) improves adenoma detection rate (ADR) in randomised and most pragmatic real-world trials, but recent concerns have been cited regarding potential deskilling of endoscopists. Conversely, AI is hypothesised to induce behavioural learning. Traditional RCT designs and ADR-based endpoints may not fully capture human–AI interaction.

We sought to evaluate whether CAde use is associated with persistent change in endoscopist's performance following withdrawal, we analysed the effect of CAde use followed by planned withdrawal in a large, real-world national cohort study (NAIAD – interim headline results were presented at ESGE Days 2025).

Methods NAIAD is a nationwide, multicentre study of 114 colonoscopists undergoing sequential assessment across three 3-month phases: baseline (Phase 1), CAde-assisted (Phase 2), and post-withdrawal (Phase 3). ADR was analysed at the individual endoscopist level. Persistent improvement was defined as Phase 3 ADR > Phase 1 ADR. Paired comparisons were performed across phases [1–3].

Results Mean ADR increased modestly from Phase 1 to Phase 2 (30.2 ± 16.7 vs 33.8 ± 18.5). Following CAde withdrawal, ADR decreased from Phase 2 to Phase 3 (33.8 ± 18.5 vs 27.4 ± 19.4). Overall, ADR in Phase 3 was not significantly different from baseline (30.2 vs 27.3 %; $p = 0.25$). However, 41/108 endoscopists (38.0 %) demonstrated persistent improvement (Phase 3 > Phase 1). ADR persistence was observed in both low (ADR < 25 %; 66 %) and high (ADR > 25 %; 23 %), baseline detectors indicating heterogeneous responses to CAde.

Conclusions In this large, real-world study, CAdE was associated with sustained improvement in ADR in over one-third of endoscopists, suggesting some learning effect rather than universal deskilling.

These findings highlight limitations of conventional RCT frameworks, ADR as sole endpoints and regression to the mean in evaluating AI when linked to human performance. CAdE may not only augment detection but also induce operator-level behavioural change, with variable adoption across individuals. AI may not simply replace human skill; it may reshape it.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Repici A et al. *Gastroenterology* 2020; 159: 512–520
- [2] Wang P et al. *Lancet Gastroenterol Hepatol* 2020; 5: 434–442
- [3] Hassan C et al. *Endoscopy* 2022; 54: 365–373

eP1322 Breath Volatile Organic Compounds as a Non-Invasive Tool for Colorectal Cancer Screening and Prevention

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DOI 10.1055/s-0046-1822930

Aims Colorectal cancer (CRC) is recognised as one of the leading causes of cancer-related mortality worldwide [1]. Limitations of CRC screening programmes [2] have driven increasing interest in non-invasive complementary approaches, such as the chemical characterisation of volatile organic compounds (VOCs) in human breath [3]. This prospective study aimed to identify CRC-related VOCs fingerprint in human breath and to investigate the potential of breath analysis for the early detection of CRC and precancerous lesions in FIT-positive subjects, in order to discriminate subjects who really need colonoscopy.

Methods A total of 37 FIT-positive participants were enrolled from July to December 2025 by the Digestive Endoscopy Unit of the Clinical Cancer Centre “Giovanni Paolo II”, in Bari. Breath samples were collected from them before undergoing colonoscopy. Volunteer enrolment fulfilled predefined inclusion criteria following Ethics Committee approval (Prot. 7862 del 27/11/2024). End-tidal breath samples were collected using the automated sampler Mistral (*Predict SpA*), which allows to collect 750 ml of exhaled air from patients and ambient air directly into two-bed adsorbent cartridges (Biomonitoring steel tubes, *Markes International*); after, these cartridges were analysed by thermal desorption gas chromatography – mass spectrometry (TD-GC/MS). Following colonoscopy were performed in our centre to classify enrolled patients into three groups: 17 patients diagnosed with CRC, 14 healthy controls (HC) and 6 subjects with precancerous lesions (adenomas).

Results A total of 138 VOCs was detected across the 37 samples. A patient × VOC matrix, containing the normalized relative abundances associated with each identified compound for each subject, was constructed and processed using univariate statistical analysis (nonparametric Mann-Whitney U Test) to compare the groups of healthy subjects and those affected by colorectal cancer and identify the VOCs most associated with the disease state. After the applying of Bonferroni correction and a comparison with ambient air samples to exclude any exogenous contamination, the 20 most significant VOCs were selected. Principal Component Analysis (PCA) showed improved separation between CRC-positive subjects and HC after VOCs reduction, while supervised machine learning using a Support Vector Machine with Radial Basis Function Kernel (SVM-RBF) achieved the highest diagnostic performance, with an accuracy of 84.3 %, sensitivity of 90.0 %, and an area under the ROC curve of 0.958. The six VOCs' profiles of subjects with adenomas, not included in the model building phase, were used to test the model afterward. Only the patient with three polyps was classified as “positive”, suggesting that VOCs' profile could reflect the preneoplastic lesions burden.

Conclusions This study suggests that multiple VOCs contribute to the model decision. The data presented here are preliminary and require further validation especially about polyps' classification, but the observed performances fall within the ranges reported in literature.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Altomare D.F. «Breath Analysis for Colorectal Cancer Screening». *Colorectal Disease* 2016; 18 (12): pp 1127–28
- [2] Niedermaier T et al. Sensitivity of Fecal Immunochemical Test for Colorectal Cancer Detection Differs According to Stage and Location». *Clinical Gastroenterology and Hepatology* 2020; vol. 18 (13): pp 2920–2928 e6
- [3] Cancer Tomorrow <https://gco.iarc.who.int/today/>

eP1323 Does Excellent Bowel Preparation Improve Adenoma Detection Rate Beyond Adequacy? Results of the First Meta-analysis Comparing BBPS 8–9 Versus 6–7

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DOI 10.1055/s-0046-1822931

Aims Bowel preparation quality is a key determinant of colonoscopy effectiveness; however, the incremental benefit of excellent bowel cleansing compared with adequate preparation remains debated. To date, no meta-analysis has specifically evaluated adenoma detection rate (ADR) within the adequate or excellent Boston Bowel Preparation Scale (BBPS) range. We conducted a systematic review and meta-analysis comparing ADR between excellent bowel preparation (BBPS 8–9) and adequate preparation (BBPS 6–7).

Methods A systematic literature search identified studies reporting ADR according to BBPS categories. Studies directly comparing BBPS 6–7 versus 8–9 were included. When BBPS subgroup data were not fully reported, corresponding authors were contacted, and provided additional unpublished BBPS-specific ADR data. The primary outcome was ADR. Pooled relative risks (RRs) with 95 % confidence intervals (CIs) were calculated using a random-effects model. Heterogeneity was assessed using the I² statistic.

Results Seven studies published between 2019 and 2025 were included, comprising 21,688 colonoscopies (10,406 with BBPS 6–7 and 11,282 with BBPS 8–9). Excellent bowel preparation was associated with a statistically significant increase in ADR compared with adequate preparation (pooled RR 1.10; 95 % CI 1.01–1.21). Substantial heterogeneity was observed across studies (I² = 82.9 %; p < 0.001), although most individual study estimates favored BBPS 8–9.

Conclusions This first meta-analysis evaluating ADR differences demonstrates that excellent bowel cleansing (BBPS 8–9) is associated with a significant improvement in ADR compared with BBPS 6–7. Achieving excellent bowel preparation may therefore be considered when aiming to optimize colonoscopy outcomes

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1324 A Smartphone-Based Automated Image Measurement System (AIMS) for Standardized and Objective Assessment of Endoscopic Resection Specimens: A Prospective Validation Study

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DOI 10.1055/s-0046-1822932

Aims Precise measurement of ex vivo endoscopic specimens is crucial for quality assessment but suffers from optical distortion and subjectivity. This study aimed to prospectively validate a novel smartphone-based Automated Image Measurement System (AIMS) for objective and standardized specimen quantification [1–20].

Methods A total of 127 consecutive fresh gastrointestinal specimens obtained via endoscopic submucosal dissection (ESD) were included. Specimens were fixed on a standardized foam pad and photographed using a smartphone. The AIMS workflow automatically performed perspective correction, illumination normalization, and tissue segmentation to calculate dimensions. Results were compared against the gold-standard manual ruler measurements using Bland-Altman analysis, intraclass correlation coefficients (ICC), and Pearson's correlation.

Results AIMS demonstrated a minor systematic bias (+ 1.50 mm for length, + 1.17 mm for width) compared to the manual method. However, it exhibited excellent statistical agreement with manual measurements, yielding ICC values > 0.99 for both length and width. Pearson correlation coefficients exceeded 0.98 ($r = 0.9847$ for length, $r = 0.9871$ for width).

Conclusions The AIMS application provides a highly accurate, automated, and reproducible solution for the digital measurement of endoscopic specimens, effectively eliminating traditional optical distortions. This accessible mobile tool enhances standardized documentation and precise size-based risk stratification, significantly improving pathological assessment.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Martins C, Alencastro LF, Campero A, Rhoton A. Three-Dimensional Endoscopic Photography of Anatomic Specimens. *World Neurosurgery* 2018/12/01/ 2018; 120: e730–e736. doi:10.1016/j.wneu.2018.08.150
- [2] Rancea A, Anghel I, Cioara T. Edge Computing in Healthcare: Innovations, Opportunities, and Challenges. *Future Internet* 2024; 16 (9): 329
- [3] Kaminski MF, Thomas-Gibson S, Bugajski M et al. Performance measures for lower gastrointestinal endoscopy: a European Society of Gastrointestinal Endoscopy (ESGE) Quality Improvement Initiative. *Endoscopy* 2017; 49 (4): 378–397. doi:10.1055/s-0043-103411
- [4] Bisschops R, East JE, Hassan C et al. Advanced imaging for detection and differentiation of colorectal neoplasia: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2019. *Endoscopy* 2019; 51: 1155–1179. doi:10.1055/a-1031-7657
- [5] Hassan C, Antonelli G, Dumonceau JM et al. Post-polypectomy colonoscopy surveillance: European Society of Gastrointestinal Endoscopy (ESGE) Guideline – Update 2020. *Endoscopy* 2020; 52: 687–700. doi:10.1055/a-1185-3109
- [6] Vleugels J, Dekker E. Does polyp size matter? *Endosc Int Open* 2017; 5 (8): E746–e748. doi:10.1055/s-0043-112853
- [7] Koo TK, Li MY. A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. *J Chiropr Med* 2016; 15 (2): 155–63. doi:10.1016/j.jcm.2016.02.012
- [8] Gioi RGV, Jakubowicz J, Morel JM, Randall G. LSD: A Fast Line Segment Detector with a False Detection Control. *IEEE Transactions on Pattern Analysis and Machine Intelligence* 2010; 32 (4): 722–732. doi:10.1109/TPAMI.2008.300
- [9] Nixon M, Outlaw F, Leung TS. Accurate device-independent colorimetric measurements using smartphones. *PLOS ONE* 2020/03/26 2020; 15: PMID: e0230561. doi:10.1371/journal.pone.0230561
- [10] Ho R, Feng J, Somlyo AP, Shao Z. Optimizing the window size for multiple least squares fitting of electron energy loss spectra. *J Microsc* 2000; 197 (Pt 1): 46–51. doi:10.1046/j.1365-2818.2000.00634.x

[11] Douglas DH, Peucker TK. ALGORITHMS FOR THE REDUCTION OF THE NUMBER OF POINTS REQUIRED TO REPRESENT A DIGITIZED LINE OR ITS CARTOGRAPHIC. *Cartographica: The International Journal for Geographic Information and Geovisualization* 1973; 10: 112–122

[12] Hartmann R, Weiherer M, Nieberle F et al. Evaluating smartphone-based 3D imaging techniques for clinical application in oral and maxillofacial surgery: A comparative study with the vectra M5. *Oral Maxillofac Surg* 2025; 29 (1): 29. doi:10.1007/s10006-024-01322-2

[13] Esteva A, Kuprel B, Novoa RA et al. Dermatologist-level classification of skin cancer with deep neural networks. *Nature* 2017/02/01 2017; 542 (7639): 115–118. doi:10.1038/nature21056

[14] Martins C, Alencastro LF, Campero A, Rhoton A Jr. Three-Dimensional Endoscopic Photography of Anatomic Specimens. *World Neurosurg* 2018; 120: e730–e736. doi:10.1016/j.wneu.2018.08.150

[15] Seoni S, Shahini A, Meiburger KM et al. All you need is data preparation: A systematic review of image harmonization techniques in Multi-center/device studies for medical support systems. *Computer Methods and Programs in Biomedicine* 2024/06/01/ 2024; 250: 108200. doi:10.1016/j.cmpb.2024.108200

[16] Wang C, Ding Y, Cui K, Li J, Xu Q, Mei J. A Perspective Distortion Correction Method for Planar Imaging Based on Homography Mapping. *Sensors* 2025; 25: 1891. doi:10.3390/s25061891

[17] Zhu Y, Jia H, Liu W, Hu B. Impact of Endoscopic Image Distortion Correction: The First Single-Blinded, Randomized Controlled Trial on Endoscopic Lesion Estimation Accuracy. *Gastrointestinal Endoscopy* 2024; 99 (6):.. doi:10.1016/j.gie.2024.04.1840

[18] Kwak MS, Cha JM, Jeon JW, Yoon JY, Park JW. Artificial intelligence-based measurement outperforms current methods for colorectal polyp size measurement. *Dig Endosc* 2022; 34 (6): 1188–1195. doi:10.1111/den.14318

[19] Genovese K. Single-image camera calibration with model-free distortion correction. *Optics and Lasers in Engineering* 2024/10/01/ 2024; 181: 108348. doi:10.1016/j.optlaseng.2024.108348

[20] Djinbajian R, Taghiakbari M, Haumesser C et al. Comparing size measurement of colorectal polyps using a novel virtual scale endoscope, endoscopic ruler or forceps: A preclinical randomized trial. *Endosc Int Open* 2023; 11 (1): E128–e135. doi:10.1055/a-2005-7548

eP1325 Development and Multi-center Validation of a Real-time Automatic Risk Classification System for Colorectal Polyps

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DOI 10.1055/s-0046-1822933

Aims Colorectal cancer is a significant global health concern, and colonoscopy is crucial for identifying, classifying and removing precancerous polyps. However, its effectiveness highly depends on endoscopists' skills. Although artificial intelligence (AI) shows potential application, current research has limitations on small datasets and lack of real-world validation. Our study aims to develop a more sufficient system for polyp classification based on a more solid dataset to solve it.

Methods A real-time automatic colorectal polyp risk classification system was developed based on multi-center datasets, including 73,504 images used for the Polyp Detection Model development and 5,889 images for the Polyp Classification Model. It was prospectively validated through external image validation, real-time video validation, and a human-AI competition.

Results The real-time automatic system developed in the study achieved an accuracy of 91.0% for polyp detection, a precision of 86.6% and a recall rate of 89.4%. For risk classification for polyps, the system achieved a recall rate of 90.4% in external validation, and a precision of 95.3% in video validation. The F1-score was 0.846 and 0.820 in external validation and video validation, respectively. The classification performance for real-time video was observed to be affected by factors such as distance and light reflection. In the human-AI

competition, the system's polyp classification accuracy was significantly higher than that of novice endoscopists and comparable to experts.

Conclusions The study successfully developed and validated a real-time polyp risk classification system, demonstrating its potential for clinical auxiliary diagnosis, especially in enhancing the diagnostic capabilities of novice endoscopists.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1326 Efficacy of 1-L versus 2-L polyethylene glycol plus ascorbate for bowel preparation: a multicenter, non-inferiority randomized trial in elderly outpatients: The PLATONE Study (on behalf of AIGO)

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DOI 10.1055/s-0046-1822934

Aims Adequate bowel cleansing is essential for a high-quality colonoscopy and directly impacts key quality indicators and clinical outcomes. A very low volume preparation based on 1L polyethylene glycol plus ascorbate (1L PEG + ASC) has been recently introduced. Nevertheless, the efficacy and safety of 1L PEG + ASC as compared to that of 2L PEG + ASC in elderly outpatients is still unclear.

Methods This single-blinded, non-inferiority study randomized over-65 years old outpatients undergoing colonoscopy to receive split-dose 1L PEG + ASC or 2L PEG + ASC. The primary endpoint was the overall cleansing success (CS). Secondary endpoints were overall excellent cleansing (EC), adequate cleansing of the right colon, cecal intubation rate (CIR), adenoma detection rate (ADR), patient compliance, and safety.

Results Overall, 285 patients (mean age 73.6 ± 6.3 years) were randomized to 1L PEG + ASC (N = 139) or 2L PEG + ASC (N = 146).

The total Boston-Bowel-Preparation-Scale (BBPS) score was significantly higher in the 1L compared with the 2L PEG + ASC group (7.66 vs 7.08; mean difference 0.58, 95% CI 0.17–0.98; P = 0.005).

The 1L PEG + ASC showed higher CS (94.2% vs 81.5%; OR 3.69, 95% CI 1.58–8.63; P = 0.001) and EC rate (36.2% vs 24.7%; OR 1.74, 95% CI 1.05–2.89; P = 0.034) as compared to the 2L PEG + ASC preparation. The cecal intubation rate was similar between the 1L and 2L PEG + ASC arms (95.7% vs 91.1%; OR 2.15, 95% CI 0.79–5.86; P = 0.125).

ADR was significantly higher in the 1L PEG + ASC group compared with the 2L PEG + ASC group (30.9% vs 19.9%; OR 1.80, 95% CI 1.04–3.12; P = 0.033), while the colorectal cancer detection rate was similar between groups (1.4% vs 1.4%; OR 1.06, 95% CI 0.15–7.69; P = 0.955). Tolerability and incidence of adverse events were comparable between preparations.

Conclusions In elderly outpatients undergoing colonoscopy, 1L PEG + ASC was non-inferior and statistically superior to 2L PEG + ASC in achieving overall CS and EC, with a higher observed ADR, and comparable tolerability and safety. Further adequately powered studies are warranted to confirm the impact of 1L PEG + ASC preparation on lesion detection rates.

Protocol Eudract N. 2020000927 38

Funding: Non conditional support by Norgine for supply and distribution of drugs.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1327 Pulsed Field Ablation for Complex Colorectal Polyps (PULSAR): Prospective Target-Trial Emulation Demonstrating Safety, Efficiency, and Early Efficacy Compared with Endoscopic Resection

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DOI 10.1055/s-0046-1822935

Aims Pulsed field ablation (PFA) is a non-thermal bioelectric modality based on irreversible electroporation, offering the potential to simplify treatment of colorectal neoplasia while reducing thermal injury and procedural risk. Preclinical studies [1] have demonstrated favourable safety and efficiency profiles; however, comparative human data are lacking. This study presents early prospective results from a target-trial emulation comparing PFA with endoscopic resection (ER) for complex colorectal polyps.

Methods A prospective cohort of the first 10 consecutive patients undergoing PFA (12 lesions; treatment-naïve and recurrent) was propensity-matched to 20 ER patients (2:1 nearest neighbour, caliper 0.2). Covariates included demographics, comorbidities, lesion characteristics, and prior treatment history. Balance was confirmed using standardised mean differences (SMD < 0.10), with sensitivity analysis performed using inverse probability of treatment weighting (IPTW).

Primary outcomes were safety (adverse events), procedural efficiency (procedure time, hospital admission), and treatment response. PFA response was assessed at 12 weeks, while ER complete response (CR) was assessed at 6 months. Patient-reported outcomes were evaluated using the SF-12 questionnaire.

Results Post-matching, all covariates were well balanced (SMD < 0.10). The PFA cohort included 10 patients (mean age 68.9 ± 12.8 years; 50% female; ECOG 0–1) with 12 lesions (median size 16.5 mm, IQR 10–30; mean 20.7 ± 13.3 mm), 50% ≤ 15 mm. Lesions were predominantly rectal (58%), with high-grade dysplasia present in 25%.

Median PFA application time was 11.5 minutes (IQR 5–25), compared to ER (ES-D&uEMR) knife time of 74 minutes (range 45–110). No adverse events occurred in the PFA group, whereas one ER patient (5%) required endoscopic haemostasis (risk difference – 0.05). No serious adverse events were observed in either group. Hospital admission occurred in 0% of PFA versus 5% of ER patients.

PFA achieved an overall response rate of 66.7% (8/12 lesions) at 12 weeks, including CR in 58% (7/12). Notably, 100% CR was observed in lesions ≤ 15 mm (p = 0.016). ER achieved a CR rate of 95.8% at 6 months. Residual disease following PFA was associated with larger lesions and incomplete electroporation coverage in early cases; all were successfully treated with en bloc ER, with no recurrence at 6 months.

Quality of life remained stable following PFA, whereas 20% of ER patients reported transient decline at 3 months. IPTW analysis confirmed the robustness of these findings. No early recurrence was observed among PFA responders at 6 months.

Conclusions PFA demonstrates excellent safety & substantial efficiency over ER, with encouraging early efficacy, particularly in lesions ≤ 15 mm. It represents a promising non-thermal alternative for colorectal polyp management and warrants further evaluation to confirm these findings.

Conflicts of Interest This work is part of the PhD thesis of Mr Adeyeye which is funded by a grant by Mirai Medical. Mr Haji is an advisor to Mirai Medical on Endoscopic Electroporation

References

[1] Rugivarodom M, Kamba S, Sonani H, AbiMansour JP, Wong Kee Song LM, Graham RP, Rajan E. Irreversible electroporation for treatment of colorectal cancer in a porcine model. *VideoGIE* 2024; 10: 176–179. doi:10.1016/j.vgie.2024.12.002. PMID: 40093300 PMID: PMC11910323

eP1329 RNA-sequencing on EUS-acquired tissue of pancreatic cancer at diagnosis and after first-line chemotherapy allows identification of biomarkers of prognosis and response to chemotherapy: first results from the PACEUT trial

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DOI 10.1055/s-0046-1822937

Aims Molecular tools to predict prognosis and chemotherapy response in pancreatic ductal adenocarcinoma (PDAC) are limited. Transcriptomic profiling identifies classical and basal-like subtypes, with different prognosis and chemosensitivity, but data from EUS-FNA samples remain scarce. We aimed to characterize transcriptomic subtypes and biomarker expression in EUS-FNA baseline samples, assessing associations with prognosis and chemotherapy response, and in EUS-based tumor re-sampling after first-line therapy to evaluate evolution after treatment (PACEUT trial).

Methods 240 PDAC patients undergoing diagnostic EUS were prospectively enrolled, and FNA samples underwent RNA sequencing. PURIST was applied to classify subtypes. Outcomes included overall survival (OS) and progression-free survival (PFS), adjusted for age and stage. A subgroup of 25 patients underwent paired tumor sampling before and after chemotherapy.

Results RNA-seq succeeded in 239/240 baseline samples (99.6%). Among those, 16 (6.7%) were basal-like and 223 (93.3%) classical. Basal-like patients had shorter OS (11 vs 15 months; $p=0.04$) and were significantly older (72.3 vs 66.9; $p=0.02$). Purist score associated with increased mortality risk (HR 1.08; 95%CI 1.01–1.15; $p=0.02$), in particular for patient receiving FOLFIRINOX (HR 1.23; 95%CI 1.07–1.41; $p=0.003$). In the 25 PACEUT samples (RNA-seq success rate 100%), 4% were basal-like before chemotherapy, 8% afterwards. Purist score increased in 8 (32%) patients (towards a more basal-profile), remained stable in 9 (36%) patients, and decreased in 8 (32%) patients (towards a more classical-profile). Increased Purist score after chemotherapy associated with increased mortality risk (HR 4.48; 95%CI 1.45–13.0; $p=0.0097$).

Conclusions Transcriptome profiling of EUS-FNA samples enables prognostic stratification in PDAC both at diagnosis and after first line chemotherapy.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1330 Surgical Versus Conservative Management of Iatrogenic Colonic Perforation: A Systematic Review and Meta-Analysis

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DOI 10.1055/s-0046-1822938

Aims To compare clinical outcomes of surgical versus non-operative management in adult patients with iatrogenic colonic perforation (ICP), focusing on hospital length of stay, overall complications, and in-hospital mortality [1–3].

Methods A systematic search of PubMed, Embase, and Scopus was conducted according to PRISMA guidelines. Observational studies directly comparing surgical and non-surgical management of adult ICP were included. Primary outcome was hospital length of stay (LOS). Secondary outcomes included overall complications and in-hospital mortality. Pooled risk ratios (RR) and mean differences (MD) were calculated using random-effects models. Sensitivity analyses were performed using Peto and GLMM methods to account for sparse data. Heterogeneity was assessed using the I^2 statistic.

Results Nine observational studies including 603 patients met inclusion criteria, of whom 335 (55.6%) were managed non-surgically and 268 (44.4%) surgically. Non-surgical management was associated with significantly lower in-hospital mortality compared with surgery (RR 0.24, 95% CI 0.08–0.75; $p=0.014$; $I^2=0\%$). Non-operative treatment also resulted in shorter LOS (MD –8.02 days, 95% CI –12.48 to –3.56; $p=0.0046$; $I^2=64.3\%$). Overall complications showed a nonsignificant trend favoring non-surgical management (RR 0.35, 95% CI 0.12–1.01; $p=0.053$; $I^2=46.5\%$). Sensitivity analyses confirmed the robustness of mortality findings.

Conclusions In selected patients with iatrogenic colonic perforation, non-surgical management is associated with lower in-hospital mortality and shorter hospitalization compared with immediate surgical intervention. These findings support a selective, physiology- and contamination-based approach rather than routine operative management. Prospective studies are needed to refine patient selection criteria and establish standardized treatment algorithms.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] Steinbrück I, Pohl J, Grothaus J, von Hahn T, Rempel V, Faiss S et al. Characteristics and endoscopic treatment of interventional and non-interventional iatrogenic colorectal perforations in centers with high endoscopic expertise: a retrospective multicenter study. *Surg Endosc* 2023; 37: 4370–4380
- [2] An SB, Shin DW, Kim JY, Park SG, Lee BH, Kim JW. Decision-making in the management of colonoscopic perforation: a multicentre retrospective study. *Surg Endosc* 2015; 30 (7): 2914–2921
- [3] Gedebo TM, Wong RA, Rappaport WD, Jaffe P, Kahsai D, Hunter GC. Clinical presentation and management of iatrogenic colon perforations. *Am J Surg* 1996; 172 (5): 454–458

eP1331 Nearly half of endoscopy-associated infections occur beyond 7 days and require rehospitalization: a prospective surveillance study

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DOI 10.1055/s-0046-1822939

Aims To assess the incidence, timing, and clinical impact of infections occurring within 30 days following endoscopic retrograde cholangiopancreatography (ERCP), endoscopic ultrasound (EUS), and gastrointestinal polypectomies, including endoscopic submucosal dissection (ESD), endoscopic mucosal resection (EMR), and hot-snare/cold-snare resections in both the upper and lower gastrointestinal tracts.

Methods We conducted a prospective observational cohort study (March 2025 – March 2026) in a tertiary care endoscopy center in Bucharest, Romania. Adult patients without active clinical infections, and without any interventional endoscopic procedure within the previous 30 days were included, undergoing ERCP, EUS, or gastrointestinal polypectomies. Patients were actively followed at 24 hours, 48 hours, 72 hours, 7 days, 14 days, and 30 days. Infectious complications were classified as early (≤ 7 days) or delayed (> 7 -30 days). Clinical impact was assessed by rehospitalization, sepsis, and 30-day mortality.

Results A total of 278 patients were included, of whom 262 had complete follow-up (114 patients were in the ERCP group, 77 in the EUS group, and 71 in the polypectomy group). Mean age was 64.6 ± 11.5 years. Rehospitalization rates were 20.2% (23/114) for ERCP, 15.6% (12/77) for EUS, and 5.6% (4/71) for polypectomy group ($p = 0.025$). Thirty-day mortality rate was 3.1% (8/262), with 5.3% (6/114) occurring in the ERCP group and 2.6% (2/77) occurring in EUS group, with no significant differences between groups ($p = 0.124$).

The overall infection rate was 9.5% (25/262), significantly higher after ERCP (20.2%; 23/114) compared to EUS (2.6%; 2/77) and absent after polypectomy ($p < 0.001$). The main infection site was cholangitis 80% (20/25), followed by pancreatic infections 8% (2/25). Sepsis was exclusively in the ERCP group, occurring in 7.9% of cases (9/114; $p = 0.002$), predominantly associated with cholangitis 88.9% (8/9), with one case following intra-abdominal infection following ERCP-associated perforation. Nearly half of infections (48%; 12/25), had a delayed onset beyond 7 days.

Conclusions ERCP was associated with the highest infection rates and accounted for all cases of sepsis. These findings challenge current post-endoscopic surveillance strategies, as a substantial proportion of clinically relevant infections occur beyond 7 days and may complicate short- and long-term patient outcome.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1332 Platelet-rich plasma (PRP) modifies extracellular matrix remodeling after circumferential esophageal ESD: a controlled porcine study

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DOI 10.1055/s-0046-1822940

Aims Circumferential esophageal endoscopic submucosal dissection (ESD) frequently results in severe post-procedural strictures due to fibrotic extracellular matrix remodeling. Platelet-rich plasma (PRP) contains growth factors that may influence tissue repair and scar organization. This study evaluated the impact of leukocyte-poor PRP on stenosis development, inflammation, fibrosis, and collagen remodeling in a porcine model of circumferential esophageal ESD.

Methods Twelve pigs underwent standardized 5-cm circumferential esophageal ESD and were either administered autologous Leucocyte Poor-PRP (LP-PRP) after ESD ($n = 7$) or no additional treatment (controls, $n = 5$). Procedural characteristics were recorded to ensure comparability between groups. At day-14 follow-up, lumen patency and inflammatory endoscopic features were assessed using endoscopy and fluoroscopic contrast studies. Endoscopic videos and fluoroscopic examinations were retrospectively reviewed by an independent adjudication committee of four expert endoscopists blinded to treatment allocation to assess ESD scar characteristics. When stenosis was identified, endoscopic hydrostatic balloon dilation to 12 mm was performed according to protocol. At day 28, the esophagus was retrieved for pathological examination with macroscopic and histological analysis. Inflammation and fibrosis were scored using standardized scales. Collagen composition was assessed using multiphoton second harmonic generation microscopy together with Masson trichrome (collagen I) and Gordon–Sweet staining (collagen III). Histological and multiphoton analyses were performed blinded to treatment allocation. The collagen I/III ratio was used as a marker of extracellular matrix remodeling.

Results Procedural characteristics were comparable between groups. At day-14, esophageal stenosis was present in 100% of subjects on both endoscopic and fluoroscopic assessment, requiring hydrostatic balloon dilation. Blinded adjudication confirmed severe luminal narrowing in all subjects and showed lower endoscopic inflammation scores in LP-PRP-treated animals (1.14 ± 0.80 vs 2.30 ± 0.84). At day 28, macroscopic examination confirmed circumferential scar formation and luminal narrowing at the ESD site in all subjects. Histological analysis showed numerically higher inflammation scores in the PRP group (5.57 ± 2.30 vs 3.80 ± 0.45), whereas fibrosis scores were identical between groups. Absolute collagen I and III deposition did not differ significantly. However, the submucosal collagen I/III ratio was significantly lower in PRP-treated animals (1.14 ± 0.11 vs 1.64 ± 0.43 ; $p = 0.0095$), indicating a shift toward a less fibrotic extracellular matrix remodeling pattern.

Conclusions In this experimental animal model of circumferential esophageal ESD, leukocyte-poor PRP did not prevent luminal narrowing but significantly modified collagen remodeling, resulting in a lower collagen I/III ratio in the stenotic submucosa. These findings suggest that PRP may influence scar architecture during esophageal wound healing.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

eP1333 AI-assisted Surveillance to Improve Endoscopic Follow-up Adherence in Patients with Precancerous Gastric Conditions: A Randomized Controlled Trial

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DOI 10.1055/s-0046-1822941

Aims Endoscopic surveillance for gastric precancerous conditions is essential but poorly adhered to in practice. Here we updated our previously developed artificial intelligence system (called ENDOANGEL-AS), which accurately identified high-risk patients and assigned standardized surveillance intervals, and validate its performance in improving follow-up adherence.

Methods The training set was expanded to include all gastroscopy patients at Renmin Hospital of Wuhan University (RHWU) from January 1, 2017 to October 31, 2019. The randomized controlled trial enrolled consecutive patients undergoing esophagogastroduodenoscopy with pathologically confirmed gastric precancerous conditions (atrophic gastritis and intestinal metaplasia) at RHWU from November 1, 2019 to October 14, 2022. Patients were randomly assigned (1:1) to the ENDOANGEL-AS-assisted group (artificial intelligence reminders

via messages and phone calls) or the control group (no extra reminders). The primary outcome was the follow-up rate of enrolled patients [1–14].

Results 324 patients with precancerous gastric conditions [mean (SD) age 56.41 (10.55) years, 165 (50.93%) female] were randomly assigned and analyzed, with 162 patients in each group. The overall follow-up rate was significantly higher in the ENDOANGEL-AS-assisted group than in the control group (24.69% vs 13.58%; RR 1.818 [95% CI 1.134–2.916]; $p=0.011$). ENDOANGEL-AS assistance significantly improved the timely follow-up rate compared with usual care (16.67% vs 7.41%; RR 2.250 [95% CI 1.181–4.285]; $p=0.010$). Subgroup analyses showed a consistent benefit of ENDOANGEL-AS in patients with intestinal metaplasia and those aged ≥ 55 years.

Conclusions ENDOANGEL-AS improves the endoscopy follow-up rate for patients with gastric precancer and plays a role in automatic surveillance management.

Conflicts of Interest Authors do not have any conflict of interest to disclose.

References

- [1] van Heijningen E-MB, Lansdorp-Vogelaar I, Steyerberg EW et al. Adherence to surveillance guidelines after removal of colorectal adenomas: a large, community-based study. *Gut* 2015; 64 (10): 1584–92
- [2] National Clinical Research Center for Digestive Disease (Shanghai), National Early Gastrointestinal Center Prevention & Treatment Center Alliance, Helicobacter Pylori Group et al. Chinese consensus on management of gastric epithelial precancerous conditions and lesions (2020). *Chin J Dig* 2020; 40 (11): 731–741
- [3] Pimentel-Nunes P, Libânio D, Marcos-Pinto R et al. Management of epithelial precancerous conditions and lesions in the stomach (MAPS II): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG), European Society of Pathology (ESP), and Sociedade Portuguesa de Endoscopia Digestiva (SPED) guideline update 2019. *Endoscopy* 2019; 51 (4): 365–88
- [4] Li J, Hu S, Shi C et al. A deep learning and natural language processing-based system for automatic identification and surveillance of high-risk patients undergoing upper endoscopy: A multicenter study. *EClinicalMedicine* 2022; 53: 101704
- [5] Chapelle N, Jirka I, Péron M et al. Evaluation of a Phone Call Reminder Strategy in the Surveillance of Patients with Gastric Precancerous Lesions Lost to Follow-Up. *Gastrointest Tumors* 2020; 7 (4): 110–6
- [6] Lee CS, McCormick PA. Telephone reminders to reduce non-attendance rate for endoscopy. *J R Soc Med* 2003; 96 (11): 547–8
- [7] Xiao S, Lu H, Xue Y et al. Long-Term Outcome of Gastric Mild-Moderate Dysplasia: A Real-World Clinical Experience. *Clin Gastroenterol Hepatol*. 2021; 20 (6):
- [8] Chapelle N, Péron M, Quénéhervé L et al. Long-Term Follow-up of Gastric Precancerous Lesions in a Low GC Incidence Area. *Clin Transl Gastroenterol* 2020; 11 (12): e00237
- [9] Jun JK, Choi KS, Lee H-Y et al. Effectiveness of the Korean National Cancer Screening Program in Reducing Gastric Cancer Mortality. *Gastroenterology*. 2017; 152 (6):
- [10] Zhang X, Li M, Chen S et al. Endoscopic Screening in Asian Countries Is Associated With Reduced Gastric Cancer Mortality: A Meta-analysis and Systematic Review. *Gastroenterology* 2018; 155 (2):
- [11] Dinis-Ribeiro M, Libânio D, Uchima H et al. Management of epithelial precancerous conditions and early neoplasia of the stomach (MAPS III): European Society of Gastrointestinal Endoscopy (ESGE), European Helicobacter and Microbiota Study Group (EHMSG) and European Society of Pathology (ESP) Guideline update 2025. *Endoscopy* 2025; 57 (5): 504–54
- [12] Huang RJ, Laszkowska M, In H, Hwang JH, Epplein M. Controlling Gastric Cancer in a World of Heterogeneous Risk. *Gastroenterology* 2023; 164 (5): 736–51
- [13] Arnold M, Abnet CC, Neale RE et al. Global Burden of 5 Major Types of Gastrointestinal Cancer. *Gastroenterology*. 2020; 159 (1):
- [14] Bray F, Laversanne M, Sung H et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin* 2024; 74 (3): 229–63

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Georg Thieme Verlag KG,
Oswald-Hesse-Straße 50, 70469 Stuttgart, Germany
Volume 58
Endoscopy is published in 12 issues per year.
ISSN (Print): 0013-726X
eISSN: 1438-8812

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Georg Thieme Verlag KG
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V.i.S.d.P.:
Martin Spencker
Oswald-Hesse-Straße 50, 70469 Stuttgart

Umsatzsteuer-ID

DE147638607

Handelsregister

Sitz und Handelsregister Stuttgart, Amtsgericht
Stuttgart HRA 3499, Verkehrsnummer 16427

Advertising

Thieme Media
Pharmmedia Anzeigen- und Verlagsservice GmbH
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Airfreight and mailing in the USA by Sheridan Press, 450 Fame Avenue, Hanover, PA 17331. Periodicals postage paid at New York, NY and additional mailing offices. Postmaster: Send address changes to European Journal of Pediatric Surgery, Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001.

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Printed in Germany

Typesetting: seitenweise, Tübingen
Printer: Grafisches Centrum Cuno GmbH & Co. KG, Calbe (Saale)



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